HSE OF LORDS

Environment and Climate Change Committee

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

Tuesday 18 January 2022

10 am

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

Evidence Session No. 5 Virtual Proceeding Questions 34 - 41

Witnesses

I: Faisal Naru, Executive Director, Policy Innovation Centre, RPA/NESG; Professor Dame Theresa Marteau DBE, Director of Behaviour and Health Research Unit, University of Cambridge; Carmel McQuaid, Head of Sustainable Business, Marks & Spencer.

Examination of witnesses

Faisal Naru, Professor Dame Theresa Marteau and Carmel McQuaid.

Q34   **The Chair:** Good morning and welcome to the fourth evidence session of the House of Lords Environment and Climate Change Committee inquiry looking at mobilising behaviour change for climate and environmental goals. Today we are pleased to have before us three witnesses: Faisal Naru, executive director of the Policy Innovation Centre at NESG; Professor Dame Theresa Martin, director of behaviour and health research at the University of Cambridge; and Carmel McQuaid, head of sustainability at Marks & Spencer plc. Welcome and thank you all for agreeing to come before us today. We look forward very much to hearing what you have to say to us.

Can I remind people of a few housekeeping points? A transcript will be taken and made public, but all three witnesses will have the chance to comment on that before it is published. The session is webcast live and is subsequently made available on parliamentlive.tv and the Parliament website. Can I remind colleagues that if they have any relevant interests they should declare them before asking their first question? Thank you for that.

I will open proceedings by asking the first question. What are the most successful, and indeed the most unsuccessful, behaviour change initiatives from the public, private or third sector that you have come across or been involved with? Specifically, what factors have made them successful or unsuccessful?

Faisal Naru: Thank you very much for the invitation to join this committee and this very important process. I will give you just a couple of examples of successful behaviour change initiatives, some of which are quite famous and others less so.

A couple of successful ones applied default settings. The first was in New Zealand back in 2007. They increased their pension take-up by 50% by simply switching from people having to opt into a state pension, which was KiwiSaver, into having auto-enrolment from which people would have to choose to opt out instead.

The European Commission also had an interesting piece of legislation, which was one of the first pieces of legislation that used behaviour change. It decided to ban the automatic add-ons to online sales, such as having your travel insurance automatically ticked so that you end up purchasing that when buying your travel tickets. Instead, people had to make an active choice to purchase it.

They have been some big ones. There are some smaller ones that have not necessarily had huge attention. In Copenhagen Airport, they got a 49% decrease in non-compliant behaviour from smokers smoking outside the doors of the airport simply by designating a space away from them, saying to people, "You can smoke here", instead of, "You can't smoke here". It is a small psychological difference for people, but people are

much more likely in that scenario to listen to somebody saying, "You can do this", as opposed to saying that they cannot do something else.

The final successful one that I will mention is from Qatar where, during the month of Ramadan, they decided to set up screening stations at the State Grand Mosque in order to diagnose diabetes. Of course, you have to fast before you take that test. When they did the testing there, they managed to capture 26.6% of the people who were pre-diabetic, so they could start to work on them before they were diagnosed with diabetes.

These are some examples of very successful behavioural interventions. The first factor is that they made things easy for people, through the opting in, the opting out or the location of the testing centre. Secondly, they really tried to understand people and human behaviour rather than assuming, for instance in the Copenhagen example.

Probably the biggest not-so-successful example that I will share with you, which we will probably speak about a bit more, was the five fruits and vegetables a day message in the United States, which came into effect in the 1980s. How well that particular policy was implemented was evaluated afterwards, and it showed that the understanding of the need to have more fruits and vegetables went up but consumption did not. Maybe one of the reasons—we will get on to this later—is that in some of these instances we talk about applying behavioural scientific techniques, and in others, for instance the five a day, people thought it was a good idea and there was an information campaign, but none of the typical techniques were used.

The Chair: Thank you. That is a really good introduction for us.

Professor Dame Theresa Marteau: I want to take three of the largest initiatives that we have had for changing health-related behaviour in the UK—smoking, obesity and physical inactivity—and look at the varying degrees of success across each of those programmes and the important lessons that we can learn from those.

Starting with smoking and tobacco control policies, this has been described both as a success story and more recently as "an abject failure of public health policy". Going back to 1962, 75% of men and 50% of women smoked in the UK. There has been a dramatic decline, so the figures are now around 15% of men and 12% of women. That has been achieved through a raft of policies including taxation, banning advertising, banning smoking in public places and stop-smoking services.

A report published in May last year by the Royal College of Physicians described tobacco control policies here as "an abject failure of public health policy", as I said, because six decades later smoking is still probably the single largest preventable cause of premature death in our population and remains one of the largest contributors to health inequalities. I should have mentioned that although the rates have come down dramatically over the last six decades, smoking is still two and a half times more common in those who are employed in manual

occupations compared to managerial or professional occupations. The Royal College of Physicians states that if the policies that had been advocated in its report of 1962 had been adopted by now, smoking would have been eradicated—in other words, it would have been less than 5% of the population. It has called for more ambitious policies that target disadvantaged communities in particular.

I want to draw the committee's attention to two particular policies that I think are relevant to this inquiry. First, in order to decrease the affordability of tobacco, the college recommends doubling the price in the next five years and, importantly, increasing the affordability of nicotine substitutes.

The second recommendation relevant to this committee is that the college calls for stronger measures to counter tobacco industry tactics, which have got in the way of effective policies. In its report, which I would encourage that members look at, there are some very sobering accounts of attempts by the tobacco industry to interfere in UK policy-making. Examples include industry representatives or organisations affiliated to the tobacco industry participating in informal parliamentary groups, which is a contravention of Article 5.3 of the Framework Convention on Tobacco Control, to which the UK is a signatory. It gives detailed accounts of attempts at interference, some successful, in the standardised packaging of tobacco, which was eventually passed into law in 2015 in this country. That is the story of tobacco, both good and not so good.

Coming on to obesity, I would describe our strategy here as broadly unsuccessful, but with some important exceptions. Rates are high and rising. At the moment, it is estimated that around 64% of adults in England are obese or overweight. The latest figures for children are shocking. Forty-one per cent of our children aged between 10 and 11 are either overweight or obese, which is an increase from 35% in the previous year. Again, there is a marked contrast between those living in areas of deprivation and those living in more affluent areas. Around 50% of children who are overweight or obese are living in areas of high deprivation, compared to 28% of those living in more affluent areas.

A recent analysis looked at strategies in the UK over the last 30 years. We have had 14 obesity strategies over that time, and we can see that they have generally not been effective at stemming the tide of obesity. Just to summarise, the interventions that have been introduced have been weak. Faisal has already mentioned the five a day campaign in the US and elsewhere. They have too often been based on giving advice or guidance as opposed to changing the systems or environments that shape our behaviour. They have often been poorly implemented and not evaluated.

That said, there have been some changes in direction with stronger interventions being introduced. Fiscal interventions include the soft drinks industry levy, which increased pricing on higher-sugar drinks. A recent evaluation showed that that has been effective in reducing the amount of

sugar in soft drinks purchased by households by about 10%. That is to be celebrated.

A stronger measure, banning ads, was first mentioned in 2018. Government has committed to the 9 pm watershed whereby advertising for unhealthier foods will not occur. There has been a setback there in that the Government have recently announced that there will be a delay in implementing that. There have been several consultations on this, in which parts of the food and advertising industries have campaigned repeatedly against the new restrictions. They have said that they will not work, undermined the evidence and used various arguments to try to delay them. The Obesity Health Alliance has expressed deep concern that the delays will result in further lobbying against the restrictions. Again, there is some evidence of positive change, but in the main we have not been successful in tackling obesity.

I just want to touch on physical inactivity and draw the committee's attention to a House of Lords report, published last month, on the national plan for sport and recreation. It is an excellent report in which they express their concern at the high levels of physical inactivity across the population, but particularly in those from less affluent backgrounds, as well as among women and some minority ethnic groups. They say that the problem has occurred over decades and describe "numerous underwhelming attempts" to boost activity levels.

Over the last four years, rates of physical inactivity have increased across the UK population from around 25% to 27%. That is the proportion of the population who are taking less than 30 minutes' moderate physical activity a week. They recommend in their report the application of the science of behaviour change, which I would thoroughly endorse as a behavioural scientist, and a more proactive approach to tackling health inequalities.

Finally, I would encourage the committee to look, if you have not already, at an inquiry from the House of Lords Science and Technology Committee published in 2010-11. They looked at behaviour change and they had two case studies: one was tackling obesity and the other was reducing car use. Two of the many recommendations are still relevant today. One was for government to make better use of evidence in policy-making, and the second was to ensure effective evaluation. That has happened to some extent but not nearly enough, and now is an opportunity for those recommendations to be underscored. Thank you.

The Chair: Colleagues, we have had reference to that report before. It was chaired by Lord Krebs, and it has been circulated in the past to colleagues. It is an excellent read, but thank you for referencing it again, Theresa.

Carmel McQuaid: I thought it would be helpful for the committee to share examples, successful and unsuccessful, from our experience at Marks & Spencer. We have 15 years' experience of seeking to influence our consumers on our eco and ethical programme Plan A, which has

driven change in our own operation. As I said, we set out with an ambition to make it easier and more rewarding for our customers to lead sustainable lives.

The four examples I want to touch on cover a range of programmes across food and clothing. If you remember, our customer base is mainstream consumers. We touch 30 million consumers across the UK, so it covers all demographics, and they range in maturity. I will talk first about a programme that we launched recently, and then I will talk a bit more from our experience over the last few years.

Our Sparking Change programme is encouraging our 13 million Sparks members to eat more sustainably. That launched in January this year as Sparking Change: The Challenge. That followed on from a pilot that we conducted in which we commissioned Hubbub, a behaviour change environmental consultancy, to support us with the design of the pilot and, importantly, an impact assessment of the results of the pilot, so that we could take that evidence into the rollout of our programme.

The programme covers four key interventions: first, helping families to reduce food waste; secondly, increasing plant protein; thirdly, cooking from scratch; and, fourthly, having more sustainable households in terms of how they are cleaning. We ran a nine-week programme with 92 households across the UK of all demographics: some with children, some without, old, young and in all parts of the country.

We designed it based on behaviour change principles and a number of the factors that we knew made it successful. People tell us they want to make change, but it needs to be easy, flexible and bite-sized. They really respond well to who delivers the messages about why you might change and what the benefits are for you or your family. We know things that like saving money, healthier lifestyles or spending more quality time together as a family are very motivating, and they are unifying characteristics that all demographics get behind.

A sense of community was really important, and the digital social media tools that we now have were very effective, particularly with Facebook. It allowed a lot more flexibility for drop-in sessions and peer-to-peer learning. We also made it easy by providing some hampers, meal kits and recipe suggestions.

The results from this pilot were encouraging. The impact assessment took place 12 weeks after the pilot had ended: 70% of the people who took part felt healthier as a result, 70% felt happier, 73% were cooking from scratch more often, and 75% were making more of an effort to eat in season. Interestingly, 39% said that they had noticed they were saving money, which was £22 per week on average, and 34% were more likely to try plant-based proteins. Based on those results, we have now scaled it up to 13 million of our Sparks members, which is our most loyal customer base that we can communicate more regularly with digitally.

We are running that for two months now. We will continue to evaluate that, but the principles of designing it based on evidence and what we know works—continuing to monitor, looking at the impact and then designing the rollout programme—are ones that we have learned over 15 years and are about how to drive effective behaviour change and, importantly, how to focus on the common things that unite us all, the outcomes that we want, so that we are prepared to change behaviour. At the moment, we are still evaluating it, but the pilot was successful.

There are three other examples, which I will touch on briefly. The industry's carrier bag charge in 2008, ahead of wider legislation on that, again, was successful. It had the characteristic of being based on evidence. We had seen other countries implement a charge. We had also tested it in two regions in the UK in our stores before we decided to roll it out. It was a relatively easy thing for people to do. Everyone could do it nationally. It was very visible and the country got behind it. Those are some of the characteristics.

Another example was less successful. When we first launched M&S Energy, an energy tariff, around the same time in 2008, we were very ambitious in what we wanted to do. We wanted to incentivise our consumers to use less energy, so we said, "We'll reward you if you use 10% less energy". They did not respond well and, when we analysed it, one factor was that the enabling environment was not in place. People did not have smart meters. They did not know what they could do to get a 10% reduction. They did not even know whether that was possible.

I am not sure we were the best trusted adviser; we had just entered the energy space ourselves. People find it easier to hear from Marks & Spencer about food and clothing. It was probably too early in our offering this service to give advice on how you save energy. There was a time lag, so you had to wait a whole year to see if you got your 10% reduction. From a behaviour change point of view, that was not very motivating. Also, our consumers told us that they just wanted more straightforward pricing up front and great service, so we modified our approach and changed our tariff. I would say it was probably 10 years too early and probably just ahead of its time.

The final example I thought would be helpful to share with the committee is our programme on clothes recycling, which is called Shwopping. We first launched it, again, around 2008, so we have seen it develop over time. Marks & Spencer had legitimacy to bring this topic up with our customers because of our heritage of quality clothes that last and can be passed down, so it made sense to our customers that we would offer them a solution for clothes that they no longer wanted to wear.

We made it easy so that you could do it at any Oxfam. We partnered with Oxfam not because of what it did as a charity but because of its infrastructure. We realised that this needed to be accessible to all our customers across the UK, and Oxfam had that coverage. Over time, it evolved as the enabling infrastructure got better. As our business started to do more reverse logistics from our stores, we were able to put the

Shwop boxes into our stores because we had a reverse logistics loop that enabled us to really make it more integral to our operation and a little easier for our customers to participate in.

When we first launched it, customers really liked an incentive. We offered them £5 off a £35 shop if they brought any item of clothing back. Over time, the high street became flooded with promotions and vouchers, and that was no longer motivating, so we had to reinvent the proposition. We have just relaunched it in the last few months based on behaviour change we have seen during the pandemic, in that people are now quite used to using QR codes. That allows us to have a low-cost operation in a store.

Before this, you had to have staffing at the till to deal with a voucher and hand out the reward to the customer. Now, they can self-serve with their phone. They can go to the bin, take a photo of the QR code, and get an incentive or treat booked on to the Sparks programme directly, which they can redeem. That is receiving good feedback from customers. They like that idea of fun and being rewarded for what they perceive as good behaviour.

That programme, I would say, is moderately successful. We have had 35 million items of clothing back since we started it. The reason why it is not more successful is because the enabling environment and the textile recycling infrastructure in the UK is limiting that. We are currently stalled, as are all businesses. Many other businesses have joined in on clothes recycling, and the challenge we all have collectively is what to do with the "unwearables", as we call them, which are the clothes that are not fit for reuse and cannot easily be repaired. It is moderately successful, but it now needs a wider intervention to make it deliver its potential.

The Chair: Thank you very much for that, Carmel. I really appreciate your frankness about programmes that have worked, those that have been moderately successful and those that have been less successful. It is really refreshing to hear some honesty so that we can learn the lessons and use that in our thinking.

Q35 **Baroness Boycott:** Hello to you all. Theresa, it is great to see you again. I will start with you, because these are questions about how we can learn from health initiatives. What policy-making approaches can the Government adopt or push so that we can learn about behaviour change to adapt it to climate change? Are there limits to what we can learn from health? How much can we learn from, say, smoking or obesity to take into climate change?

I have my own supplementary question to add to that. I am always quite struck when listening to practically everybody that there is this mantra: "Must make it easy". I just wonder whether that is a get-out clause for companies. I am particularly interested in what Carmel might say about this question of whether and how far we have to spoon-feed.

Professor Dame Theresa Marteau: We can think about two broad approaches to changing behaviour, and we have already heard some examples of those. One targets individuals, particularly by providing

information to change their minds about their behaviour and encourage them to do things differently. That is one set of approaches. Another set, just being very crude about this, is targeting the environments or systems that shape our behaviour.

We need both, but the evidence shows that the emphasis to date has been too much on targeting individuals and not enough on targeting the systems or environments that shape our behaviour. Although information for example about the impact of our behaviour on carbon emissions can be important in raising our awareness, its impact on our behaviour is at best minimal, and we need to retain that as a core observation. That is no reason not to give information, but it is not going to shift behaviour. For the everyday behaviours that contribute to climate change—what we eat, how we travel, how we heat and cool our homes, what we buy and what we throw away—the systems are most important in cueing them, reinforcing them and maintaining them.

That explains why the interventions that can change those systems—I would highlight the physical and economic environments—can have the greatest effects. By that, I mean the kinds of interventions that will decrease the availability and affordability of products and services that harm the environment, at the same time as increasing the availability and affordability of those that are sustainable.

I do not expect everybody to have read the summary paper that colleagues and I wrote, but it was published recently and I know it has been shared with the committee, so the details are in there. As an example, increasing the proportion of vegetable-based meals from one in four to two in four increased the proportion of people who selected a vegetarian meal from around 24% to 39% of people. Just shifting the availability changes what people select.

You heard very powerful evidence from Sustrans that building cycleways increases the journeys that are taken by bike. In one Canadian study, it also increased by 250% the number of journeys that were walked. Similarly, increasing the affordability of public transport and decreasing the affordability of motoring, which is now much more affordable than it has been, will increase the number of journeys people take through public transport and other greener means. Of course, the devil is in the detail: by how much does one need to decrease or increase affordability to get the amount of change that is needed? There is an amount of uncertainty there, but that can be estimated and evaluated.

On your second question about whether there are limits to what can be learned from behaviour change programmes in health, I do not think there are. We can learn from all areas that the basic principles of behaviour change remain the same. One would start by analysing the particular behaviour, understand what is cueing, reinforcing and maintaining that behaviour, and then develop interventions and evaluate those to see the extent to which those can be changed.

I know you want Carmel to come in on making things easier, but I would just say, finally, that many of the behaviours that we want to change are routine or habitual behaviours. As I have said, they are shaped by the environments around us, so we want to redesign those environments so that they label and support behaviours that will be more sustainable without us having to think that much about it. I should add that, in the main, the more sustainable behaviours are also the healthier behaviours.

Baroness Boycott: Can you tell us why the five a day campaign, on which the Government spent an astronomical amount of money, was such an abject failure? Somehow it just failed ever to connect. What was wrong with it? If you had that money, what would you do?

Professor Dame Theresa Marteau: Those campaigns were run in Australia, the US and the UK. They were excellent at raising awareness, but they did not change behaviour, as you say. This is a really good example of how information, in the main, does not change our behaviour.

There have been various analyses. If I wanted to increase the amount of fruit and vegetables that were consumed, I would start in schools. There have been some excellent programmes based on behavioural principles. The Food Dudes programme, which was evaluated and rolled out in the Republic of Ireland in the 2000s, involved exposing children to small amounts of fruit and vegetables every day. It was reinforced by their teachers, and the parents were also involved in the programme. In short, the children were learning to enjoy and being exposed to fruit and vegetables. That used excellent behavioural principles as opposed to just giving people information.

Baroness Boycott: Faisal, can you pick up on what we can learn from other areas of policy-making that we can take into climate change?

Faisal Naru: The number one thing from my experience of speaking with lots of Governments across the world is that what the UK Government are facing is similar to what other Governments are facing, which is that it is a hugely uncertain world. It is hugely dynamic and needs a different philosophy of governance. If we go back to the five a day, why is an information campaign easy for public policy and for Governments to implement? It is a low-risk intervention, but we are realising that it is costly. It is lower risk, but in some instances it also backfires. Governments are now required to have systems and processes in place that are more deliberative and laser-like in their application in order to understand that, when they do something, it will have this effect on the population or on its different groups.

What does that mean? We have all spoken about evidence and us needing to have good evidence. That is a question in itself. How do you generate the evidence to make unbiased decisions for the right policy interventions to take place? A key principle that has been one of the hallmarks of the application of behavioural science inside public policy has been the use of experimentation: you test and pilot before you roll out on a grand scale. It builds a bridge with academia, where there are huge

amounts of knowledge, in order to understand more before moving forward.

The other important thing here, and this goes to your point about making it easy, is that, again, from a government perspective, it might be riskier, but making it easy means really understanding the decision context of those you want to try to effect change with. Within that decision context, you may well want to encourage people, for instance, to eat more fruits and vegetables, but there are lots of assumptions as to how to do that. Through experimental methods, you end up determining the reasons why they are behaving in the way they are. It might not be a behavioural approach that ends up solving this. It might not be a nudge. There might be a real financial or environmental incentive behind why people are doing various things. A slight change in governance philosophy is required here to do behaviour change in the appropriate way.

Baroness Boycott: In the areas I work in, we spent a lot of time promoting eating fruit and vegetables. That is already politically safe. Everyone is very scared of saying, "Eat less meat", yet the single action that every citizen can take to really contribute to carbon reduction is to eat less meat. Governments will not go there, so I come back to the principle that having to make it easy also means that we duck the issues a lot of the time. Is that true?

Faisal Naru: Sometimes it is true that that can be used as an excuse not to take the necessary action. The other point about the change in governance is that it requires a certain amount of courage for Governments to say, "We have to take a stand here, and this is the way things will move".

As Theresa said, a lot of the devil is in the detail. How you begin to frame that change is very important, as in the Copenhagen example. Do you say to people, "You're not allowed to smoke here", or do you say, "You can smoke here"? The end result that you are trying to achieve is the same, but it is a different way of treating people. Again, you get that through experimentation in order to really understand the most appropriate way, and the most ethical way, to implement some of these different policies.

Baroness Boycott: Carmel, what was your reaction to the question? Also, 13% is a fantastic decrease in price. I would really like to know more about what people are buying and how you have achieved that as Marks & Spencer, because that is a fantastic thing to offer your customers. It is a lot of money, especially now.

Carmel McQuaid: We want to make it easier for our customers. That does not mean that we make it easy for ourselves. The onus is on us to put a lot of the legwork into driving environmental improvement across the supply chain, and into the products that we source and provide to our customers, and the propositions we offer them. I heard the challenge in your question, which is a fair one. Is it used as a get-out? No. We have our own plan to be net zero by 2040, with rapid decarbonisation to 2025,

and we are working in partnership with our supply chain to do the heavy lifting on behalf of our customers.

When it comes to engaging our customers on the number of things that they can do in the home or in the choices they make, all our customer insight says that a different way of looking at it, rather than just making it easier, is taking away the friction and the barriers. People want to do the right thing, but life gets in the way, there are too many obstacles or they are too busy. If we can remove the friction, we will be more successful. That informs our thinking a lot.

A lot of the Sparking Change programme is in the area of planning how you will do your meals during the week, planning what you buy, being clear about buying what you need and not more, and being quite savvy about using up every part of those ingredients. It helps that the perception of Marks & Spencer has sometimes unfairly been that our prices are only for a subset of consumers, so it was also important for us to show that everyone can buy products from us. Together, we can help to figure out how to feed your family a good, nutritious, healthy meal while still being careful about the money that you are spending.

Q36 **Baroness Young of Old Scone:** I want to focus on some of the techniques that you have described already. How do different groups within the population respond to different initiatives and interventions? What guidance would you give us from your insight into that in designing measures for behaviour change, climate change and environment?

Professor Dame Theresa Marteau: Starting with some examples in the health context, one concern has been that interventions might be disproportionately effective in more affluent areas and groups than in those that are least affluent, thereby increasing well-known health inequalities.

Generally, interventions that change the systems or the environments—I mentioned food environments and place-based interventions for tackling obesity, such as increasing the availability of healthier foods and removing the availability of less healthy foods—seem to be effective regardless of the affluence of the populations where they are being applied.

That does not occur so much in the individual-level interventions. Just to give one example, a recent review looked at digital interventions such as health apps and wearable devices that attempt to increase levels of physical activity. It was found that these were effective at increasing levels of physical activity in more affluent groups, such as the number of steps that people took, but had no effect in increasing physical activity in those who were less affluent. That is a particular concern, because this is a scheme that the Government are currently trying out to tackle obesity. Those individual-level interventions have the potential to work in a way that can increase inequalities.

Price-based interventions have been some of the most effective at increasing quitting smoking and reducing take-up. It has been shown that these have the greatest effects on the poorest. That is very interesting when we look at climate change, where an increase in price for products that, unlike tobacco smoking, are necessary, such as energy, has the potential to increase inequalities and general unfairness. As we know, this led to riots in France and was avoided in the UK by freezing the fuel duty escalator.

It therefore becomes really important for any policy intervention to be introduced as part of a package where these unintended adverse consequences for some groups can be mitigated. There are different ways in which that can happen. Any analysis needs to take that into account.

Baroness Young of Old Scone: Is there anything that we need to understand about different age groups, genders, ethnicities or geographies, for example? Is there evidence of these being particular differentiators, or is there not enough fine-grain evidence to be aware of that?

Professor Dame Theresa Marteau: It is hard to generalise. It will depend on the behaviour that is being targeted and the intervention. Most of the evidence that I am aware of has focused particularly on inequalities, because there has been a very large concern about the potential for policies and interventions to generate inequalities as opposed to reducing them. It will depend on the particular intervention.

The point you raise is really important and suggests the importance of any policy analysis considering what the distributional effects will be in different groups in any one population. It is no reason not to introduce an intervention that can be effective, but it is a guide to packages of policies to mitigate unintended effects.

Baroness Young of Old Scone: Faisal, from your international experience, what insights can you give us into the differences between individual demographics and other factors that we need to respond to?

Faisal Naru: Your question is very apt, and it is correct to have these considerations, as Theresa has said. I would also agree with Theresa that it is difficult to make generalisations about what does or does not work, because in each specific context there needs to be the analysis, the evaluation and the experimentation in order to determine. For instance, with the five a day fruit thing back in the United States, one of the conclusions from the evaluation in 2016 was that it increased food inequality, in that the amount of fruit and vegetables consumed by lower socioeconomic groups went down during that period.

It is important to look into those things. You are right in that the kinds of things to look out for are whether there are differences in relation to gender, regions or cultures. We see a lot, when working internationally, that some things might work in one context but not necessarily in another, which is why it is very important to have these systems and

processes in place in order to test things before rolling them out. Otherwise, we end up getting unintended consequences in various fields.

Looking at the decision context of people is very important. Some very good work was done by Eldar Shafir and Sendhil Mullainathan, who wrote a book called *Scarcity*, in which they looked at how being in the context of poverty, or in a situation of having less of whatever it is, can affect how you make decisions. That understanding of people is important in policy-making. A policymaker may assume that it is quite clear why somebody would not take a subsidy or go through a grant application to do something, but that does not really put them in the position of the individual or organisation.

As a very quick example, there was an experiment in the UK trying to give out grants to social entrepreneurs. They experimented with different messages. One focused on the extrinsic benefits, such as the fact that you would get a grant or money, and others on the intrinsic benefits: "How can we help you to achieve your goals?" The headline there is that the message that focused on the extrinsic things attracted all the losers, for want of a better word. The social entrepreneurs who were not doing well, were not going to do very well and were desperate for money went for the grants. They did not attract the winners, who were achieving the goals, getting to disadvantaged communities and were going to succeed anyway but would be helped by this grant. They were really the target audience for the grant.

Again, understanding the decision context will then help in understanding what kind of messaging or intervention is needed in order to have successful interventions. That is very apt for climate change, given the seriousness of the issue.

Baroness Young of Old Scone: I am particularly interested in young people. We have this vision in our head that young people get the climate change thing, the biodiversity decline thing and the environment thing. They want to eat healthily and for the good of the planet. Are there any pointers from the research or from your experience that show that we need to design things differently for a willing audience, or does it come down, at the end of the day, to more important things, such as socioeconomic status and the decision context that you talked about?

Faisal Naru: It is probably mixed. Again, there is the assumption that young people get it and want to go into it. There is also evidence that old people get it and are making huge efforts such as recycling or changing their energy habits. This is where it is really important to gather the evidence. It is difficult to do very long research pieces to inform a very urgent, pressing issue, but there are still techniques for them to try to de-bias a lot of the assumptions that we have. On the one hand, there is a group of young people who do get it and who are very involved, but there is another group of young people for whom that is not the most pressing issue.

It is very complex, and in these complex areas I do not think we will get any silver bullets. Instead, the focus has to be on having the right systems and processes in place that can manage the situation as effectively as possible.

Baroness Young of Old Scone: Carmel, is there anything from the work you have done with M&S that shows things that are common across the demographics, the socioeconomics, the geography and the culture? Are M&S customers the same across the whole country and, therefore, can you deal with them in a homogeneous way?

Carmel McQuaid: We spend a lot of time on customer insights and understanding how customers are feeling about issues. We test some of our communications before we roll them out, because nuance is often quite important when it comes to pitching something correctly. As you would expect, we spend a lot of time on the common and unifying areas, where all our customers are supportive. The piece of work that we did in the last 12 months, looking in particular at environmental behaviour and climate change, highlighted a number of really interesting things that we have taken into the design of our programmes and our communication.

First, everyone cares and wants to do the right thing, so you have that unifying behaviour as well. You asked about young people. Interestingly, when it comes to how people are influenced and who they listen to, we found that David Attenborough is clearly the universal figure who works across all our customer base, but the most important influencer for most of our customers was children, be it their own children or other young people—grandchildren, nieces, nephews, or friends and family.

That was interesting because, as I mentioned when talking about our Sparking Change programme, we found ways to make some of our programmes more inclusive and involve young children. Importantly, we also started to be braver in involving teenagers and people in their early 20s, listening to younger people's views on climate change and action that they wanted to drive in society. We partnered with the charity Reboot the Future to do that, and shared some of those conversations with our customer base, again through digital channels.

A piece of research that we found quite helpful to supplement our own was a report by Climate Outreach called *Britain Talks Climate*. Early on, in the summary section, the report highlights the unifying motivations that touch all demographics in the UK—financial, health and quality time for families, as well as protecting the countryside, the principles of fairness and everyone doing their bit, and tackling waste.

Tackling waste is a great entry point for everyone. Faisal talked about the intrinsic or extrinsic values, and in some of our research we found that some people want to use eco as a status symbol. That is okay, because there are lots of other status symbols. For some people, it is important to be able to show their eco credentials, either with their friends and family or on social media, so finding ways to tap into that with the influencers who allow that to happen can be quite good. For example, although food-

waste dinners in fancy restaurants are a tiny part of the overall solution to tackling food waste, they can play a part for a group of consumers who find that very motivating.

Q37 **Lord Cameron of Dillington:** Good morning, everybody. I first have to declare an interest as a farmer. I am also on the board of a car parking and data business.

I want to look more into the role of business in this agenda. Initially, my questions will go to you, Carmel. Much was made at COP 26 of the novel involvement of business and commerce. One gets the impression that more and more businesses are, on the surface at any rate, beginning to respond to customers' interest in climate change and the environment more generally.

I thought that your Sparking Change initiative with Hubbub was very interesting and confirmed what we found out from witnesses a few weeks or a month ago about first creating a community, albeit yours was digital, which encourages people to get together and become involved, and then to go on and do what otherwise as individuals, they might not do. There are probably lots of roles for businesses, and you have explained one or two of those that you are involved in.

What should the respective roles of business and government be on behaviour change to meet climate and environmental goals? How can business and government work together?

Carmel McQuaid: Business can play a role. Business comes in all shapes and sizes. The role that Marks & Spencer plays is that, as a mainstream business, we can move something from niche to mainstream, so we are quite good at scaling things up. A lot of start-ups and small businesses are excellent at making the market, doing the innovation and working with the early adopters to find new solutions. I would encourage government to work with the breadth of businesses, not just the big or branded ones.

In terms of government, there are two big areas. One is supporting and stimulating innovation, particularly in areas such as, in the supply chain, low-carbon farming and decarbonisation of heat in food factories. There are some structural interventions. Government can work with us on the behaviour change needed across businesses to drive greater uptake of innovation and to find solutions.

The second area is infrastructure, particularly ensuring that it is put in place at the appropriate time to capitalise on the work that might be happening in industry. One example that I referred to earlier is our clothes recycling scheme, where we benefited from support from Innovate UK a number of years ago to look at what we could do to have more sustainable fashion business models. We explored lots of different approaches to that. Innovate UK has also funded many start-ups to look at fibre-to-fibre recycling, which is excellent.

At the moment, we could do more in this country to get value from textile waste. We are a big market, in that consumers here buy a lot of fashion, so you have the material physically here in the UK, but at the moment it tends to be turned into other fibres or innovated in other countries. The two areas that government could work with business on are innovation and infrastructure.

Professor Dame Theresa Marteau: If I could broaden how we are thinking about business to a wider range of organisations, including those in education and other public sector non-government organisations, government has two key roles. One is to encourage partnerships, as Carmel has said, as a great source of innovation and very creative pilots. Government could go further in encouraging robust evaluations of these pilots. We have heard from Carmel about some great changes, but I have no idea how large those changes are. I would want to encourage partnerships, perhaps with researchers and universities, so that the evaluations are robust and appear in the public domain, so that everybody can learn from them. We need to learn very quickly, so that these can be scaled up.

To give one example of an initiative in my own university, the University of Cambridge catering service implemented a sustainable food policy in 2016. It evaluated it in 2019 and it had four key strands. Across the 14 cafeterias in the university, it removed ruminant meats, sourced only sustainable fish, reduced food waste, and increased the number of vegetarian and vegan meals that it served.

In the evaluation, it reduced greenhouse gas emissions in the food that it was serving by 33% and the amount of meat sold by about 37%, and profits went up by 2%, so there was no loss but a slight increase. It won various awards in the UK and was shortlisted for an international award for transformative behavioural interventions. There is no reason why that cannot be employed across other universities and other sectors. That is just one example of innovation.

The second important role that government has to play with regard to businesses and other organisations is to protect public policy from corporate interference. I do not say that lightly, and there is good evidence for this in other areas. I have already mentioned it in the context of tobacco policy, with interference there.

The interference comes often in delaying effective policies. It can be undermining the science or the scientists. One recent example is a series of analysis of documents from the meat industry, showing that it was framing the health and environmental impacts of red and processed meats to minimise the perception of harm and encourage continued consumption. Government has a very important role to play here. In the paper that I mentioned, we had a number of recommendations for how public policy can be protected from corporate interests. This is just part of the corporate sector, but it is a very important interference that can lead to delay or weakening of effective policies that we absolutely need to implement now.

Lord Cameron of Dillington: Thank you very much. That is really interesting.

Faisal Naru: I agree with what both Carmel and Theresa have said. We can see that, when we are talking about behaviour change, there is the individual. There is creating the enabling environment, which government and businesses can come together to do, and having the right processes, as Theresa mentioned, to ensure that there is accountability and trust. I would also add that there is potentially a hidden accelerator for climate change, which is focusing on organisational behaviour, and that is the role of all organisations, including businesses and Governments.

An example of this is the Western Cape Government of South Africa, who tried to see if there were ways to improve energy efficiency inside government buildings. They ran a load of different things. One was a competition between different floors, and they had ambassadors. Their best behavioural interventions reduced energy consumption by 14%.

Going back to Lord Cameron's point about a community base, one of the big communities that we all have is our workplace. How that workplace starts to look at being a sustainable organisation, considering the amount of time that people spend at work, is potentially a golden opportunity for starting to effect change and affect behaviour, and to create the habits that we are all speaking about, which will start to trickle down into society as a whole. Sometimes, if we look at society as a whole, it is almost a bit too big to bite off in one big chunk, but you can do it in organisations.

We were doing this when I was in the OECD, working with the executive director to see how we could make the OECD a more sustainable organisation and to affect our staff's behaviour so that it was more sustainable.

Q38   **Lord Lucas:** I would first like to ask Carmel whether she would be willing to share more detail with us of her experiment in getting people to eat more vegetables. When I look at the Marks & Spencer price list, oat milk is 50% more expensive than cow's milk. Beanburgers are the same price as cow burgers but contain one-third the amount of protein. How can you end up with a diet that costs you less?

My experience of my daughter turning us vegan was that my bills went up substantially. This is a general problem, because if we are right that being vegan is better than having a meat-based diet, it ought to be cheaper but it is not. It is substantially more expensive. What is happening in business that it is that way? How do we apply our behaviour change interests to business?

Similarly, when I wanted to repair my dishwasher, the bit from Miele cost two-thirds the price of a new machine. It was silly to repair an eight-year-old dishwasher at that rate. Similar problems exist with electronic goods too. What is open to government to do to change business practices so that we can accelerate good behaviour in areas where it is

very difficult for a consumer to affect?

Carmel McQuaid: Thank you for the question. I will respond on the topic of food and maybe leave my colleagues to comment on electrical appliances or other examples.

To be very clear, we want to make it possible for our customers to have low-impact proteins from plant and animal sources. We offer some of the best meat on the high street when it comes to animal welfare standards. We are working with our select farms across the UK, which produce great-quality products, to drive lower-carbon farming on the farm. We have a five-year innovation programme on that, working across a number of the protein products.

Lots of interventions can be made on farm, and the British farming industry is on this. The NFU has commitments to net zero. It is important that we continue to offer our customers lower-impact meat products and meat protein as well.

On the plant protein point, we bundled the activities together in our Sparking Change programme in order to address some of the challenges that you set out. That approach to thinking about what meal you will have, planning it, cooking from scratch and eating in season can help to offer a wider range of options from plant protein, such as beans and pulses, and figure out ways to incorporate those into dishes, as opposed to reaching for the alternative protein burger. There is a place for everything.

The pace of innovation in, let us say, convenience plant protein products has been very rapid. The number of products that have come on to the marketplace in the last few years has been significant, and the pace of change is happening. With that will come products that are healthier and products that are lower cost. We are investing in our innovation to support our suppliers and find those solutions as well.

I will leave it there on food. I do not know whether Theresa or Faisal would like to come in on any of the other questions.

Professor Dame Theresa Marteau: It is an excellent question from Lord Lucas. As I was saying at the very outset, the two major sets of interventions concern both availability—we need to shift the foods that are available in this context—and affordability, which means that the sustainable foods need to be cheaper than the unsustainable ones. There is a role not only for businesses but for government to look at subsidies. There continue to be subsidies on food and farming for the meat industry, which this committee could look at to make those suggestions.

Q39 **Lord Whitty:** As has just been said, prices are a direct way in which businesses affect consumers, but the other big one that is overtly attempting to affect them is advertising. We have had examples of where banning particular advertising, or self-censorship, has had a particular effect, but we have also had fairly disastrous examples of where business and government have been adopting the same message in quite a big

way, as on five a day, which has been a pretty substantial failure.

Are there any examples of where commercial advertising has been taken on board and changed behaviour in relation to food or the environment in the way we are talking about? Can anybody point to one successful, commercially financed advertising campaign that has managed to have a positive effect?

Professor Dame Theresa Marteau: I am not sure that they have been commercially funded, but mass media campaigns for smoking cessation services have been and are effective at encouraging smokers to use stop smoking services to good effect. I notice that France introduced recently—or perhaps will introduce in the next month or two—regulations such that all cars that are advertised also need to include a statement about the importance of active travel for the environment. I do not know whether those have been evaluated, and we have to be sceptical about that until we see any evidence.

Most of the effects of advertising that I have seen have been in the other direction, with evidence showing that advertising for alcohol increases, in the short term, the amount of alcohol that people consume. I am not entirely sure what you have in mind by way of a marketing campaign and whether, in order to increase consumption of plant-based foods, it would make a difference. For that to have an effect, though, we need the environment to return to a chorus line that makes it the easiest and most affordable option.

Q40 **Lord Lilley:** Theresa, you said that there are three areas where behaviour change can be relevant: food—turning vegetarian; travel—giving up cars; and heating homes—moving away from gas. Could witnesses tell us what sort of scale of change they think, when they are feeling very optimistic, might be produced in each of these areas by behavioural measures as against merely putting up the price of the thing you do not like? Would it be 10%, 25%, 50% or 75%?

Professor Dame Theresa Marteau: We have a different idea about behaviour change. When I say behaviour change by intervention I am thinking of any intervention, including a price-based intervention, that changes behaviour. I am not using it to define the intervention but rather the outcome. I would be guided by the Committee on Climate Change. In a recent analysis, it drew a distinction with regard to technology changes that have reduced carbon emissions, which have been incredibly successful in reducing emissions in the UK up to now. For the next 15 years it is saying that we need a combination of technology and behaviour change in order to achieve those emissions.

Lord Lilley: What contribution can behaviour change make? It is a bit disingenuous to say that you are including price changes, because we all know that if we taxed meat highly enough, people would stop eating it, or if we subsidised other things, people would do them. Every subsidy is also a tax on something.

Professor Dame Theresa Marteau: I was talking about shifting subsidies away from meat-based foods towards more plant-based foods and increasing the availability. It is a really good question, to which I do not know the answer: by how much would you need to shift the proportion of foods, let us say, that are plant-based away from those that are meat-based in order to achieve the change that the Committee on Climate Change has estimated we need?

Indeed, that will be my answer to the final question that I am anticipating from you about what is needed next, which is a scientific strategy whereby we can estimate by how much we need to change our environment. I talked about economic environments, but also physical environments. I do not think that we know at the moment, but, as I have mentioned, changing what is available has generated some of the largest effects that we have seen in shifting both travel and diet-related behaviours.

Lord Lilley: In your paper, you say that the scope for moving away from consuming meat is greater than the potential for reducing carbon emissions from rearing cattle, so you obviously have some quantitative feel of the two.

Professor Dame Theresa Marteau: That was looking at this globally. The analyses have not been done, so I do not want to go beyond that. The potential is large.

Lord Lilley: Do any of the other contributors want to go for estimates of the value of what we are talking about and the contribution it can make?

Faisal Naru: As Theresa was saying, the approach that I would take—

The Chair: Faizal has frozen. That is a shame. If we do not get him back, perhaps we can ask him for a written response, because clearly he has some words of wisdom in response. We now move to the final question.

Q41 **Lord Browne of Ladyton:** Thank you very much, all of you, for what has been an interesting and informative evidence session. In a sense, Theresa, you have anticipated this, but interestingly you anticipated it in exactly the space that I thought you probably would. We have had the advantage of the *Changing Behaviour for Net Zero 2050* paper from the BMJ, which helpfully has a box of key messages on its last page, so that was a help. We have also had extracts from the OECD *Behavioural Insights and Public Policy* document, which adopts a similar approach to Faisal's in his first question by selecting examples. Helpfully, too, we have had the Sparking Change impact report, which, in a very accessible way, explains how you changed the behaviour of people and tested it later to see that it had stuck for at least 12 weeks.

What we are all about is trying to find out how to help the Government to change the behaviour of the public at scale. Bearing that in mind, what recommendations would you make to the UK Government regarding how they should approach behaviour change to meet climate and environmental goals? I have certainly had in my mind the Committee on

Climate Change's conclusion that behaviour change by individuals, businesses and people in public policy is essential in all aspects of what we are trying to do in getting to net zero by 2050.

Carmel McQuaid: I would offer the committee three observations. First, I would encourage government, on any new policy, to ensure that there is a strong evidence base. As has come up many times with my colleagues too, we would really welcome early discussion before such policy ideas are at consultation stage, because in business we think we may be able to offer a perspective that shows what the unintended consequences may or may not be or how it could be made more effective. We would certainly encourage the adoption of pilots and testing, and of impact evaluation, where we could work well together.

The second recommendation is for government to play a greater role in creating the enabling environment for innovation infrastructure, so that we can then tip niche behaviour into more mainstream.

The third recommendation is a plea for the Cabinet Office to play a role in co-ordinating activity. There is a raft of new programmes coming and it is important that they are synchronised and timed in the right way. Those would be the three observations that we would offer.

Finally, we will write to the committee with a bit more information about the topic of cost, which came up in some of the earlier questions. We will add some supplementary information to our Sparking Change programme.

Faisal Naru: I agree with Carmel, but maybe I can add some points. I apologise, because I was about to speak but got cut off.

The first thing for government to do is to be authentic in its engagement. Whether with businesses or with society, the messaging effect is very important. The signalling of the importance of this will be very important.

The second thing, which may relate to some of the earlier questions, is having the humility to say, "I don't know". Climate change is one of those topics where most of us do not know what will happen and what interventions will have impact. Therefore, the focus has to be on having the right techniques, systems and processes in place for governance, rather than saying, "We've got the idea and we've got the solution".

As soon as we do that, things will change. There will be some kind of different, random behaviour, or something will happen in the climate, and we will have to change again. Having those systems and processes in place is very important for having good evidence. Experimenting and having good evaluation, with accountability and transparency, will be key to navigating the future.

Lord Browne of Ladyton: Thank you, Faisal. That seems to be pretty good general advice for governing.

"Changing behaviour at scale requires changing the environments that

drive the behaviour". Theresa, those are the words from your box, and you have been doubling down on that in your evidence to us thus far. If you want to expand on that now, this is your final opportunity.

Professor Dame Theresa Marteau: It is no coincidence that my main recommendation relates to what Faisal and Carmel have said. All three of us have been evidence-led in our submissions to you. My main recommendation is for government to develop a science strategy and delivery body for changing behaviour for net zero, to be led by the Committee on Climate Change, which has outlined where and how much change needs to occur. At the moment, we do not have a group of experts and a delivery body to co-ordinate and oversee that.

There need to be two key components of that science strategy. One is that it has to be evidence-led and far more ambitious, in both scale and speed, than any of the previous programmes that I started off by outlining, on tobacco control, obesity and programmes to increase levels of physical activity. We absolutely need to learn from those. There are some effective strategies but some very ineffective unsuccessful ones as well. We do not have the time not to learn from those.

Core to that strategy, but it will not only be this, will be creating the enabling environments that we have all been talking about that discourage unsustainable behaviour and encourage sustainable behaviour, particularly by shifting availability and affordability.

It will be evidence-led, with evaluation designed in, because we are talking about are multiple interventions. I absolutely agree with Faisal that we want proof of concept experiments beforehand, but we do not know how those will work across the systems, so we need to have the evaluation designed in and the systems in place such that we are checking how things are going along in order to make the fine adjustments so that we do not find ourselves in the situation that we are in at the moment.

Our current obesity strategy was to halve childhood obesity by 2030. Our ambition on smoking was to reduce it to below 5% by 2030. There is no way, short of two extraordinary miracles, we will achieve that, so we want to avoid that situation. It is about being evidence-led, with evaluations designed in.

Finally, I would make a plea for appropriate resourcing for all this. There are just two observations that I would make about the resourcing. The task is huge. The committee has illustrated that by the broad range of witnesses you have had so far in your evidence sessions. It needs to engage the whole of civil society, as well as business, and policymakers at local, national and international levels, with government enabling this through resource and creating regulation.

The task is huge, but the prize is also huge. With effective changes to behaviour, not only would we start to tackle climate change and be on the path to net zero by 2050, but, because of shared drivers, we would

also be improving health and reducing inequalities, and tackling some of the major challenges to population health, including obesity and dementia. Keep the eyes on that huge prize, but it needs significant resource to achieve that.

Lord Browne of Ladyton: Thank you all. I will be surprised if we do not find some of these words in our recommendations at the end of the report.

The Chair: On our committee's behalf, can I thank all of you for the real richness of the evidence that you have provided for us today? We have really appreciated the breadth and depth of the contributions, which have echoed a number of contributions we have already had to date, which is very encouraging. I am sure that, as Lord Browne says, we will be picking up some of these not only in future evidence sessions that we have coming up but, indeed, in the final report itself.