

Environment, Food and Rural Affairs Committee

Oral evidence: Plastic waste, HC 556

Tuesday 30 November 2021

Ordered by the House of Commons to be published on 30 November 2021.

[Watch the meeting](#)

Members present: Neil Parish MP (Chair); Ian Byrne MP; Geraint Davies MP; Dave Doogan MP; Barry Gardiner MP; Dr Neil Hudson MP; Robbie Moore MP; Mrs Sheryll Murray MP; Derek Thomas MP.

Questions 1 - 113

Witnesses

I: Paula Chin, Sustainable Materials Specialist, WWF-UK; Adrian Whyte, Resource Efficiency Senior Manager, Plastics Europe; and Susan Evans, Senior Policy Advisor, Green Alliance.

II: Barry Turner, Director of Plastics and Flexible Packing Group, British Plastics Federation; Richard Hudson, Technical Manager, Chartered Institution of Wastes Management and Dr Adam Read, External Affairs Director, SUEZ.

Written evidence from witnesses:

- [Green Alliance](#)
- [British Plastics Federation](#)
- [Chartered Institution of Wastes Management](#)
- [SUEZ](#)

Examination of witnesses

Witnesses: Paula Chin, Adrian Whyte and Susan Evans.

Q1 **Chair:** Welcome to the EFRA Select Committee. We are looking into plastic waste. We are fortunate to have some very good witnesses before us this afternoon. Starting with Paula, would you just like to introduce yourself briefly for the record? And then Adrian and Susan, please.

Paula Chin: Thank you very much for inviting me to give evidence today. I am Paula Chin and I am sustainable materials specialist at WWF.

Chair: Thank you very much.

Adrian Whyte: Thank you. I greatly appreciate the opportunity to be here. My name is Adrian Whyte, and I am the senior resource efficiency manager with Plastics Europe.

Chair: Thank you very much. And Susan, please?

Susan Evans: Likewise, it is a privilege to be here. My name is Susan Evans. I am a senior policy advisor at Green Alliance, focused on resources.

Q2 **Chair:** Thank you very much. Like I say, it is very good to have you all here before us because we are just starting our inquiry, so it will be a very useful evidence session.

My first question to you is a very broad one. How much plastic does the UK produce? Are we seeing any change in the volume and type of plastic waste the UK produces? Would Adrian like to have a stab at that one first?

Adrian Whyte: Yes. So, in total 3.6 million tonnes of plastic are placed on the market; 2.29 million tonnes of that are for plastics packaging. We will have seen some changes with Covid, with reductions in on-the-go plastic articles. We are seeing an increase in plastics recycling—although there is a lot further to go.

Q3 **Chair:** Have you got any figures on how much plastic use has gone up through Covid? It has been essential in some ways, but it is bound to have gone up quite dramatically, I would have thought.

Adrian Whyte: Yes. On-the-go plastics packaging has come down, but we have seen increases in other areas. We are just about to conclude a study on this; we will make that available to you. Barry Turner, who is speaking later, may have more granularity on those figures.

Q4 **Chair:** Paula, what is your overall opinion on the change in the volume and the types of plastic the UK produces? Have you seen any particularly interesting points on that?

Paula Chin: Yes, certainly. Covid has had a massive impact. At the start of the pandemic, there was quite a big momentum around reuse and it



was growing. Then, of course, Covid put paid to that and we saw consumers return to pre-packaged goods where previously they were buying into refill and reuse options on those, which was a bit of shame, but then momentum has picked up again. But, as Adrian mentioned, there is a drop-off in food service, and different types of waste streams of plastic have come on the market now, with a lot of PPE, for instance—although I am aware of some recycling activities that are going on in PPE collection, so that is a really positive sign too.

Q5 Chair: I know they are looking at reusable PPE as well, but I think that has become quite complicated. It is understandable, too, that people in a pandemic want to see things covered in plastic. It makes them feel safer, almost. It is a difficult question for you, really. How do we change people's attitudes back to looking at the amount of plastic? At the moment I think we are still in the pandemic and I am not sure they are quite ready for it, are they? What is your view on that?

Paula Chin: I think, initially, there was some very minor evidence of transmission risk, but a study that I read said that the transmission risk was greater on more organic materials such as paper and fabrics as opposed to plastic. I think that you have got a struggle between what people perceive might be the situation as opposed to what is the actual situation. So, definitely a recommendation to do more studies on it, to see transmission on different types of materials and ascertain the actual risk to public health. My mother is an example of where if it does not come in a wrapper she just does not trust it, and you will always have people with that mindset.

Q6 Chair: Indeed, yes. Susan, anything you would like to add?

Susan Evans: Just to add to what Paula said, when we talk about reuse and refill systems, that encompasses quite a variety of different systems. We might immediately think of taking your own coffee cup in to get refilled, but also it is possible to have systems where the cups or the food containers would be owned by the business rather than by the consumer. Then perhaps there could be systems where you could guarantee the safety and hygiene a bit more. There are not many of them off the ground at the moment, but it would be good to see more support for that.

Q7 Chair: I know in our last report we were looking at a lot of that type of thing, but at the moment, for understandable reasons, it is not so attractive. Can I put to you another part of my question? Our last report on plastics found that the Government was underestimating how much plastic waste the UK produces. What changes would you like to see in how plastic waste is reported? Naturally, some smaller companies and others do not have to report at the moment. What would you like to see happen?

Susan Evans: I think it would be very welcome if under the packaging EPR system, as I think was proposed, a wider variety of producers had to



HOUSE OF COMMONS

report. It is important to try and improve data right across the system. We need data at the point of the packaging coming on the market, of how much is being collected, and then how much is actually recycled. Right across the system, there is a real problem with there not being enough data, and you get these conflicting sources of data, so it is hard to get the full picture. For a basis for really robust targets and actions, we need to improve reliability of data.

Q8 Chair: I think I am right in saying that in our last report we found that companies that were using less than 50 tonnes of plastic did not have to report. I would suggest that 50 tonnes of plastic is quite a lot of plastic, because plastic on the whole does not weigh that heavy. I can understand that we do not want to make it hugely time consuming for every business, but I just think we need to be much more accurate. Adrian and Paula, do you have any comments on that?

Adrian Whyte: We certainly need much better reporting. I think some chain of custody models that we will see emerge in future will help greatly with that. You are right; it is really just finding that optimum point for reporting without putting an unfair administrative burden on smaller businesses. But there is a lot more to do in terms of increasing plastics recycling, the technologies that are there and the opportunities to do that.

Q9 Chair: Paula, are you largely on the same page?

Paula Chin: Yes, definitely. I would go further and say that the granular level of detail that we require is around the different polymers that are being used—the actual packaging formats—because obviously some are more challenging. 50 tonnes of flexible films, for instance, is going to be way more voluminous than 50 tonnes of PET bottles. There is an opportunity with EPR to require that central reporting through the scheme operator.

Chair: It would be difficult to do it by volume rather than weight, I suppose. Would that in itself be quite difficult to administer and work out?

Paula Chin: I will correct myself. It is more that 50 tonnes of flexibles would be millions of pieces as opposed to PET bottles—so, yes, definitely by weight.

Q10 Dave Doogan: The latest figures are that around 40% of plastic waste is recycled. What are the barriers that prevent higher rates of recycling? Given that most local authorities, most consumers and most producers in the United Kingdom would all say they want to see more recycling, what is the drag on that priority?

Adrian Whyte: There is a number of barriers to increasing recycling rates and we desperately need larger quantities of quality recyclate to fulfil the ambitions of targets going forward. I know that harmonised collection is already being looked at but if you can harmonise collections and get consistent feedstocks going into mechanical recycling facilities, it



HOUSE OF COMMONS

means that they can do their job better and get higher qualities and quantities out of that. There is also emerging technology—such as chemical recycling—that by 2030 will be achieving scale and that will also provide the opportunity to recycle more plastics. The plastics industry is investing just over €7 billion in this to achieve over 3 million tonnes of chemically recycled plastics by 2030. But we do need the support of Government in robust mass balance systems to allow those materials to be counted towards recycling.

Q11 Dave Doogan: What was the tonnage figure in 2013, Adrian?

Adrian Whyte: It was 3.1 million tonnes.

Q12 Dave Doogan: 3.1 million tonnes. Where are we now?

Adrian Whyte: We are at a very low level at the moment. The technology demonstrators are being built. We expect there to be about 1 million by 2025. So, this is a result of a lot of spending on innovation.

Q13 Dave Doogan: That target is back-loaded then?

Adrian Whyte: Absolutely, yes.

Susan Evans: There are a few things I can point to as well. As we all know, there have been some delays—some of them understandable due to Covid—with some of the key policies which are supposed to drive recycling rates up, the Extended Producer Responsibility for packaging and the Deposit Return Scheme being two key ones, which obviously we would like to see faster progress on. Back in 2018, we produced a report showing that we probably need around 60 new recycling plants to actually be able to have the facilities to process the amount of recycling that we would need to—or, even better, about 30 recycling facilities and lots of investment in reuse. Something that I would also just add in response to Adrian's comment there is, yes, it is good to improve our recycling capacity, but also we have to think about: do we want to spend more on new forms of recycling, or do we want to put the effort into reducing the amount of plastic coming into the system in the first place?

Chair: We will be coming on to reduction in a minute.

Susan Evans: Okay. I would also point to the issues around data and enforcement as well, which cut across many of the issues we are talking about today. To get a handle on where recycling rates are, we need robust data on recycling rates to understand how much is actually recycled. Given that a lot is exported—I know we are coming on to that as well—we need to understand what the situation is to be able to improve it. Data monitoring and enforcement are all going to be really important.

Paula Chin: Just add to what Susan said, we are coming onto exports, but two thirds of plastics collected for recycling are actually exported. I would just note that around the same figure of paper is exported, too, so



HOUSE OF COMMONS

there is a recycling capacity issue throughout the UK across the different materials, not just plastics.

Adrian, I thought you would touch on the valorization aspect of recycling plastics, but you did not. They come so cheap as virgin material that once you put it through all the processes and put it back in, does it make economic sense? I have realised over the last few years that that is a big driver and a barrier to it, as well as things like food grade regulations. Within the Resources and Waste Strategy 2018 it said that that would be reviewed at some point to see whether the standards were correct or whether there was some softening that could be done to unlock a bit more of the recycled material that might be coming through. But, certainly, the valorization aspect is one big barrier.

- Q14 **Dave Doogan:** Just a supplementary, Chair. I think it is important to acknowledge that recyclate is a commodity with a fairly marginal value and the quality of that recyclate affects that value quite severely. Is there an education opportunity for consumers and producers about the importance of recycling well—while accepting that some view recycling as being at the bottom of the strategies to cope with it, after reuse and reduction—to make it easy to recycle well?

Paula Chin: Yes, I think there is an opportunity for producers. For consumers, it is a bit more of an ask to get them to understand the complexities of the waste industry. I think you are so right that it is a commodity, and to trade in a commodity like plastic is very complex. It is also intertwined with the energy sector, because obviously fossil fuel-based plastics come from oil and gas, so there will be a dependency on the price of that to determine the price of the polymers going forward. It is tied up with a lot of macroeconomic factors through the market.

- Q15 **Chair:** Thank you. Just before we leave this question, have WWF or the Green Alliance in particular done any work on how green the chemicals used to recycle are? That is something I am interested in, and I am not altogether convinced they are. Have you done any work on that at all, Paula?

Paula Chin: Possibly somewhere in our network, but I am fairly knowledgeable on the topic. I know, certainly working with NGOs like CHEM Trust, there is a big concern. There has been a lot in the news about the PFAS chemicals or forever chemicals. There is probably, as we stand, a lack of understanding as to the cocktail of chemicals that is emerging. The recyclate coming out will itself go through stringent food grade appropriateness tests, but we do not know with these things because there are so many variables and so many different materials and additives going into the mix.

- Q16 **Chair:** In terms of the value of plastic, as Dave said, a lot of this plastic is very low-grade when you have finished mixing it all. If you can keep the different types of plastic—i.e. the bottles and things—separate and then make a new bottle out of it, it is actually worth a lot more in value.



HOUSE OF COMMONS

Susan, is there anything that the Green Alliance has particularly looked into on the recycling side of things? I think it is one of these things where we tick the box and say, "Yes, we have recycled it," and we all feel better, but has recycling it done the environment any good?

Susan Evans: In a way, it is about looking at the opportunity cost if you are displacing virgin materials. The reason we do recycling is because on the whole the net impact is better. But you are absolutely right; every industrial process, including recycling, has its own impacts and requires energy, as well as chemicals and so forth. Again, back to the need to reduce. You talk about the value of recycling—the value of a bottle that you reuse is obviously much higher than the value of high-quality recycle bottles.

Q17 **Chair:** Adrian, any final comment from you?

Adrian Whyte: I think you correctly identified the separation of high-quality materials. You can produce the highest quality with looking at 50%, 75%, 100% recycled content in PET bottles—we are getting 50% recycled content in milk bottles—and by better consumer education to get the right materials going into the right recycling bin. We are working with Innovate at the moment on a programme with 620,000 households in Kent to look at ways that you can improve communications with householders to get them to recycle more, and to do it in a quality way.

Paula Chin: Adrian mentioned chemical recycling. It is still very much an emerging area, but there is a lot of interest, because obviously it takes back and deals with the more problematic plastics, and at the end of it the output is akin to a virgin raw material. It is an interesting area, but one that I think we need to be careful of because we do not fully understand the lifecycle impacts yet. There is a lack of transparency coming from these trial plants that are setting up. There is a big plant being set up in Humberside by INEOS. But that lack of transparency as to what the true impacts are and what the outputs are, the quality of the outputs, the chemicals and the energy being used, and so on—I think that is something that certainly NGOs are keeping a close eye on.

Chair: Thank you very much; that is interesting.

Q18 **Geraint Davies:** Paula, I understand from the United Nations that they are basically saying that by 2050 there will be more plastic in the sea than fish, and that in the UK we produce more plastic per head, at 99 kilograms per person, than any country in the world other than the United States, which is at 105 kilograms—compared to, say, Italy at 56 kilograms, which is about half that. Would you agree with me that what we should be doing, perhaps, is to have a target for the overall amount of production and consumption of plastic in Britain—like in the Climate Change Act—that is reduced, and then we use various strategies like taxing plastic to incentivise people not to consume it and to use sustainable alternatives?



Paula Chin: Thank you for that question; it is right up my street. Of course, we need to have ambitious targets but you are right, because for us it is about reducing overall material consumption. A WWF report that came out recently, “Thriving Within Planetary Means”, does show exactly that the UK consumes more than its fair share of the planet's resources, and one of those areas is in materials. That report is calling for a 40% reduction in our per capita materials footprint. This concept of consuming more than our fair share of various natural resources is really important too, because we are leaving our impacts in places around the world which are providing our products and services through manufacturing in those particular locations. We recently launched a WWF Basket Metric at COP26 and the packaging targets on that go across all materials. It is not just looking solely at plastics; we want to look at materials across the board. So, 100% recyclable packaging, 40% reduction in material use driven by our report, and that all materials are sustainably sourced.

Q19 **Geraint Davies:** Sorry, just so I am clear, does WWF support the idea that we should have a target for the overall production and consumption of plastic in Britain that goes down year on year, or not?

Paula Chin: I think we need to have a target to reduce material consumption overall. There are risks around going after a solely plastics-focused target because we see through the activities of businesses that they are switching to other materials, and that in itself delivers environmental risks. In their progress report, the Ellen MacArthur Foundation—

Q20 **Geraint Davies:** Switching from plastic—what are the environmental risks?

Paula Chin: Switching from plastics to paper, for instance, or to aluminium, which are much more carbon intensive materials. The Ellen MacArthur Foundation showed that there had been a 1.2% reduction across their global commitment members in the use of plastic. However, 76% of that 1.2% was delivered through material switching, and 20% of that was through paper. There are huge issues with the paper supply chain at the moment; suppliers are scrabbling around for material, and sourcing standards will be going out of the window in order to fulfil orders.

Q21 **Geraint Davies:** You can recycle paper on a multiple basis that you cannot with plastic. Is that right?

Paula Chin: You can, yes, but there are different qualities of paper. Some papers will be higher quality and can be recycled more, but something like a newspaper, for instance, will be very low quality in the first place. It is important that we focus on tackling plastic pollution, but I think it is even more important that we take a holistic overview as to all the materials we are using less —

Chair: We are straying, Geraint.



HOUSE OF COMMONS

Geraint Davies: Okay, I will turn to Adrian—

Mrs Murray: Chair, I will make my apologies, because my question has now been answered, and it is pointless my staying and taking—

Chair: All right; apologies, Sheryll.

Q22 **Geraint Davies:** Can I turn to Adrian now, about the overall amount of plastic? It is the case, as I have just mentioned, that we are consuming more than anywhere else in the world, and obviously we are going to have more plastic than fish. It is also the case that 6% of global GDP is spent subsidising fossil fuel, making plastic ridiculously cheap so it is not worth recycling. Do you think there is a strong case that there should be a global limit on the amount of plastic produced and consumed in Britain, and a target for its reduction?

Adrian Whyle: No, I cannot agree with you, for a number of reasons. First of all, the figure about as much plastics as fish in the ocean is highly questionable. What if it is 10% or 1%? It is still too much going into the ocean. We do not know the biomass in the ocean today. In terms of UK consumption, plastic packaging placed on the market has flatlined over the last decade. If you take into account population increase, we are seeing a decrease in that.

Geraint Davies: A decrease in consumption of plastic per head—is that what you said?

Adrian Whyle: In plastic packaging consumption per head, yes.

Geraint Davies: For plastic overall, not just packaging?

Adrian Whyle: In plastics overall. They are finding a lot of valuable uses in renewables, automotive —

Geraint Davies: Sorry; just so we are clear, is plastics per head going up or down? My understanding is it is going up, and you are contesting it is going down. Is that true?

Adrian Whyle: No, that is plastic packaging.

Geraint Davies: Not plastic?

Adrian Whyle: Not plastics overall; plastics packaging consumption per head. But in terms of plastics overall, it is increasing per capita. I am mindful that plastics bring a great deal of utility to the value.

Geraint Davies: We all know the value of plastic.

Chair: We are now going into reduction. I am going to get told off by everybody, at this rate, for stealing everybody's questions. I have already had Sheryll leave because she felt her question had been stolen. I think we had better try and keep to your question, please, because I am not going to have other people walking out of the room.



HOUSE OF COMMONS

Q23 Geraint Davies: No, no. It is about plastic targets, Chair. I think you are saying there is not a case to reduce the target for overall plastic per head and, therefore, it should go up every year. Is that right?

Adrian Whyte: I am not saying it should go up every year.

Geraint Davies: What are you saying? It should go up or down or stay the same?

Adrian Whyte: I am saying that plastics have their role. They bring great utility. If you set a target that meant, for instance, that you would not be able to benefit by the lightweight insulating properties of plastics and you increased greenhouse gas emissions, that would be not be in the greater interest.

Geraint Davies: If we consume less plastic we would have more greenhouse gas emissions. Is that what you were intending?

Adrian Whyte: If you are limiting the amount of plastics going into insulation—they can go into light-weighting vehicles, aircraft, and son—yes.

Q24 Geraint Davies: We could use wood pulp, couldn't we? Obviously, plastic manufacturers would not agree with that. Susan Evans, given that we consume nearly twice as much as Italy and more than anywhere else in the world other than the United States, would you agree that the UK should aim to reduce the amount of plastic consumption per head?

Susan Evans: I am probably going to agree with Paula on this one and say that we should be looking at overall resource consumption. Possibly within that, when you start to analyse it, you may come to a conclusion specific to plastic and look for a target for that. But I think it is important not to set up a situation where you focus so entirely on plastics that you inadvertently cause shifts to other products that also have their own environmental impacts. To add to what Paula said on that, we need to remember that so much of the environmental impact of the resources we use is often upstream so it is about thinking about the whole lifecycle analysis. For example, if you made the wrong decisions around plastic that led to a big increase in food waste, that potentially has enormous carbon impacts. It is about making sure that you are taking a strategic approach to all material use with the way you set up any targets.

Q25 Geraint Davies: The Government has said that by 2042 there should be a target to eliminate avoidable plastic waste. Would you agree with that?

Susan Evans: Broadly, yes, in the context that we also have the 2050 target to eliminate all avoidable waste. But I do have a problem with the way that is defined, in that it is a bit unclear still as to what is avoidable plastic waste.

Q26 Geraint Davies: I was going to ask you what that is, because I do not know.



Susan Evans: There have been a few different definitions put forward in different policy documents, which is interesting. But the definition in the Resources and Waste Strategy for England essentially excludes anything that can be recycled or composted or is biodegradable, so it turns it into a residual waste target, which is then what we have got under the Environment Act as well—a target for reducing residual waste. That is actually quite problematic because if you think about compostable plastics, for example, that we are seeing more and more of—on things like your Waitrose bananas—clearly, a lot of that packaging is avoidable. You do not have to put your bananas in a plastic bag of any kind, whether it is compostable or whatever. So looking at that definition of what is avoidable is quite important. The other thing to remember on that is the definition of avoidable changes over time.

Q27 **Geraint Davies:** The 2025 target aims for all packaging to be recyclable, reusable or compostable. Is this the right target or should the target be how much the packaging is actually recycled, reused or composted?

Susan Evans: It is not the right target. It should definitely be how much is reused, recycled or composted. I will just go back to the example of compostable packaging materials to demonstrate that. Take, for example, a Bagasse food container that might be compostable. If you put that in your food waste bag and that turns up at an anaerobic digestion plant, it is likely that whole bag of food waste will just get chucked into landfill or incineration because there is no certainty that that is safe. In fact, most compostable plastics cannot actually be processed in anaerobic digestion plants that we use for food waste in the UK. So, you could have a situation where you achieve your target—"Oh, there is so much compostable plastic"—but actually you could have had damaging impacts on the way waste is actually processed, and the carbon impact.

Q28 **Geraint Davies:** Adrian, do you agree with the Government targets? Namely, 2042 to eliminate avoidable plastic waste, and 2025 for all packaging to be recyclable, reusable or compostable? Or are they ridiculous?

Adrian Whyte: I would agree that you should eliminate avoidable waste of all kinds. I think we are seeing a lot of new innovations that are coming into play with the 2025 target for all plastics to be recyclable or compostable. I agree with the comments that were just being made that we should beware of the unintended consequences. I also do not believe that we should be sacrificing resource efficiency in shelf life just to make a packaging format recyclable.

Q29 **Geraint Davies:** Finally, Paula, have you got any comments about these targets?

Paula Chin: I agree with Adrian and Susan's comments.

Geraint Davies: Okay. I will leave it there, Chair.

Chair: Okay. Thank you very much.



HOUSE OF COMMONS

Q30 **Dave Doogan:** Chair, can I just clarify? It was quite a point that we heard there from Susan. What was that packaging? Are you talking about the translucent green liners that people put in their food waste caddies, wrap up their food waste in and throw it in the compost?

Susan Evans: No, I think those ones are okay.

Dave Doogan: I am very glad to hear that.

Susan Evans: I was talking about some examples like Bagasse, which is something that is coming in quite widely as a food container to replace expanded polystyrene food containers. Sometimes they say they are compostable—sometimes they are, sometimes they are not. In either case, it is hard to process them in our facilities.

Chair: We did quite a lot of work in a previous inquiry on what was compostable plastic. Of course, it is an industrial process and it often has to be heated to 70°. Also, you do not necessarily want to mix up compostable plastics with non-compostable plastics. The whole thing becomes horribly complex, if we are not careful, but it is an interesting point you make. Thank you, Dave, for that supplementary.

Q31 **Barry Gardiner:** Why do we export so much of our plastic waste?

Adrian Whyle: Would you like me to lead with that question?

Barry Gardiner: Yes.

Adrian Whyle: It is a good question, because we really want to see that plastic remaining in our own countries.

Q32 **Barry Gardiner:** We do not have the facilities to manage it in our own country, do we?

Adrian Whyle: Exactly.

Barry Gardiner: And that relates to the PRNs?

Adrian Whyle: The PRN is part of that, but it is not just low-quality plastics that are being exported. There are high-quality plastics being exported as well, and good prices are paid for that material. That means that there are lower labour costs, which makes it economically more attractive.

Q33 **Barry Gardiner:** I would like your advice as to whether this is still the case; it certainly used to be the case that if you were putting a tonne of plastic into recycling in the UK, it was measured as a tonne. If you were putting a tonne of plastic to be recycled for export, it was all bundled together, and actually they found that a large proportion of it—sometimes up to 30% of it—was not plastic that could be recycled; it was rubbish. The people who were doing it were finding it very cost effective to be paid for a tonne of plastic that was being recycled for export, rather than a tonne that was being recycled domestically. Is that not the case?



HOUSE OF COMMONS

Adrian Whyte: Yes, and that is why we need the reform of the PRN. I think the EPR scheme is going to address that issue. Without doubt, any sort of criminal exports need to be stopped. What you are describing is a criminal export.

Q34 **Barry Gardiner:** No doubt you will have welcomed the Government's commitment to banning the export of plastic waste to non-OECD countries. Perhaps you could tell us what percentage of our exports of plastic waste actually go to non-OECD countries?

Adrian Whyte: We export about 60% of plastics from the UK.

Barry Gardiner: It is 61% of plastics.

Adrian Whyte: It is 61%; thank you, and there is a large amount going to Turkey at the moment.

Q35 **Barry Gardiner:** That is 27%. I asked you what percentage is going to non-OECD countries, just so we can get the measure of what the manifesto commitment actually means.

Adrian Whyte: I do not have the exact figures for Malaysia and Hong Kong, but you will find that they are high.

Q36 **Barry Gardiner:** The figures I have are 7% for Malaysia, 8% for Hong Kong and 3% for Indonesia; in total, 18% to non-OECD countries. It is not actually a big deal, really, is it? It is good as far as it goes, but not a big deal.

Adrian Whyte: We would like to see those being exported to companies where they have got adequate waste management systems in place to stop leakage into the environment.

Q37 **Barry Gardiner:** How might the Government's proposals for extended producer responsibility be used to limit the export of plastic waste?

Adrian Whyte: I think we have an issue in terms of the lack of infrastructure, which you rightly described, with extended producer responsibility coming into play two or three years from now. We need to be addressing the infrastructure development now. The plastic tax provides a mechanism to provide the funds to start that infrastructure development for facilities that will re-shore those valuable plastics back to the UK and to provide outputs that can be incorporated into finished goods that are being manufactured here.

Q38 **Barry Gardiner:** Susan, perhaps you could tell us what measures to strengthen compliance, monitoring and enforcement the EPR is going to introduce.

Susan Evans: I do not know if I can give much detail on that question.

Barry Gardiner: Paula, is that one for you?



Paula Chin: Yes, I can pick up on that. Just to agree with Adrian that export PRNs have been too cheap for too long versus domestic ones, so that has driven a lot of export. With the amount of plastic that we are exporting, we are also bringing in about the same amount as filled imported goods. One of the things EPR will require is evidence of what actually happens to that material once it reaches its end destination. This, of course, will link in with what will be a very welcome consultation with the Government on electronic waste tracking.

It may surprise you, but I am not overly concerned with the exportation of waste as long as the waste is being used in the correct way. Say, for instance, we are exporting 60% of our plastic waste but we are getting 60% back and it has got our recycled content in it, then we have done a switch and we have offset the use of virgin material in the country that has produced that good for us that is coming back in.

Q39 **Chair:** Can we track that to make sure that that is actually happening, and that we are just not exporting it and it is not being properly recycled? To what degree can you check that at the moment?

Paula Chin: That is the \$20 million question.

Q40 **Barry Gardiner:** It was the question I asked, actually—whether the EPR would introduce strengthened compliance monitoring and enforcement procedures, and what they would be. In particular, what would they be for exports?

Paula Chin: In principle, it is looking to do exactly that. In practice, it will require a lot more resourcing of the agencies that will need to audit and monitor and enforce these infractions.

Q41 **Barry Gardiner:** Who are those agencies?

Paula Chin: The Environment Agency, for instance, who, at the moment, as I understand it, are able to carry out very limited waste shipment exports.

Q42 **Barry Gardiner:** Is that because of the powers or because of the resources that they do not have?

Paula Chin: The resources, I believe, at the moment. I think they have the powers to intercept and audit waste bales that are going out and being exported. There have been some high-profile cases of them picking up on subquality waste that is being exported.

Q43 **Barry Gardiner:** Also some cases of the rubbish being sent back to us?

Paula Chin: Yes, absolutely. There definitely needs to be more support behind that monitoring and enforcement.

Q44 **Barry Gardiner:** If a recommendation were to be made by this Committee in its report, what should that recommendation look like to improve the capacity for that monitoring, compliance and enforcement?



HOUSE OF COMMONS

Paula Chin: There should be more resourcing of the Environment Agency, for one, because currently it is all self-reported. There should be more evidence provided through that self-reporting of the quality of the bales that are being sent abroad for exporting. Also, to set up, as Adrian mentioned, chain of custody arrangements with the receiving businesses at the other end. Going further than that, once the first recipient of the waste receives it, they might strip out what they can use and then the rest of it goes somewhere else, so we need that full chain of custody so that ultimately—

Q45 **Barry Gardiner:** How many prosecutions have taken place for exporters that have been found to be non-compliant and that have self-declared the incorrect amount of plastic waste for export?

Paula Chin: I do not have that figure to hand, but I would imagine it is very few at the moment.

Q46 **Barry Gardiner:** Is it a figure that you are able to give us? Or Adrian perhaps?

Adrian Whyte: Anecdotally, I heard a figure—not an exact figure—but one in four shipments notified on the EA's hotline that were inspected were found to be non-compliant.

Q47 **Barry Gardiner:** So, a quarter of the waste that we are exporting is non-compliant?

Adrian Whyte: No. The caveat I made was that it was reported as non-compliant on the hotline.

Q48 **Barry Gardiner:** Sorry; just cash that out for me a little bit more carefully.

Adrian Whyte: Okay. There is a hotline that the Environment Agency has, and one in four of the containers they inspected were found to be non-compliant that were reported on there.

Q49 **Barry Gardiner:** So, they were alerted by somebody that it might not be compliant. They then inspected and found that in a quarter of the cases that was true.

Adrian Whyte: Yes. And when I asked about the amount of non-compliant containers that were going out, they said "they were in the minority". That is not to defend these materials—

Q50 **Barry Gardiner:** Indeed. Was each of the hotline-reported 25% non-compliant cases prosecuted, and what penalties were imposed in relation to the cost savings that the fraudsters were making?

Adrian Whyte: I have no idea. I do not have that information.

Q51 **Barry Gardiner:** Is it information that we can be given as a Committee?

Chair: I think that question is a bit outside our witness's remit, to be honest with you, Barry, but we can get that.



HOUSE OF COMMONS

Barry Gardiner: Maybe we could proceed in other directions, Chair.

Susan Evans: Can I add one small point?

Chair: Yes, please do.

Susan Evans: I endorse the point that the Environment Agency should absolutely be resourced such that it has the resources to conduct the amount of audits that it is supposed to do. The National Audit Office noted a couple of years ago that it has not been able to even get close to hitting its targets for audits.

Q52 **Barry Gardiner:** Do you know what those targets are?

Susan Evans: I do not have them to hand, but we could provide those.

Barry Gardiner: That would be helpful, and then we could incorporate that into the report. Thanks very much.

Q53 **Chair:** Just before we leave this one, Paula, are you happy that transporting the waste for recycling to far-flung places does not offset the gains from recycling? I suppose how it is transported is an issue. Does that worry you?

Paula Chin: Of course it does. For instance, with the plastics tax where there is a requirement to have 30% minimum recycled content, one of the things we wanted to push for was to differentiate the tax rate between imported recycled material versus domestic recycled material because the benefit is slightly outweighed or offset by the fact that you are having to import the materials. There will be impacts, but the most important thing is that the materials are actually recycled and used in some way.

Chair: And recycled properly when it is exported.

Dave Doogan: Chair, can I just have a very quick supplementary on that?

Chair: Very quickly.

Q54 **Dave Doogan:** It is very quick. Can I ask any of the panellists if they think there is a cultural or a behavioural link between being one of the highest producers of plastic waste, and being one of the highest exporters of plastic waste—or, to turn that on its head, having the least ability to export? Does it point to a significant cultural issue in the UK?

Chair: Can I just have very quick answers from you, please, here? Adrian, you have a go. You can just say yes if you want to.

Adrian Whyle: No. We have seen high export rates of plastic waste from other countries as well, so I do not think it is a cultural issue.

Chair: I think we will leave that one there, Dave. I am conscious of time.



Q55 Dr Hudson: Thank you, Chair, and thank you to our witnesses for being before us today and for the very interesting and valuable evidence. I want to draw on the points just mentioned—particularly about recommendations to the Committee for Government to adequately fund the Environment Agency, which has such an important role. I think our Committee banging that drum to the Government is very important in terms of air quality, water quality, waste control and flood management. That is an important take-home message for us—to support the Environment Agency.

I wanted to get on to the banning of single-use plastics. In October 2020, the Government banned the distribution and sale of things like plastic straws, plastic-stem cotton buds and drink stirrers, with some special exemptions. I just wanted to get your thoughts on how effective you feel bans on single-use plastic products are at reducing waste. Do you want to kick off with that, Susan?

Susan Evans: I could come in on this one. If you look at the bans, and in fact charges on single-use plastics, that have been put in place to date, they are really quite piecemeal. They only address very small amounts of overall waste streams.

The specific items that have been banned in England and in Scotland were based on the items that are most commonly found in beach clean-ups around Europe, so, yes, it has that impact on litter, but when we are thinking about how to have an economy that uses materials sustainably, we cannot just go item by item. We have to have a strategic vision and really tackle things in a bigger way. If you look, for example, at the ban on some microbeads, it addresses less than 9% of microplastics that are intentionally added into the environment. A much larger amount of microplastics are intentionally added in the agriculture sector, for example. We have only addressed them in some cosmetic products. When you look at the overall picture of the material flows going through our economy, it really is just picking and choosing these really quite small waste streams. They do not really get to the heart of the issue.

Q56 Dr Hudson: Can I take you back to the macroplastics? Has there been a direct link between these bans and what people are picking up on beaches, and so on? Do we have data on that?

Susan Evans: I do not have data on that. The ban is quite recent so it may take a while.

Dr Hudson: Yes, October 2020.

Susan Evans: Yes, so it is going to take a while for that to filter through. I do not know how much monitoring has been done of the impact either; I would be interested to hear from others on that. One thing that is quite clear—if you look at how the impact assessments are being done for these bans on single-use plastic items—they are assuming pretty much a wholesale switch across to alternative single-use items, so they are not really tackling the single-use culture, which is what we want to tackle.



Going back to the fact that material impacts often are much greater upstream when they are produced—when they are extracted from the ground and processed—we need to think about, “Is it okay to switch from totally unnecessary single-use plastic balloon sticks or drink stirrers to these things made out of another material?” Those materials are often much denser and can, as Paula mentioned, sometimes have higher carbon impacts and cost more for waste processing, and so on. Is it a real benefit or—as studies have shown—when it comes to charges and bans on single-use plastics, should we have a systemic approach that really drives reuse at the same time as tackling these items?

Q57 Dr Hudson: That is very helpful. The unintended consequences arguments are coming out again. Paula and Adrian, do you have any thoughts about how effective the bans have been on single-use plastics?

Adrian Whyte: I have no evidence, but anecdotally we see a few straws littered on our beaches.

Q58 Dr Hudson: Paula, do you have any comments on that?

Paula Chin: Yes, just to reiterate what Susan said about the unintended consequences and the switching. But going after the items that are most problematic and most highly littered is clearly a positive thing. In terms of the overall tonnage of plastic that is being used and other areas that we could be tackling, there are some bigger opportunity areas for the Government to go after. Nurdles, for instance—the production pellets which are leaking and causing all kinds of havoc in the ocean.

Q59 Dr Hudson: That leads me to my next question; the Government has now launched new consultations on bans of different types of single-use plastics. Are there any particular products that you, the panel, think should be included in these consultations? And, if so, what might they be? Do you think the consultation is set up to pick up the right questions in there, or what things would you like to add to it?

Paula Chin: As I understand it, it is tobacco filters, wet wipes, sachets and single-use cups—a very disparate group of products, but obviously all quite problematic from a litter point of view.

Picking up on Susan's point about a systemic approach, the single-use cups is a really interesting one because it is the plastic bag of the food service world. There is an opportunity for the Government to really look at the whole systems approach with that. Businesses are already running their own initiatives; for instance, McDonald's have gone in with a reuse initiative supported by Loop—TerraCycle—on the reuse system. There is an opportunity to penalise the use of single-use cups and incentivise the use of reuse, and that is definitely an area where we can look at a systemic approach to reuse. It is a shame because Scotland was to introduce a national reusable cup trial but it did not go ahead before the pandemic. That would be a really exciting thing to think about as a wholesale systemic approach.



HOUSE OF COMMONS

Q60 **Dr Hudson:** Thank you. Adrian and Susan, are there any other products that you think could go into that consultation?

Susan Evans: Again, going back to what I said before, for me it is less about picking and choosing specific products. We need a logic. We need to ask, "What is our overarching aim?" Presumably, it is to cut our material footprint, to cut our carbon footprint, and to cut the other adverse environmental impacts of these materials. It would be sensible to come up with some kind of good process for narrowing down what are the problematic categories of items—not just single items—so that we can then perhaps address more items at once.

Q61 **Dr Hudson:** Thank you. Adrian?

Adrian Whyte: I think the points have been really well made. I think we have to avoid unfortunate substitutions and we have got further to go with refill when it comes to coffee cups.

Q62 **Dr Hudson:** Do you have any specific comments on the wet wipes issue? That is in the consultation, and a Back-Bench Member—I think the Member for Putney—has brought forward a Bill on that. Do you have any specific comments on plastics in wet wipes and that whole issue?

Paula Chin: Thank you for asking that question. I think that is an area where the alternative is often an industrial compostable material being touted as plastic-free, which actually is slightly disingenuous and misleading. I also think that with the untold issues that it is causing within our water systems, no wet wipes should be flushed down at all. I have been a mother—I have been there—and wet wipes come in so handy. I tried reusable ones; I really did give it a go. It is very, very challenging. It is very much personal choice as to how you see these things, but I think ultimately, responsible disposal and communication about responsible disposal when it comes to wet wipes is absolutely critical.

Susan Evans: I would broadly agree with Paula, and also confess that I did not always use reusable wet wipes for my own children either. I also think there is perhaps a problem with targeting a type of material that is often used by people who are caring for other people—caring for children or adults—and maybe we need to think about the social impacts of which things we target. But we do definitely need to tackle the problem of wet wipes and the issues they cause in our waterways.

Barry Gardiner: As it is confession time, I did not always use reusable ones either.

Susan Evans: We will not tell anyone.

Q63 **Chair:** I think we unintentionally covered a lot of question six in question two, but is the Government paying enough attention to the impact of materials being used to replace single-use plastic? Is there anything else you would like to add to that that has not been said? I know you talked



about the fact that with paper, for instance, you have got the carbon impact. But, of course, you do actually grow the tree in the first place. I am very interested in this differential between a plastic made from mineral oil compared to using paper or cardboard, say, to wrap eggs in a carton. You have not convinced me we should now put them into plastic, and I think they are actually better off in cardboard. Susan, would you like to comment? I think this is a really interesting debate.

Susan Evans: I think it is. Ideally you have your cardboard carton and you go back and refill it—I think I have about six in my cupboard now. But talking about the switch to wooden and cardboard and paper items in general, I could refer back to a conversation I had with the sustainability lead from a big department store a few years back who I was asking, “Why do you not just say everything is going to be FSC certified?” He said, “Well, because we just cannot get enough.” There is not enough sustainably certified wood and paper products available for everyone to have it. What happens if we switch across to much more reliance on those products? We are going to be driving illegal deforestation, which is incredibly hard to verify because of the way global markets work. Again, it is back to the fact that reduction is always going to be better than switching to other materials in so many different ways.

Q64 **Chair:** Going back to my analogy over eggs, you will need to put them in something, so therefore you either put them in a cardboard tray or cardboard boxes or you put them in plastic. I am not yet convinced by your argument, because paper and cardboard is a natural material. I can understand the argument of where that forest has come from—I get your argument entirely—but I am not convinced yet that we should have more plastic use and less paper or cardboard. It seems to me as though that is completely the wrong direction to go in. I am not convinced.

Susan Evans: This is where it comes to lifecycle assessment. I do not have the exact figures to hand of how long you would have to use that plastic egg tray for and keep reusing it before it would be better than using the cardboard version—maybe someone else has that data. It does not have to be plastic; there are different materials you could use, but the point is to keep using it. As I say, I have been using the same cardboard one for at least a couple of years and just going back and refilling it so if you do not want to use plastic you do not have to.

Q65 **Chair:** You see, I recycle ours—or my wife does—because I give them to my cousin who is an egg producer and he carries on using them again and again. So, cardboard egg trays can also be reused. I am not necessarily disagreeing with you; I am just saying to you this is a fascinating argument for me because I come from a fairly simplistic mind that replacing the use of plastic with something that is renewable, and is not a mineral oil base, would be better. But I accept there are questions to be asked on how that paper and cardboard comes about. Paula, would you like to add anything to it?



Paula Chin: Yes, thank you. You have just perfectly exemplified the dichotomy that lies with the plastic debate versus other materials. I am going to quote a Green Alliance report, "Fixing the system" from back in 2020, which says: "Switching all current consumption of plastic packaging"—1.6 million tonnes—"on a like for like basis, to the other materials currently used for packaging in the UK could almost triple associated carbon emissions from 1.7 billion tonnes...to 4.8 billion tonnes" of CO₂.

We have got two issues here. One is this horrendous, pernicious plastic pollution problem. But we have also got our net-zero commitment, and we have also got the growing awareness of our global footprint overseas. The cutting down of trees for our materials, the mining of bauxite for aluminium cans in Australia or Guinea—the two are not very good bedfellows, and we are constantly fighting against the two. Do we prioritise climate or do we prioritise getting rid of plastic pollution? There is a fine balance.

Again, if we are thinking too much about recycling and single-use that is one issue, and you pursue different routes for that and different policies for supporting greater recycling. Recently I judged on the packaging awards and there was a reusable little egg bag. I did not particularly like it, but there is no reason why. That is not a very good example because, actually, that carton is very efficient. It is highly recycled material, versus plastic, and protects the eggs very well, which is the most important thing ultimately because of all the energy and the feed that has gone into rearing the chickens that laid them.

It is that whole lifecycle approach. It is really being able to understand—which we cannot do right now—deep into the supply chains, having the full traceability through all the different processing stages of all the different materials. When we do lifecycle analyses right now, you can flex them a bit too much by picking your metrics. You might not want to look at water impact as a metric because it might not actually come out very well for your material, but the industry needs to work towards a standardised way to look at lifecycle analyses.

We also need to find a way to consider the pollution impacts of plastic, so either as a biodiversity loss measure or a nutrient depletion factor in the oceans. I am not sure; I am not a hardcore scientist. I understand what we need to do, but we just need to find the experts to get us there.

Chair: Interesting point. Geraint, just one very short point, because Sheryll is still watching and you are still in trouble, as far as she is concerned.

Geraint Davies: I know. I can feel her eyes burning into me.

Chair: Be very careful, please.

Q66 **Geraint Davies:** I just wanted to ask the panel what they thought about



HOUSE OF COMMONS

incineration and burning of wood. For example, Paula has just mentioned this issue about eggboxes. But given that we know now the Government is spending £832 million a year —

Chair: Geraint, please; that is not a short supplementary. I am tolerant, but come on and get to the point.

Geraint Davies: The point I am making, Chair, is that instead of burning all this wood in Drax power station or incinerating plastic, would it not be better—

Chair: That is not the issue.

Geraint Davies: Can I just finish the question? Would it not be better to pulp up this wood into wood fibre and put your eggs in it than burning it? That is what I am asking.

Chair: Right. Quick answers, please.

Paula Chin: I am not particularly au fait with whether it is possible to take a piece of wood and to pulp it down. You have got to remember that pulping is a really water, chemical and energy-intensive process of papermaking. I would imagine that it nets out as not actually being very beneficial to do that conversion.

Chair: I am going to park that one there, because you have had a fair shot at it. Barry, very quickly, please, and then I want to move on to Robbie.

Barry Gardiner: I will pass, Chair. I think my question was partially answered by what Paula said previously.

Q67 **Robbie Moore:** Whilst I am not, I just want to put on the record that my family are involved in a plastic recycling business. Just following on from the Chair's previous question focusing on reuse and plastic packaging, in 2019 we said that the Government was not placing enough emphasis on reducing plastic packaging. In your view, Adrian, is there now sufficient focus by the Government on plastic reduction in Government policy?

Adrian Whyle: Yes, I would say there is enough focus, and the industry itself has just called for a mandated recycled content of 30% in plastics packaging by 2030. So, yes, the focus is there. The levers are in place to start to recycle more, and reuse and refill offers opportunities there as well.

Q68 **Robbie Moore:** Just following on from the timeframes that you set out there and that percentage reduction, do you think that is the Government pushing the industry hard enough—do you feel satisfied that that is an achievable target within that timeframe?

Adrian Whyle: It is a stretch target, but if new innovations and technologies come into play, we need to increase that target.



Robbie Moore: Okay. Paula, the same question.

Paula Chin: Thank you. It is well known that NGOs have always felt that the Government's packaging waste policies have focused too much on end of life. In the most recent EPR consultation, I was involved in some stakeholder discussions with WRAP—who I believe were heavily involved in writing that—and it was great to see reuse added in as a consideration in that second consultation, although it was an annex, so it indicated to us that it was a little bit of an afterthought. We would have liked to have seen it front and centre. There are opportunities with upcoming EPR consultations—which obviously involve plastics as well—in textiles and construction for the Government to get on the front foot and really put reuse, repair and re-manufacturing at the heart of some of those EPR reforms, or EPR introductions for those particular sectors.

The focus on facilitating recycling is great, and there are lots of calls for EPR funding to go into recycling infrastructure. What we do not want to see is too much go to recycling and not enough go towards circular economy hubs, for instance, in local communities—to that repair, reuse, manufacturing-type economy which will create jobs. Green Alliance recently did a report about that.

There is a balance to be had, and I think the time is right now. A few years ago when these policies were launched we were not ready to talk about reduction and reuse, but the narrative has slowly changed. We were very welcoming of the Government's adoption of our priority amendment for the resource and waste chapter. Extending single-use charges for plastic items across all items should be a signal to those who are intent on continuing to grow single-use culture that there needs to be a slow shifting away from that to greater resource efficiency, material reduction and so on, across all materials. That is a point I have made before.

Q69 **Robbie Moore:** Do you feel that the Government are going far enough in setting those targets? Or—this is the same question as I asked Adrian, really—do you feel that the Government is pushing the industry enough?

Paula Chin: I work for an NGO so of course, the answer is no. We can always push harder. We can be more explicit. The Government can always be more explicit about what their intentions are, and I think businesses are looking for that too. At the moment everyone is sort of at a stalemate. They are dipping their toes into this initiative; they are trying to do that; they are testing the water with consumers on reuse. In a way—forgive me for saying this—I think businesses are slightly ahead of the Government in showing an appetite for trying these different initiatives. The Government needs to give a clear signal to show the direction of travel because then that is when investors and businesses will have the confidence to really go after one thing and they will know which horse to back.



Susan Evans: I think as we get more and more into the detail of the plans, the targets and everything else, we can sometimes lose sight of the big picture of what we are trying to achieve through all these policies. In my view, we should be reducing our material footprint, reducing our carbon footprint and reducing all the other environmental impacts associated with our use of resources. The direction of travel at the moment—when you look at a lot of our targets and policies, you could actually make a lot of progress on paper, increase recycling rates and so on, but fail to bring down our material consumption. That ties through to the targets being proposed under the Environment Act as well, which again focus on reducing residual waste and increasing resource productivity. You could achieve those things while actually increasing our material footprint. We need to make sure that we design these policies so that we keep that in mind, so that we do not lose sight of that and take the easy route. I would agree that reuse still has not got the level of emphasis that it should get.

Q70 Robbie Moore: In terms of taking things forward, what do you feel the Government could do more to encourage businesses, industry and particularly consumers to actually encourage more reuse, refilling of plastic packaging?

Susan Evans: I think there are all kinds of things. Going back to the discussion we had earlier about concerns around hygiene, for example, there could be more bringing together the authorities responsible for food safety with those responsible for packaging and these kinds of policies, so that we can make sure there are systems in place. For example, I went to a local takeaway to ask if I could bring my own tub, because I did not want to get the takeaway if I could not. I was told that I could not, because she would have to take that tub in, take responsibility for its cleanliness and then give it back to me. There must be a solution to this. With the kind of brains we have in this country, I am sure there is a solution to this challenge. We have managed it for coffee cups.

That is just one small example. Obviously, there is a lot more we can do. You referred to the pilots that were proposed in Scotland for reusables, where you look at a particular community or small town and bring together a lot of small businesses and run Government-supported pilots to get people used to the idea of using these reusables. You can find ways to make it work in a scaled-up way that is not so dependent on individual choices and more systemic. That is just a couple of examples.

Q71 Robbie Moore: Do Paula or Adrian want to comment on how the Government could encourage consumers or industry to refill or reuse plastic packaging more?

Paula Chin: Yes, I am happy to comment. I think there are two immediate opportunities with the policies that are on the table. One is through EPR: really signal its intention around reuse through the modulated fee structure, having either a one-off fee for a reusable item



that is put on the market and no further fees going forward, or no fee at all. There examples of that in other EPR models around the world.

The other one is, of course, through deposit return schemes which, at the moment, seems to be being kicked down the road a little bit. Okay, let us accept the delays, but let us take advantage of them and really see whether we can future proof.

Germany, I believe, have a DRS system which can take back reusables. Coca-Cola is one of the big businesses that has reusable heavier-weight PET bottles—those are their reuse bottles—which is much more carbon efficient than glass. Those are two immediate policy opportunities where we can do that. But again, just to reiterate that this is a holistic view; it is not just about plastics. The material reduction aspect is absolutely critical on all of this, otherwise we will end up with untold issues. I know that in a previous Committee, Libby Peake told a story about elephant ivory being used for billiard balls. I learned recently that the plastic bag was invented as a reusable bag in 1952 by Sten Gustaf Thulin to replace the then dominant paper bags and avert environmental disaster. Let us consider and learn from the past as we move forward.

Adrian Whyte: There is a clear place for refill and reuse. It should not have a larger carbon footprint, and it needs to be affordable. A lot of the systems at the moment are not affordable to many of our population.

Q72 **Ian Byrne:** I have a really quick one for the panel, to get this on record. Do you agree that we should be focusing on reuse, recycling and refilling rather than incineration, because the Government are looking at 2030 and the doubling of incineration targets, or should we be focusing on what we have just been speaking about?

Susan Evans: In the 21st century, incineration of waste is not really a low-carbon form of energy production. It should be viewed as a last resort, generally, rather than desirable, and plastics in particular need to be taken out of the waste streams that go into incineration. That is a really important part of it, because it obviously has particularly high carbon impacts and other nasties that go out into the air when it is burned. So, yes, definitely.

Paula Chin: Absolutely, and I would go further and say that we would like to see a moratorium on incineration investment and additionally an incineration tax to make it less favourable. The landfill tax has had positive impacts on the amount of waste going to landfill. An incineration tax would do the same. We need to learn lessons from Scandinavia where they prioritised recycling, including incineration, over waste prevention measures. They still have some of the highest waste per capita figures in Europe so it is not working; it is not driving down the amount of waste that we are producing. We can get a head start on the Scandinavians, for once, and think about what those waste prevention measures could be.



Adrian Whyte: I see incineration as a transient technology. This has been well elaborated by Stuart Hayward-Higham from SUEZ. We are going to see increased demand for a lot of those materials that are going for incineration for chemical recycling and mechanical recycling with all the new developments that are coming into that area.

Chair: Thank you very much. Can I thank all three of you for a very good evidence session? It has been very thought-provoking. Adrian, you are almost an old hand at coming before Select Committees, but Paula and Susan, this has been your first time here, so I hope it has not been too traumatic a time for you. We really appreciate, all three of you, the excellent evidence that you have given us this afternoon, and it starts us off on a very good footing for our inquiry. You may stay and listen to the next panel or go, whichever you please. We are about to have a vote, but I think we will invite the next panel in and then we will break. Thank you very much; it is most appreciated.

Paula Chin: Thank you. Can I just say thank you to Ellie for the excellent briefing that she gave us as well?

Chair: Well done. You have been mentioned in dispatches. Thank you very much.

Examination of witnesses

Witnesses: Barry Turner, Richard Hudson and Dr Adam Read.

Sitting suspended for Divisions in the House.

On resuming—

Q73 **Chair:** Welcome back to the Environment, Food and Rural Affairs Select Committee looking at recycling and plastic waste. We have our next panel of witnesses. Our first panel was very interesting; I suspect you will also be very interesting. Barry, would you like to just introduce yourself for the record, please?

Barry Turner: Yes. Thank you for inviting me to this evidence session. My name is Barry Turner and I represent the British Plastics Federation. I am the director responsible for packaging.

Chair: Thank you. Richard, please.

Richard Hudson: Good afternoon. Again, thank you for the invite to appear today. Richard Hudson. I am a technical manager at the Chartered Institution of Wastes Management.

Chair: Dr Adam.

Dr Read: Thank you for the invitation. I am Dr Adam Read. I am the external affairs director at SUEZ Recycling and Recovery UK Ltd.

Q74 **Chair:** Welcome, gentlemen. I think we have got a full complement of



Members back now so we will restart the meeting. Does the UK recycling infrastructure have the capacity needed to support the increased recycling rates the Government wants to achieve?

Richard Hudson: I would say the honest answer is no, not at the moment. There was an excellent document produced by the BPF with their roadmap. They have identified, effectively, mechanical recycling. We are about 1.5 million tonnes short of potentially where we need to be, if the desire is to recycle as much of our waste as we can in the UK. We also need an increase in chemical recycling and in the composting side of things if we are going to reduce our reliance on export and energy from waste.

Q75 **Chair:** Where would you place the Government, if you were going to mark them from nought to 10? Hopefully they get above nought. Where do you put them, really?

Richard Hudson: I would probably sit on the fence and go somewhere in the middle, because I think there are a lot of initiatives that have been introduced that are going to address that balance. In particular with EPR, and hopefully with collection consistency and the plastic packaging tax as well. They are definitely heading in the right direction.

Q76 **Chair:** Before I open to the other two witnesses, a new chemical recycling plant is being built in Teesside and so can I ask you, what are the benefits and challenges of chemical recycling and how green is it?

Barry Turner: As you heard from the previous session, it is an emerging technology and a very interesting one because it gives us the opportunity to continually recycle materials. It also allows us to put material into food contact applications that presently, using mechanical recycling, we cannot do. In the previous session, I think one of the speakers said there was a lack of transparency, but in terms of its footprint there are LCAs already out there in the space and I am happy to supply copies of those. But I would —

Chair: The LTA?

Barry Turner: Life cycle analysis, sorry.

Chair: Right.

Barry Turner: Comparing chemical recycling with alternative methods of treating waste. I am happy to supply copies of those to the panel.

Q77 **Chair:** I take it this plant in Teesside would potentially be taking material from all over the country, would it?

Barry Turner: Potentially. Obviously economics come into this. We need to see multiple plants; the one in Teesside is a good start. They are planning 20,000 tonnes with a possibility of increasing that to 80,000 tonnes. But there are other plants coming on stream across the country and there are plants already operating in Europe as well.



HOUSE OF COMMONS

Q78 **Chair:** Yes, and actually 20,000 tonnes at the moment when we are talking of millions of tonnes is not a lot. But do you believe the trajectory will go up quite swiftly if it works and if it is environmentally sound?

Barry Turner: I think it is there to complement mechanical recycling, not replace it. It is there to tackle those materials, particularly the thinner films—the polyolefins—in food contact applications that might have fillers or barriers that are problematic for mechanical recycling—so it is really complementary. But the exciting thing about it is that it enables full circularity for all plastics, so that is where they —

Q79 **Chair:** Do we know yet, when the material has been recycled, what sort of value it will have in reuse?

Barry Turner: In terms of what sort of premium it will command on the market?

Chair: Yes.

Barry Turner: At the moment, because there is a shortage of supply, it is commanding quite a premium. Obviously, as supply increases that premium will fall back. But it is a considerable premium to virgin at this moment in time. Having said that, there are a lot of brands out there and a lot of our members are still happy to pay that premium to increase the recycled content of their packaging and improve its sustainability.

Dr Read: It is a recognition that mechanical recycling suits certain plastics, polymers and packaging types, and that chemical recycling enables you to broaden that target group a little further so that you can increase your overall recycling. Many of the big brands and large organisations that are working in this space can see the value of it. Equally, there are concerns around the carbon benefit and the costs, and we have got to make sure that it works properly. But under the regime of extended producer responsibility it could well provide a solution to target materials that at the moment we would struggle with. It is part of the portfolio going forward.

Q80 **Chair:** Playing the devil's advocate, it is very useful for companies to say that they have done a complete recycling of everything, but how lovely and green are the chemicals used in this sort of chemical recycling?

Barry Turner: We have all focused on net zero at the moment and driving towards that. There is a lot of interest being shown in polymeric substances that can be derived from renewable sources, so I think you will see more of that in the future. That does not mean that that same polymer cannot be recycled in the same way that —

Chair: No, but the point I am trying to make to you is, do you put them all together and they recycle themselves or do they put lots of additives in there? Then, when you are putting all these additives in there, is it properly recyclable? Is it environmentally recyclable? Or does it just mean that you can recycle it and then you can tick the box to say that



HOUSE OF COMMONS

you have recycled everything? I am slightly obsessed by this, but we live in a world where that seems to be going on all the time.

Barry Turner: As I say, life cycle analysis has been completed on this technology and I am happy to share those initial results. It is an emerging technology; we will see further studies in this space. There are initial studies which tick the box and say it is better than alternative forms of disposal, so we can tick the box that it makes sense. In terms of the applications that it will open up to us, some of those that have been touched on by my colleague here, that mechanical recycling presently struggles with, are some of the most resource-efficient formats anyway—thin films, for example. If you can recycle those, you have got a win-win because you have got a very resource-efficient product.

Q81 **Chair:** You are hoping to actually recycle and make a thin film again, are you?

Barry Turner: You effectively take it back to the basic feedstock that goes into the cracking operation, so it is indistinguishable from the virgin material when it comes out of that cracker.

Chair: Interesting.

Q82 **Robbie Moore:** When you are recycling various products like chemical cans or right the way through to a shampoo bottle, a lot of the efficiency of the process comes down to the design of the actual product you are recycling. For example, to start with, if there is some hazardous waste element or residue caught within the handle of a bottle, this can affect the shredding process that the product goes through. In your view, do you think that there should be more onus on the design of the actual packaging and the nature of the makeup of the number of plastics that go into that packaging? For instance, with a milk carton there might be three different types of plastics before you have even considered the paper. Do you think there should be Government policy that specifically focuses on the nature and the design of the packaging as part of the recycling process?

Barry Turner: In my view you will see that come through more strongly in EPR. We, as an industry, already have guides on best practice recycling that relate to the design of packaging and they are widely available to brands and retailers. We encourage them to think about the design of the products that they place on the market. We set out what best practice is and we have a colour coding that basically says, "If you're in the green spot, you have designed it with recycling in mind. If you're in the red spot you've got to change your design." A lot of work has gone into that area already.

Q83 **Robbie Moore:** Just to put more pressure on that, if I may. Whilst you used the word encouragement, do you think that is actually going far enough? Do you think that actually there should be regulation that stipulates more of an onus on the industry to look at that?



HOUSE OF COMMONS

Barry Turner: I will let my other colleagues come in on this, but you will see that reinforced by EPR when it is brought in.

Robbie Moore: Okay.

Richard Hudson: The potential problem with regulation is that you maybe stifle innovation. You drive the wrong behaviour. Certainly from the point of view of EPR, if it is brought in correctly and if its modulation element is done in the right way and it incentivises people to design things for recyclability, my belief is that that would probably be sufficient without the need to go down further regulation.

Dr Read: Under EPR, the intention has always been that the more complex and harder to recycle, the higher the tax or the fee that is imposed on every single item. Although a lot of that work has been happening behind closed doors and has not been obvious to many, that is the intention of the EPR regulation. So you would like to think that that would put a very clear steer to industry that you do not want multiple composite materials where you do not need them for real benefit.

Equally, many of the large brands, whether it be shampoos or not, have spent time in the type of infrastructure that we run to see how their bottles, their containers or their packaging would feed through our system. They now understand where their product gets stuck and what that means for us. For example, the density of a bottle changes if you have residue in the bottom, which means it might not go through the plant the way that you would have hoped on the design. We are learning all the time as a value chain about what can and cannot work in the system.

Chair: With the Committee's indulgence, Derek has been here all afternoon and has not answered his question and he has to go. I am going to bring in number 11, okay? Question 11, then I will go back to Geraint and Barry after that, if that is okay.

Q84 **Derek Thomas:** Thank you, Chair. The Chair is right because I am kind of jumping the gun a bit because I am picking up on the EPR and plastic tax which other colleagues have got questions about prior to me. My question is simple. What challenges are presented to you and industry by having extended producer responsibility coming in at the same time as the plastic tax? Because they are not necessarily complementary, are they? Barry, do you want to tackle that first?

Barry Turner: Yeah. I think the tax is coming in ahead of EPR which is, to a certain extent, problematic. It would have been better if there had been time to bring them in together. Nevertheless, it sent a very clear signal to the market to drive increased recycled content. There are some issues with the way the tax is currently designed that need addressing, including chemical recycling: at the moment, the way the secondary legislation has been drafted, it will require modification to allow chemical recycling to be incorporated. There is also a risk with the tax that,



HOUSE OF COMMONS

because it has been introduced before EPR, it does not drive the investment that we want to see.

Chair: Yes, we are going to come to the tax in a minute. But I understand.

Q85 **Derek Thomas:** But it is connected: you are right. Logic would suggest that EPR needs to come in, be established and then the tax pick up the residue. Is that how it should be? I am sorry, I interrupted you, Barry.

Barry Turner: As an industry we felt that was the right approach. The Government decided to do it the other way round.

Q86 **Derek Thomas:** Richard, have you any inclination as to why Government might have taken that view?

Richard Hudson: From a Government point of view and in terms of the time scales, it is probably easier to implement the plastic packaging tax than it is EPR. It does give a good signal to industry. The tax produces certainty, which is what industry likes and what manufacturers want. You may not agree with it, but you know what you have got to do to meet it. From an industry point of view, the big disappointment is the fact that none of the funds from the plastic packaging tax are actually going to flow into developing the UK recycling infrastructure. I think that is quite a backward step in many ways, particularly when you bear in mind that it looks like things like EPR, the DRS and collection consistency are maybe going to take a little longer to implement, plus the uncertainties over the PRN system. The use of the revenue from the plastic packaging tax would have been a bit of a welcome boost over the next couple of years, to maybe backfill where it is needed.

Q87 **Derek Thomas:** I will leave other colleagues to pick up on their questions on that. Finally, Dr Read, as we were saying earlier before everyone returned, given that you now know this is happening and you know when, will the industry not just get ahead of the game anyway and get prepared, in a similar way to how the sugar tax triggered a reaction?

Dr Read: It is a fair point. The plastic tax does a very good job of steering industry towards what is coming and when it is coming. You can tell that we are now running out of time to be in a position where you are going to be compliant or you are going to be budgeted for to be able to cope with the transition. I think what is missing from the tax is a) an escalation and b) a timetable for an escalation. For some industries you can see that it is not going to be a big issue at the moment, but five years from now it might be, when the tax goes up or the recycled content requirement increases. That is what the landfill tax did so well over time.

Chair: I think we are actually talking too much about the tax. I would prefer you all, in this question, to talk about the extended producer responsibility.

Derek Thomas: Well no, Chair. To be fair I am not covering either.



HOUSE OF COMMONS

Chair: I know.

Derek Thomas: I am only interested in the two working side by side and whether they help or hinder, and at what point do we see what success might look like? That is what I am interested in. The detailed material I have to leave to other people, sorry.

Dr Read: From a waste and recycling perspective, they do sit hand in hand. Ideally, you would have introduced, as Barry said, EPR before so that we could make sure that the timings and the nuances were correct. But one is a pull factor and one is a push factor, and if we get the modulation right on the push and we make sure that the 30% or the 40% is absolutely right to keep the pull moving, then industry will align itself around making the changes that we need.

Derek Thomas: It is interesting. We ought to do another inquiry in a couple of years' time from now, or maybe later, to see what has happened.

Chair: Thank you, Derek. Right then, Geraint, over to you.

Q88 **Geraint Davies:** On plastic tax can I simply ask, do you believe it will reduce plastic waste? In particular, given that the level is £200 per tonne and I understand in Europe it is going to be £650 a tonne. It is a slightly different combination, but do you think we should have introduced it at a higher level to have more impact and parity with Europe?

Richard Hudson: To answer the question, do I think it will reduce plastic waste? Ultimately, yes, it will, in isolation but also in combination with things like EPR. Because suddenly people need this material and so they will find a way to extract that from the waste stream. Now, it depends what you mean by waste, because I think it is going to change the way we dispose of plastics. So probably less plastic going both to landfill and to energy from waste as a result of the packaging tax actually encouraging recycling. Is it going to impact upon plastic litter? No, I do not think it will. But it certainly serves its purpose in giving more of a value to plastic waste. Changing people's—

Q89 **Geraint Davies:** Can I ask, will it reduce the case for incineration of plastic? Obviously, if you drive up the plastic tax, presumably more will be reused and less burnt. Is that right?

Richard Hudson: Certainly the material that is suitable to be recycled will be recycled. This is why, again coming back on to chemical recycling, it is quite an important toolkit in the armoury, if you like, because you need all these different options. From that point of view then, yes, it is very important and it is widely welcomed by the industry as a means of reducing plastic waste, definitely.

Q90 **Geraint Davies:** And Barry, do you think it is going to work to reduce plastic waste and do you think there is a case to have it at a higher level akin to the EU?



HOUSE OF COMMONS

Barry Turner: Well, the design of the EU tax was slightly different to the UK tax. The UK tax is driving towards a set percentage of recycled content, so it is a slightly different design. What it will do is provide that premium because obviously that 30% can command a premium of £600, effectively, versus virgin, so it does provide a very good driver for recycled content. In those cases where brands or retailers might have been hesitant about incorporating recycled content because of the commercial impact, then you have got another driver in the toolbox. Clearly anything that uses less virgin material has got to be encouraged—it has got to be the right way to go.

Q91 **Geraint Davies:** In other words, having a plastic tax increases the value of the plastic as you recycle it, increases reuse, reduces the overall amount of production that otherwise would happen and reduces incineration. Is that right?

Barry Turner: Yes, because if you look at what is happening with the chemical recycled feedstock, one of the first places that some of the incinerators are going to are those chemical recyclers and saying, "Okay, here's the feedstock. You can now recycle this." Whereas before, it might have not been possible to recycle that for the reasons that I have mentioned in terms of the economics or the applications —

Q92 **Geraint Davies:** In other words, if I was thinking of investing in incineration of plastics and given that there is a plastics tax and there is chemical recycling, I would be better off thinking again. Is that right?

Barry Turner: Yes.

Geraint Davies: Okay, thank you. Dr Read, if you could respond to those same questions?

Dr Read: I do not think any of us would be investing in energy from waste just for plastics, because we do not burn plastics in isolation. That is not really what our infrastructure is about. It is to deal with residual waste that cannot be recycled or is not being captured for recycling. We heard it from the previous evidence submission, but we see energy from waste as a transitory transition technology that over time, with more chemical recycling, more mechanical recycling, more reuse and repair, will become something that features a specific waste stream that has low organics and low plastic, and therefore is solving only the residual. It is not an area that we see expanding significantly over the next 20 to 30 years. But on that carbon journey that we are all embarking on, the waste and resources sector is very keen to take as much of the plastic stream as possible out of our residual stream by working with the value chains, so working with municipalities to make sure we capture as much of that as is possible.

Q93 **Geraint Davies:** So I am clear on this, because the Government's current target is to double incineration by 2030. Do you think that is something that they should revisit in light of what everybody seems to be



saying?

Dr Read: I am not sure that the Government target is actually to double what they burn. The intention is to recycle more and to reduce the use of landfill and it is what fits in the middle that is going to be quite critical. Can we increase recycling faster than the targets? That is one option. But more importantly, can we reduce the amount of material that is in the system? That is where the repair and prevention agenda comes in, because if that is the case you do not have the residual problem.

Q94 **Geraint Davies:** My point was about the consent that BEIS are giving out and the volume that is implied by that, and that is being done separate from what our DEFRA ambitions are. Finally, have you got any particular views on how the plastics tax should be used? I am not a great fan of hypothecation, I must confess, but is there any particular view on how it might be used?

Dr Read: In an ideal world, as was originally intended with the landfill tax, some of that money was ring fenced to put back into the sector to enable recycling and some of the newer technologies to develop. I would argue that at least some of the plastic tax should be put towards encouraging and developing the next wave of technologies and solutions or towards building, in particular, UK infrastructure. If the Government is so keen to see UK infrastructure and the capacity in the UK grow, then we have got to help pump prime that to some degree.

Geraint Davies: Barry, would you agree with that?

Barry Turner: I would totally agree simply for a couple of reasons. The tax has been introduced before EPR and consistent collections, so there is a gap in terms of funding. It could play a vital role there in terms of pump-priming the investment that we need to see in the UK. The other reason is consideration needs to be given to the fact that we import roughly 50% either filled goods packaging or empty packaging into this market which ends up in the waste stream. We have got to ensure that this plastic tax, when it is implemented, creates a level playing field in terms of transparency, particularly in terms of the measurement and the validity of claims around recycled content. Also, the tax revenue could be used to help develop a system of certification and audits that would prevent any risk of fraudulent claims. I think some moneys could be set aside for that as well.

Geraint Davies: Richard, have you got any further ideas on how we might use the tax consistent with our ambitions?

Richard Hudson: The other area that it could possibly be used, and it was something that was touched upon in the earlier session, is in terms of consumer education; what is possible in terms of what should be recycled and what should not. Certainly there is a case to be made for some sort of educational fund.

Geraint Davies: Great, thank you.



HOUSE OF COMMONS

Q95 **Chair:** Just before we leave this question, we have been doing a bit of simple arithmetic up here. Now, this cup, we reckon, is 11 grams. We reckon we can get either 100,000 or a million cups out of a tonne of plastic for these cups. £250 on a tonne—imagine you have got a million cups—is not much of a pence per cup, is it? Is it going to be a deterrent not to use new plastic? Is it going to make the slightest bit of difference? Because much of plastic is so light when it is actually manufactured.

Barry Turner: If you are referring to the economic driver associated with recycled content, that £200 per tonne will translate into £600 on material that might cost as prime —

Chair: But surely the argument is that if you put enough tax on it, it then actually makes some of the recyclable processes stack up more economically.

Barry Turner: Quite, absolutely.

Chair: You see, I am not quite convinced that £250 one way or the other, putting it bluntly, is going to make the slightest bit of difference to the economics if you are going to use virgin plastic or not.

Barry Turner: All I could say is that there has been quite a lot of investment since this plastic tax has been first mooted. There is a new plant just being commissioned at one of the waste management companies that will process 60,000 tonnes of new material that can be put back into packaging. There is the other one that we were talking about, that chemical recycling plant, and I could keep on quoting examples of that. There is substantial volume already being added in anticipation of this tax, so I would say the driver is there.

Chair: It is probably in the right direction. We can always increase the tax if it is not actually delivering what we want.

Barry Turner: You can, absolutely.

Chair: I will park that one there. I thought it was just an interesting point to make to you.

Q96 **Barry Gardiner:** Picking up on the tax aspect. My colleague Geraint Davies quoted the EU tax rate at £650 and I have just calculated that €800 euros at today's rate is £681.63—

Geraint Davies: Not £650 exactly?

Barry Gardiner: No, 0.63 out, Geraint. So—

Geraint Davies: Old exchange rates.

Barry Gardiner: On that basis, given that we are looking at a tax rate in the EU that is so much higher, I mean three and a half times as high, what capacity is there going to be for leakage in this system?



HOUSE OF COMMONS

Barry Turner: I will pick up on that and then pass over to my colleagues. We have to understand that the EU tax rate, the one that you are referring to, was put in place to effectively fund EU coffers following the UK leaving.

Barry Gardiner: Yes, but that is not my question. My question is, are we exposed to leakage?

Barry Turner: If I can just finish, that revenue, in many cases, is being funded centrally by Government, not by industry. It is not cascading down as a tax on plastic items. There are two examples, Italy and Spain, where they are considering a tax. That is, again, a different tax design and looks more at the virgin content rather than the 30% recycled content around which the UK has designed its tax. Will there be leakage? Will there be competition for this recycled material? Definitely, because brands and retailers, before the tax was even thought about, were setting ambitious targets to incorporate recycled content. There is already leakage occurring; that is something we need to be aware of. There is going to be a lot of competition for this material.

Q97 **Barry Gardiner:** Again, thinking of the recommendations that this Committee might make, how would you set about controlling that leakage?

Barry Turner: One of the ways we can help ourselves is by developing the UK industry to supply more than we have at the moment.

Q98 **Barry Gardiner:** Oh, I fell into that one. Businesses, though, will not be able to verify the amount of recycled plastic in the packaging that they import. Without certainty over the amount of recycled content in packaging companies, businesses may wrongly declare themselves as tax exempt. How are we going to stop that?

Barry Turner: I will go first and then please, colleagues, join in. We are quite firm believers that you need a robust verification system. We have developed a document that sets out certification systems that can be used, because we are concerned that imported goods will make claims that will not be substantiated. There are certification and audit systems that already exist in Europe that could be used to ensure that these fraudulent claims do not occur. As an industry, we would like to see Government embracing those systems or developing a system for the UK that draws on best practice associated with those systems.

Dr Read: We would fully support that as an industry, and it is the same question, I think, that you asked earlier about exports. It is, how confident are we about where the exports go and the validity of the treatment? It is no different. We have to do the due diligence, we have to have the certification schemes and we have to be confident of the supply chain.

Q99 **Barry Gardiner:** Let me quote the extended producer responsibility. "Packaging producers will pay the full cost of managing packaging once it



HOUSE OF COMMONS

becomes waste. This will encourage producers to under-declare packaging," oh, sorry, "To use less packaging and use more recyclable materials." Do you think that is actually what is going to happen?

Barry Turner: Not so sure about the recycled material. We would prefer to see the EPR designed around reducing climate change impacts and more emphasis on resource efficiency. The current design of the EPR scheme could be improved to embrace those and you would get better outcomes. That is the view of our industry, certainly.

Richard Hudson: It is inevitable that any costs that are incurred by the industry in some form and to a certain extent are going to be passed back onto consumers. When it starts to hit consumers in terms of their having to pay more for their products, potentially they will then vote with their feet. That behavioural change could drive some changes in packaging design and the use of materials. People are going to think twice about over-packaging items. They are going to think twice about having packaging that is probably overdesigned.

Q100 **Barry Gardiner:** But here we are focusing on the producers and them paying the full cost of managing the packaging. Now, there is one point that I am unclear about in the Government's statement here, where it says, "Once it becomes waste." Is there a loophole here?

Chair: These gentlemen are not necessarily going to tell us, Barry, but I am sure they will be —

Barry Gardiner: But if they do not, we can hold them accountable for their silence, Chair.

Chair: Exactly. I am sure they are being very honest with us here this afternoon.

Dr Read: There is an issue about when material comes back into the system, post-consumer, and how long you might be storing something or reusing it for an alternative means at home and —

Q101 **Barry Gardiner:** Well, indeed. How big is this loophole? When does it become waste?

Dr Read: I certainly do not have evidence on that. Most of the material we handle is quick —

Barry Gardiner: Just give me your gut feeling, Dr Read.

Dr Read: I would probably argue that 90% of all of the material we are handling has been in use some time in the previous year, probably the previous three months, because most of this is about packaging, and most packaging is now quite light, and it is all about, get the material in, get the product and get it out. We are not building a lot of packaging that is designed so that you could repurpose it at home because you like the look of the jam jar, because we just do not produce those kinds of packaging any more, on the whole.



HOUSE OF COMMONS

Q102 **Barry Gardiner:** The measures for ensuring traceability of material and monetary flow through the system are as yet not defined. I think that was effectively what you just said, Mr Turner. It is not clear how the revenue is going to flow to the reprocessor and therefore achieve what you all vigorously nodded your heads about wanting, which is to incentivise the reprocessing industry domestically. In default of a clear system of financial flow, how do you see the EPR as actually working?

Barry Turner: We have not seen the final design of the proposed EPR scheme. I would be disappointed if the monetary flows did not cover some of the costs of sorting material at a reprocessor level, and there is a risk with the way that it is presently articulated that those flows do not reach that point before —

Q103 **Barry Gardiner:** The Committee has certainly been told, in the evidence that we have received, that the payment mechanism will go from producer to recycling sorting but not extend to reprocessors. This means that, again from the evidence we have received, the payback period for investment in those reprocessing plants, which will have to make their money simply from the goods end, the retail forward, is going to double before receiving any return on the investment. Would you agree with that?

Barry Turner: EPR was never designed to provide a financial flow for the purpose of investment in recycling. It was primarily designed to ensure that the cost of sorting—whether that occurs at a waste management plant or at a recycler—was actually covered. The economics of that reprocessing operation really do then have to stand on their own feet because they are going to be aided by things like the plastic packaging tax that we previously touched on.

Q104 **Barry Gardiner:** Do you not think that, given the lack of recycling infrastructure in the UK—and you just adverted to the fact earlier in your response to Mr Davies—in effect the horse of the tax has come before the cart of the EPR scheme and it is therefore rather important that the EPR is used to drive investment into the domestic industry?

Barry Turner: Yes, I do. Where I was referring to the EPR scheme and the tax, what the EPR scheme should do is provide that funding for the sorting that is much needed for plastics. Obviously that is not going to happen until after a couple of years of the tax being in place.

Dr Read: Industry has certainly fed back to Government, throughout the last three years. As we have seen more and more of the EPR system design, shall we say, we feel that there should be payments that flow throughout the system based on quality and performance. The reprocessors are just as important in that chain as any collection system, because if we do not get them to close the loop properly then that material will never go back to where we intended it.

I would still argue that that gap is a gap that Government could address without too much difficulty. But by the legislation or the policy that comes



HOUSE OF COMMONS

out in the new year, we are expecting to see the next stage in January or February, and it would be good to see some kind of payment or evidence base needed between the recycler and the reprocessor, so that we can then ensure the quality and the provenance of the material goes through the system to end market.

Richard Hudson: I would agree with that.

Chair: You have one more question.

Q105 **Barry Gardiner:** Yeah, it is really just to try and ensure that we as a Committee have understood the witnesses properly here. So to recap on this section, you have suggested that the monitoring and verification is absolutely essential. You have suggested that we need to see the funding mechanism clearly outlined and to see some sort of payments going through from the sorting to the reprocessing. Is that correct?

Richard Hudson: Yes.

Barry Gardiner: Thank you.

Chair: Thank you very much, Barry.

Q106 **Ian Byrne:** The Government has delayed the introduction of the deposit return scheme until 2024 at the earliest. Greenpeace said this delay to a long overdue initiative was frustrating and that delay is unnecessary. Once the system has been outlined, how long should it take to make the scheme operational?

Richard Hudson: The reality is probably not as much time as will be needed or that will be given for it. It will be brought in—we believe—probably realistically from the point that you actually appoint the deposit management organisation; probably a minimum of 18 months. Then you need to look at the infrastructure that is required. Assuming we are going to go down a model of having reverse vending machines, for instance, if you have one at every retail outlet, that is somewhere in the region of 37,000 units that have got to be manufactured. There is probably one or two sorting equipment manufacturers licking their lips. But the reality is that is a lot of equipment to actually manufacture and get introduced.

Q107 **Ian Byrne:** Just on that, AAT, the Association of Accounting Technicians, have said to use this delay, “to comprehensively study the possibility of digital DRS rather than a traditional reverse vending machine model.” Would you agree with that?

Richard Hudson: Yeah, digital DRS is a very, very interesting concept. I think it ticks a number of boxes. For a start, we have a very, very well-established collection from local authorities at the moment, which by and large works very, very well. Now they are going to lose some of their value streams as a result of DRS; so HDPE milk bottles, PET bottles, aluminium cans, steel cans. Aluminium particularly has a very, very high revenue stream; that is going to be lost. If we can somehow use the



infrastructure that is already in place and is very well established by using digital DRS then to my mind that is probably more beneficial to everybody than actually having this system where the consumer has to take a product back to an outlet. It also addresses the issue of people with mobility issues. How do they actually get the containers back to the reverse vending machines? Yes, we would definitely support a delay to investigate digital DRS a little bit more.

Dr Read: If I can just build on that. I think three to four years from the decision to start to recruit the DMO before we actually see it impacting. Realistically we have got EPR and consistent collections happening before. We need to see how effective they are before we muddy the waters with an alternative. One of the worries that we have certainly seen in some of our public-facing consultations is, just how does the average person react to suddenly finding that a lot of what they put out for recycling every week is no longer being put out for recycling and they have got to do something different with it? Is the 20p deposit then enough to drive the new behaviour that you want from them? Whether it is reverse vending machines or Amazon take-backs, there is quite a bit of transition that is uncertain.

The delay therefore is potentially quite positive from an analytical perspective, to understand where is the leakage from the system with the EPR and the plastic tax and consistent collections working after two or three years of becoming embedded. If there are materials that are not being captured at 80%, 90% capture rates at the kerbside and we have not got an effective digital system, then you can have DRS coming in for the materials where it really makes sense.

Ian Byrne: Barry, would you like to add anything to that?

Barry Turner: No, I broadly agree with that. It is an issue of timing again, and the current proposal of using reverse vending machines is akin to using a sledgehammer to crack a nut. There has got to be a better way.

Q108 **Ian Byrne:** I will stay with you, Barry, because in 2019 the predecessor Committee welcomed the introduction of DRS but said that "Government must monitor the financial impact on local authorities as material is diverted away from kerbside recycling." In your mind, how should the potential financial impact of the deposit return scheme on local authorities be managed?

Barry Turner: Again it is all intertwined with EPR, because under EPR the cost of collection is effectively transferred to business. With a deposit return scheme, you are effectively diverting valuable material, the most valuable materials that are presently available, from the kerbside scheme and setting up a parallel system just for those. I do not think there will be, because of the timing, a financial impact on local authorities because this is a form of EPR, if you like. However, if we go away from the reverse vending model to a digital system, which has merit in terms of transition,



HOUSE OF COMMONS

then there will have to be some recognition that councils will continue to play a role and they will need to be compensated for that. We will also have to find a way of making sure that quality material drives through the system in the same way that a reverse vending system could deliver.

Ian Byrne: Richard would you like to add anything to that?

Richard Hudson: Yeah, not really much to add, other than to say that, I guess, one of the opportunities that the move to DRS could potentially free up is a little bit of capacity in the recycling bin for other materials to be collected. If you assume that you have got 240 litres every fortnight to fill, then we look at things like plastic films that were being proposed to be collected, increased carton collections. These have got to be accommodated somehow, so maybe it is a way of using that capacity.

Ian Byrne: Good answer.

Dr Read: I think my colleagues have made very pertinent points. We live in a world where local authority contracts for recycling are often based on an assumed value for the material stream. In some respects we will create a contract for a seven-year or a 10-year period and there is a gift back or proportion of the revenue stream that we can generate together based on the quality that they can get the customer to deliver and the ability of our MRFs to sort and refine. We have to accept that there will be a period of transition because that impact will be very different from one local authority to another based on their contractual system, but also based on what their current service provision is. It is quite a difficult thing to map, but it is going to be painful for everybody.

Ian Byrne: On that note I will leave it there, Chair.

Q109 **Chair:** Just before we leave it, I was sold on the reverse vending machine by the fact that if you put that plastic bottle in in its entirety, you should then be able to create another bottle from that same plastic. Whereas if you collect it, and I understand the argument you are making about collected by local authority, will you not actually have a much lower grade plastic when you finish? So is there not an advantage from actually recycling and using less virgin material again? Sometimes we lose sight of that. I understand the local authorities and the length of contracts, but you have to keep the bottle absolutely right, you must not have anything else on the bottle when you put it through that reverse vending machine to be able to actually make another bottle out of that same bottle. I am sorry to be boring on this subject but we did look at this in great detail before. What is your answer to that one?

Barry Turner: With the digital system, we have heard about quality before and certainly within EPR we need to see more focus on quality protocols to ensure that the material that does flow through the system gets to the destination that is intended. If you look at the reverse vending model, the challenge with the reverse vending model is the behavioural one that we heard about before in terms of consumers. But it



HOUSE OF COMMONS

is also the logistical one, because not only have you got to install those reverse vending machines, you have got to get that material from all those different locations back to a central point. Whereas at the moment we are taking that material back from the waste management—

Chair: As you are generally going out with the vehicles to collect it. Yes, it is an interesting idea.

Barry Turner: I think it is a complex area. There is merit in looking at alternatives that perhaps involve less change for consumers, but we do want quality material coming through the system.

Dr Read: Chair, on the quality issue, we handle very different material streams up and down the country depending on the service that is required, but also depending on the social demographics and the willingness of the public. What is interesting is when you do kerbside sort, so somewhere like East Devon or in Somerset, where you are providing a number of containers and we have got a vehicle with compartments, you are tending to keep the plastic separate from everything else, which means the contamination levels are very low, which means the quality of the material is much higher. Ultimately, bottle to bottle is much more achievable. When you put it in a bin and it is two weeks before you know what is in there and you open the lid and you shove it in the back of the lorry and you kind of pray that there is not a nappy in there or somebody has not left an engine block, and over two weeks of it festering, that limits the capability of my system to do what we would like to do which is to recycle all of it.

Spending more time on the front end ability of the system to work and getting the consumer—but more importantly businesses of tomorrow because so many of those are going to be targeted under the regulations as well—to make sure that they get clean stream material captured in an appropriate way. That is still going to be a lot more efficient than everybody traipsing back to a supermarket of their choice or queuing at —

Chair: But it depends on the person who is actually sorting that and putting it in the bin. I mean, my wife has got much more patience than I have and she sorts it all out very carefully. Whereas I must admit, even as Chair of the Environment, Food and Rural Affairs Select Committee, I might be inclined to stick it all in the same bin because I have not got the patience to sort it all out, especially when they come to collect it. They probably largely land up putting it in the same bin in the end, and of course the public have got a degree of scepticism over all of this. But I take your arguments. Right. Neil, question 13 before I put myself into even more trouble than I am already.

Q110 **Dr Hudson:** Thank you, Chair, and thank you to our witnesses for being before us this afternoon. I wanted to get back onto the topic that we raised with the first panel about the banning of single-use plastics. As you know, in October 2020 the Government put in a ban on certain items—



HOUSE OF COMMONS

plastic straws, cotton buds and drink stirrers and so on—and there is now a live consultation about other items. I wanted to ask what impact will both the proposed bans but also the existing bans have on your sectors?

Dr Read: Generally many of these are not high tonnage, they are not heavy items, and they are not prevalent in the municipal waste stream. When we model the impacts of the previous ban and look at what is in the proposals now, we do not see this being a massive sea change in the design of our systems. Actually, there is a fundamental flaw here, which is we are still talking about single-use plastics, and I know you heard this from the other Committee earlier, but we have just got to be talking about single use. I would much prefer to handle a lot less material because it has been designed to go round and round.

We were talking about these cups, but where are the reusable mugs and the china cups and everything else that we should be using? Our consumption style has become too much about on the go and we have just got to get a bit of control under that. I do not think banning stirrers or straws is really a significant step in the right direction. It gives you a signal, but coffee cups for me are a far bigger issue in the round because there are so many more of them in society today.

Q111 **Dr Hudson:** Right, thank you. Richard or Barry?

Richard Hudson: I think our response to the consultation will be—

Dr Hudson: If you could cover the existing ban and then the proposed—

Richard Hudson: So with the proposed, the thing that could potentially make a difference is if it was extended to include non-essential PVC—

Dr Hudson: I am going to get onto that as to things you might like to add. But if you could just cover at the moment the existing ban, the proposed ban and then my follow-up question is going to be, what could be added to the consultation. Sorry to limit you.

Richard Hudson: Yeah, no, certainly. Probably nothing really more to add to what Adam has just said.

Dr Hudson: It has not had a significant impact on your sectors then?

Richard Hudson: Not a significant impact, no. Because of quantity and where they are currently ended up. At the moment, it just does not—it is wrong to say it is not on the radar, but it is relatively low.

Dr Hudson: Okay, thank you. Barry?

Barry Turner: Generally, we would have preferred to see more emphasis placed on on-the-go consumption. We know that the infrastructure is not there for recycling on the go. Trying to educate consumers to take recyclable items home to recycle them is tough if you have not got convenient methods of disposing of items on the go. We would have preferred to see an alternative approach with investment moneys flowing



HOUSE OF COMMONS

from EPR into providing that infrastructure. I do not think it is too late to do that. Bans, as we heard previously, can have unintended consequences as well. You can end up substituting and moving to materials with higher environmental impacts, so they need to be executed very carefully. In terms of impact on the sector, the on-the-go sector plays a part in total consumption, but not a huge part in plastic consumption.

Q112 Dr Hudson: Thank you. That is really helpful. Right, I am going to come back to you now, Richard, with the supplementary. In November of this year the Government launched the consultation in terms of supply of single-use plastic—plates, cutlery, balloon sticks, polystyrene food and drink containers—and also a separate consultation looking at the ban on, say, wet wipes with plastics in them, tobacco filters, sachets and single-use cups. Are there particular products that you feel should have been added to that consultation? If so, what are they?

Richard Hudson: We should have a broad alignment with EU single-use legislation, which would bring in the things that you just mentioned. Also, and I will possibly make myself unpopular with Barry here, non-essential PVC packaging. PVC is a fantastic material for long-life products in the building construction sector and for essential medical applications, but there is still a very, very small amount used in packaging items and that is a big source of contamination, particularly for people trying to reprocess PET. So PVC would be worthy of consideration.

Q113 Dr Hudson: Okay, and to you Adam and then over to Barry. Anything you would like to add to the consultation, do you think?

Dr Read: No, not in terms of additional materials. I would rather they went back to basic principles and started to address the real issues that are facing us, and EPR in many respects would be a better way of driving some of these changes. You just modulate the fees correctly to make some of these less popular. You do not need to spend a long time worrying about bans. I just think we need EPR and modulation to be clear and transparent and we can all work within the one regime.

Barry Turner: I would agree that the future to me is getting the EPR scheme designed correctly and with the necessary drivers. As I said earlier, the focus needs to be on driving low overall climate change impacts, increased resource efficiency across all materials. In terms of the comment on PVC, it is a very small part, and if you look at our design guides that we promote, it sits in the red area anyway so we are trying to encourage people to move away from what we would call disruptors to the recycling system.

Chair: Right, well thank you, Barry, Richard and Adam. It has been really good this afternoon because what it is showing us on this Committee is the practicalities of what we are trying to do. Do they work environmentally? Do they work economically? Nothing in life is simple; that much I think you have proved for us entirely. It has been a very



HOUSE OF COMMONS

good evidence session so thank you very much. Both panels this afternoon have given us a very good start to our inquiry. Thank you, Members, very much for your patience and forbearance. Thank you, we had a good session.