HOUSE OF COMMONS

# Environmental Audit Committee

## Oral evidence: Electronic Waste and the Circular Economy, HC 220

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Watch the meeting

Members present: Philip Dunne (Chair); Barry Gardiner; Marco Longhi; Caroline Lucas; Jerome Mayhew; John Mc Nally; Dr Matthew Offord; Alex Sobel; Claudia Webbe; Nadia Whittome.

Questions 126-196

### Witnesses

I: Kevin Considine, Head of Sustainability, Samsung; Andrew Mullen, Head of Quality and Sustainability for the UK and Ireland, Beko; and Eva Gouwens, CEO, Fairphone.

II: Robert ter Kuile, World Wide Director of Environmental Affairs, Amazon; Matthew Manning, Compliance & Recycling Operations Manager, Dixons Carphone; and Astrid Wynne, Sustainability Manager, Techbuyer.

# Examination of witnesses

Witnesses: Kevin Considine, Andrew Mullen and Eva Gouwens.

Q126 **Chair:** Welcome to the Environmental Audit Committee for our fourth session with witnesses in our inquiry into electronic waste and the circular economy. We have panels today with leading industries involved in electronics and consumer products, and I am looking forward to hearing what they have to say. For our first panel, I would just like to ask each of the witnesses to say who they are, where they are from and, briefly, what their role is in relation to sustainability within their business. First of all, Andrew Mullen.

***Andrew Mullen:*** I am Andrew Mullen. I am head of quality and sustainability for Beko plc. We are a major white goods manufacturer, and I have responsibility for product durability, product reliability and sustainability within the UK.

***Kevin Considine:*** My name is Kevin Considine. I am head of sustainability for Samsung Electronics UK. My remit covers anything from the WEEE regulations and the circular economy, all the way through to social sustainability issues such as the modern slavery report. I am based here in the UK.

***Eva Gouwens:*** My name is Eva Gouwens. I am the CEO of Fairphone. Fairphone is a social enterprise that designs, produces and sells smartphones. Our aim is to change the industry, and to motivate industry and show that it is possible to act more responsibly. I am going to tell you way more about it, I think, in the coming hour.

Q127 **Chair:** Excellent. Thank you very much indeed. You are very welcome. I would like to ask a few questions to start with, looking at the big picture of the environmental impact of your businesses, both in the way you generate product and the way in which you sell and seek to recycle products and their components. If we could start with Andrew, Beko is, I believe, the largest home appliance supplier into the UK market. Could you tell us what you are doing to ensure that your business aligns with the Paris agreement and the UN sustainable development goals?

***Andrew Mullen:*** Yes, I can. First, thank you for acknowledging that we are the largest. We have signed up to the Paris climate change agreement. We have signed up to the UN 2030 sustainability goals. I guess our focus really falls into three areas. It is about the materials we use, the way in which we produce product and how those products are used and are made energy-efficient for the consumer. I will just cover, very briefly, all three: we have a number of projects which look at using recycled materials in our products. That includes things like plastic bottles in washing machine tubs; it includes fishing nets, which we now use for some of the plastics in our ovens and our dishwashers; and it includes some bioplastics that we are

working on for refrigeration, for launch at the end of this year or early next year.

In terms of how we produce, we use renewable energy sources to run our factories. Our latest factory, which is in Romania, is a "lighthouse" factory. It is one of only 25 factories in the world to be recognised by the World Economic Forum as an environmentally friendly factory, and it is powered by solar farms. We focus on driving down water consumption and making sure anything that comes out of the factory is clean. For new products, we focus on energy efficiency and making sure the products are durable and reliable. Nearly all of our products are well into 90% recyclability at the end of life.

Q128 **Chair:** Kevin, Samsung is the largest manufacturer of consumer electronics in the world—I think it is the largest manufacturer of units of phones in the world. Could you answer that question on behalf of Samsung?

***Kevin Considine:*** Similar to what Andrew just said, we support the Paris agreement and we fully support the 2030 sustainable development goals. We have two targets at a corporate level for our business: one on our operations, and one relating to our products. Those goals have been established and will expire this year.

Just so you know, as a manufacturer, we produce 90% of the products ourselves, and we have 37 factories around the world. Unlike some of our competitors, we are also a direct manufacturer, and we produce products and components on behalf of some of our competitors. We are underpinned by two climate change targets: one for operations and one for products.

We made a commitment last year to source renewable energy for all our operations in the US, China and Europe. We were the first Korean company to join the Carbon Disclosure Project. We have also joined the carbon disclosure supply programme, and we are working with 80% of our supply chain to understand their emissions and try to move them towards renewable energy solutions.

We have a good relationship with the Carbon Trust, so we have been footprinting our flagship mobile devices and Note devices since 2012. Earlier this year, we also footprinted a flagship semiconductor. Once again, we have been monitoring the footprint of our devices and looking at how we can identify improvements in how we design those products.

On the United Nations Development Programme, our sustainability report reflects the goals that are most material to us as a business and outlines what action we are taking to address them. We have partnered with the United Nations Development Programme to launch an app about the sustainable development goals, which promotes understanding and awareness to our users. That app was embedded on our S10 product last year, and it is donations-based, so consumers can take direct action to support the apps that are most relevant to them.

We also take action in the UK with regard to renewable energy, and we partner with organisations. For example, we have been working with Bulb, the renewable energy provider in the UK, to develop the SmartThings app, which gives consumers much more control and understanding of energy in the home and how they are using it. People know us for TVs and mobile phones, but we produce a whole range of products, including, for example, air source heat pumps, which is an important renewable technology for the UK if we are going to decarbonise homes.

I will stop there. There is a lot that we are doing around packaging as well, but that should give you a flavour of some of the activities that we are doing.

Q129 **Chair:** I think we will come on to that, but there is a long way to go. You said you just committed to renewable energy last year. In 2016, only 1% of your energy used came from renewable sources. I didn't hear you mention South Korea in your list of countries where you have made that pledge. As South Korea is, as I understand it, where most of your manufacturing is centred, isn't that a rather glaring omission?

***Kevin Considine:*** No, not at all. You are right that we have challenges in South Korea. Renewable energy development infrastructure in South Korea is not where it possibly is in European countries, and we are lobbying hard to ensure that we increase the volume of renewable energy available in Korea. It is just not possible for us to purchase renewable energy in Korea, I believe. I think there are some very ambitious targets being proposed in South Korea for the development and deployment of renewable energy, so I think we will see change, and change will be coming very soon in that country.

Q130 **Chair:** Eva, Fairphone is obviously a very different kind of company, and you are more focused on these issues than the larger companies that you are sharing the panel with. Could you just tell us a bit about Fairphone's approach?

***Eva Gouwens:*** Thanks. You cannot say that we are the largest yet, as you can do with the other two companies. To elaborate a bit on Fairphone, we are a social enterprise and we are building a market for ethical phones. We do that to motivate the industry to act more responsibly.

By designing, producing and selling smartphones, we uncover all kinds of issues in the supply chain behind our products, and what we try to do is to raise awareness around those malpractices and innovate on solutions. We actually do that jointly; we try to partner up and convene parties together, to implement those solutions in the supply chain, because our ultimate goal is to make care for people and the planet a natural part of doing business.

The Paris agreement and the SDGS are at the core of our company, in many respects. What we focus on—this is perhaps what I can add to what you heard from the two previous companies—is long-lasting products that you can keep in use for a long time, because we know that with smartphones 70% of the $CO_2$ emissions takes place around production.

A tool that we use in our company is modularity. Our smartphones are built up in six modules. That allows us to be resource-efficient and to save all kinds of emissions, because we improve the repairability of our phones and their recyclability, but also their upgradability during their lifetimes.

It is not just about making the phone; you really need to set up what we call an ecosystem, which allows the consumer to repair their phone. I have our phone here, and I can easily open it. If, for example, your battery runs out of energy quite quickly, which is an important reason for many consumers to change their phone and buy a new device, with Fairphone you just take out the battery, buy a new battery in the webshop and replace it yourself at home. Then you save a whole new device, because the rest of the materials in the phone are still perfectly well fitted for the job.

We have worked together with the Fraunhofer Institute to get a better understanding of the implications of both the modularity and our design decisions. What you see is that if you can expand the lifetime of a phone to five years, you save 30% of the $CO_2$ emissions, and if you can extend it to seven years, the reduction would be 45%.

Production, and the focus on preventing the production of more devices, is really the key. The usage and, for example, the transportation, are way less impactful for the environment.

Q131 **Chair:** Thank you, Eva; if I may, I will just stick with you for a moment. One of the other features, as I understand it, of your system is to try to minimise the content of conflict zone minerals—tungsten, titanium, tin and gold in particular, and perhaps cobalt in batteries. Why is that important to you, and how successful have you been in reducing the content of such minerals in your phones?

***Eva Gouwens:*** Thanks for asking the question. Before, I focused a lot on the planet and on carbon emissions. Actually, this is very important for us as well, because a 100% circular economy is just impossible, at least in the coming decades. We won't be there, I fear. It will always be a mix of both virgin and recycled materials, and both changes need to be investigated and actioned.

The recycling part is the nice part to talk about, because it is cleaner and way more positive. It is not so dirty as virgin mining, but there are some of the same malpractices that are in virgin mining, such as child labour and hazardous working conditions both for people and for the environment. Fairphone has focused from the start on virgin mining, and we started off with conflict minerals. Our ambition is to source minerals for our phones that are responsibly sourced, which means they are traceable, and to support working conditions for the mineworkers, factory workers and broader communities.

As there are more than 42 minerals in a phone, we did a scoping study and chose the eight minerals where the issues are the most severe and where we, as the electronics industry, have leverage and a big impact.

Indeed, you have already mentioned a few. I will not mention them all, but it is very important for us to work on an ethical phone. For example, we work in Uganda on a gold project. Again, we don't do that alone; we really believe in partnering. If a small company such as Fairphone wants to do it alone, it takes way longer, so you really need to partner up.

In Uganda, we focus specifically on improving the conditions for small-scale mines towards a standard such as Fairtrade. This is specifically aimed at stopping child labour in those mines and in this environment. We also implement better working conditions. Fairphone then provides the demand in the first phase. When those mines are actually improving the conditions, they can supply to us. That is also why it is so important that we partner up, so that from the start there is already demand for more responsibly sourced minerals.

It is the same for the Fair Cobalt coalition. We need cobalt to make the transition towards green energy. All solar panels and windmills need batteries, so they all need cobalt. There is quite a lot going on in that industry, and we have now set up a coalition to support artisanal mining and local initiatives to improve that.

Q132 **Chair:** We have a few more questions on this in a minute, but I will finish my questions. Kevin, I have not used a Samsung phone, so I do not know how easy it is to extract a battery from one of your phones, but I know it is very difficult to take it out of one of your competitors' phones—unlike the Fairphone that we have just heard about. Why don't you allow for replaceable batteries in your phones, if you don't? Can you address the issue of how you *[Inaudible]* conflict minerals?

***Kevin Considine:*** *[Inaudible.]*

**Chair:** Kevin, you need to unmute.

***Kevin Considine:*** I apologise. On the issue of conflict minerals, we are doing very similar work to that of Fairphone. We comply with the OECD guidance on responsible supply chains for conflict minerals, and on areas of high risk. We have a supply code of conduct in place. We are a member of the Responsible Business Alliance and part of their responsible minerals initiative, which has a programme in place looking at smelters and making sure that they are accredited, so that we understand and have an assurance that we are sourcing minerals responsibly. There is a lot of work that goes on there.

Eva also mentioned partnerships. We see the value of partnerships as well. We are a member of the European Partnership for Responsible Minerals, which is a multi-stakeholder forum with European Governments, industry and academics that looks at funding projects in conflict areas and areas of high risk, to improve standards around mining and sustainable solutions for local communities.

Similarly, we have worked with the German development agency GIZ, with our sister company Samsung SDI, which is our battery manufacturer, BASF and also the BMW Group to develop cobalt for development. That is

looking and working with an artisanal mine in the Democratic Republic of Congo to develop sustainable mining solutions. We consider ourselves to be a very ethical company, working in a very ethical way.

Just to come back to your issue on phones, the circular economy always gets down to an issue around phones very quickly—I hope we can talk about other products as well! The reason that phones went to a sealed unit was about durability. If you looked at the repair network, lots of repairs were around water and dust ingress. Sealing a unit means you no longer have those repairs. Fundamentally, we are responding to consumer demand.

The innovation that has gone into our devices means that we are producing slim devices, which is much more resource efficient. What I hope will come out of this discussion today is that when we talk about the circular economy, and about repairability, durability, reusability, there are always trade-offs in design. We moved away from removable batteries because we were responding to consumer demand. I would say that we are actively innovating in this area. We invest a lot of money in research and development. We are constantly improving our technology and we are leading the world in innovation and technology design around these products.

Q133 **Chair:** Thank you. We are going to come on to durability in a moment with Barry Sheerman, but I will just give Andrew an opportunity to respond. Do your products also contain minerals from conflict areas?

***Andrew Mullen:*** There are certainly small amounts of minerals. Much like the other two, we have programmes in place to make sure that we know where those minerals have come from. We are audited to SA8000, which demonstrates fair treatment of workers. We risk assess all our suppliers and we audit those for whom we feel the risk is highest, to make sure, as much as is practically possible, that we do keep those conflict minerals out of our products.

**Barry Gardiner:** Chair, I thought you were going to bring in Barry Sheerman.

**Chair:** I am so sorry, Barry. I don't know where that thought came from.

**Barry Gardiner:** No worries. You have just aged me by 20 years.

**Chair:** No, our Committee doesn't go on for long enough to be able to allow Barry Sheerman to join us as well. Barry Gardiner—I am so sorry.

Q134 **Barry Gardiner:** Good afternoon to our panel. Do any of you know anything about the Livermore-Pleasanton Fire Department in California? It has a lightbulb that was installed and switched on in 1901 and it is still going strong today in 2020. It is reputed to be the world's longest lasting lightbulb at 119 years. I am sure all of us would be very happy to buy such a lightbulb, but very few of us would want to sell it, would we?

Kevin, your company Samsung was recently fined €5 million for making

sure that your smartphones do not last anywhere near as long as that lightbulb. In fact, you were intentionally slowing them down, weren't you? How long had you been doing that and what steps have you now taken to adopt a fairer and more sustainable business model?

***Kevin Considine:*** First and foremost, that is a single case brought against Samsung in Italy. It is a case that we have contested and is going through an appeals process. Our response to that was very clear: we provide software updates to enhance the consumer experience—it is not to affect performance. That is very much an isolated case and as I say it is being contested.

Look at all the products that we place on the market. Durability, as I have said, is a core component of how we develop products. In fact, in our sustainability report we have five circular economy principles, and durability is two of those. We have done a lot with how we test products. We test to international standards, as well as developing our own standard. We rigorously test products. We are working in a European market that is very—*[Inaudible.]*

**Chair:** We have lost you.

***Kevin Considine:*** Sorry. I think it muted.

We are in a very competitive market, and we are all fighting for market share, so providing product that meets consumer demand on durability is a key factor. It is very important.

We perform very well in *Which?* surveys. Back in 2017, a report by WRAP, "Switched on to value", looking at what products are coming into the waste stream, found that products are lasting a lot longer than consumers' expectations and that, breaking down which products were lasting longer, it was those from original equipment manufacturers, not own-brand manufacturers.

We are doing a lot on durability. On the whole issue of so-called planned obsolescence, there is a complete lack of evidence to support that. In fact, in France has a planned obsolescence law, but I am aware of only one other fine in that country. In Germany, they have done studies—

Q135 **Barry Gardiner:** Look, I don't want to give the impression that Samsung are the only bad guys when it comes to planned obsolescence. Apple was fined €25 million by the French regulators for the same trick of slowing down phones—only in the French courts, it was called fraud, I think; it was called not planned obsolescence, but fraud.

We all understand that there is an inherent contradiction between product durability and company profitability. Perhaps I can ask Eva, how do you think that should be balanced out? How does the planned obsolescence of software and components impact companies such as Fairphone?

***Eva Gouwens:*** To be honest, I also struggle with the term "planned obsolescence", because it implies an evil mind somewhere, deciding that now this phone is obsolete, but it is also about the free market. It is more

complex than just one company deciding that this phone is now obsolete; it is a complex system of all the business models of all those different players.

You ask how this influences Fairphone. To talk about software, yes, we struggle with obsolescence, so it is present—it is not that I ignore it—but it is tough to address it in the way of, "Oh, this is the evil mind behind planned obsolescence." In fact, to talk about the opposite and to state it positively, for a long-lasting phone, what would you need?

In our case, for example, we have Android-based phones, so we need Google, who provide us with updates and security patches. We need them—that is the first step. They need to decide which Android version is supported, and for how long. We also rely on the chip manufacturers for the chips we use in our phones. We work with Qualcomm, for example, and they need to program their chips so that they can work with the specific Android release. They also need to make sure that their chips can integrate all those software upgrades.

Only when that work is done can a company such as Fairphone start doing our part of the upgrades, integrating the updates towards our specific hardware. As you can already see, these are big companies with all their own business models and product portfolios, and they need to work together. Then there is Fairphone, which has so many smartphones provided and so many products in every portfolio, so it is possible, but it a very complex system, which all together drive the obsolescence of a phone.

That is about software, but it is also about hardware similarly. Take, for example, a new camera: the camera manufacturer stops producing the specific camera we had in our phones, so we cannot buy spare parts anymore and the phone becomes obsolete.

Altogether, it is a super-complex system for all kinds of manufacturers that have their own product portfolio and their own business models, and the market drives them towards innovation and a new phone every year, or every two years. It is able to work around it: luckily, with Fairphone 2, our second-generation phone, we were able to provide software support and updates for four and a half years. We will definitely hit the mark of six years in the end, but we have done that with external, independent software developers, our partners and our community. You really need to work around the industry now, and if we set up some regulations—I think we are going to talk about this later—they should aim for longer support and longer availability of spare parts.

Q136 **Barry Gardiner:** The research by Eunomia that was published in January this year showed that "A lack of minimum 'eco-design' standards"—I notice you talked about modularity being intrinsic in your own design—"and consumer information to guide choice relating to product quality and reparability, has seen a shortening of product life, and a high cost of repair relative to purchasing a new product. This can perversely encourage the purchasing of new products, even when the product is

repairable." In a sense, your business model shows that, but this is every director of finance's fantasy, isn't it? Even when it can be economically repaired, lack of consumer information means that the punter just goes out and buys a new one. Lifespan labelling could change that, and it has also been shown to boost sales.

If I can turn to Mr Mullen, how open would your company be to a durability accreditation system like the one used in Austria? You picked up the Chair saying, quite rightly, that you are No. 1 in the UK large home appliances sector, but your small print says, "We remain committed to developing products and partnerships that tackle the challenges facing our planet today, to leave a better world for future generations." Are durability accreditation systems part of that?

***Andrew Mullen:*** Before I come on to that, perhaps I could go back to your lightbulb example. To use one of our own products, if you were to buy a standard two-door fridge freezer in 1995, that product would probably cost you £128 a year to run at today's electricity prices. In 2015, the same product costs £28 a year to run.

Q137 **Barry Gardiner:** Modern upgrades and innovation mean that things can be environmentally better as a result. Nobody doubts that, but you have seen the statistics, as have we all, that talk about 35%—possibly up to 45%—of the rollover, if you like, not being because of increased efficiency and actually militating against it. However, I do take your point; it is a point well made and fairly made.

***Andrew Mullen:*** To pick up on your point on durability, you specifically mentioned repair costs. Our products are repairable and reliable. In an average year, we talk to about 600,000 of our customers who contact us in some way. One thing about customers is that if they are unhappy with the durability, reliability or performance of our products, they tell us.

Q138 **Barry Gardiner:** They only do that if they know how you compare with somebody else. Surely that is the whole point of having such information available to the customer. The point of the research I quoted was that the customer is not aware, and there is not an accreditation system that is comparing products like for like. That is why I am asking you whether you would welcome such a system, so that they could compare your products against other manufacturers'.

***Andrew Mullen:*** We would welcome any system that enables a customer to make a reasoned and informed choice when they purchase an appliance. Going back to the fridge freezer, the point I would make is that there is more than just the durability to consider here: there is the energy efficiency and the safety of that appliance. Again, to use the 1995 fridge example, that fridge almost certainly would not have a flame-retardant back on it. There are many, many considerations, of which durability is absolutely one.

If I might come back to the point about the cost of repair, one of the significant factors today in terms of the cost of a repair is the cost of the engineer relative to the product. If you were to take a product

manufactured in 2000, an engineer would be about 14% of the cost of the product to repair it. Now, it is over 30%. That is another significant factor. All of these things have to be considered when the consumer is presented with information.

Q139 **Barry Gardiner:** Is that not where Eva's point about modularity comes in? If the component parts of any appliance were made in a more modular fashion—designed in that way in the first place—the repair cost would be a lot less. But because they are not plug-and-play, repair costs are increased.

***Andrew Mullen:*** Again, I think there is a trade-off. To use an example from back in the past, when I was a boy growing up, we had a TV that was rented, and those TVs were a modular design so that, when a repair man came out—they came out frequently—they could take out the faulty panel, replace it with a refurbished one and get the set going again. It became very apparent that one of the big problems with those TV sets was the interconnections between the various panels. The very fact that it was modular led to some of its weaknesses. I think for all of us as manufacturers, there is trade-off between making a product that is modular and easily repairable—we as a manufacturer repair products, so ease of repair is important to us—and whether that modularity starts to impact on durability.

Q140 **Barry Gardiner:** Mr Mullen, you have raised a very interesting question that I think the Committee has partially explored previously, which is looking at changing the model from a purchase, ownership model to a service model, where you pay for the service rather than the item itself, whether it is a fridge, a cooker or whatever. Of course, it would then be in the service provider's interest to ensure that there was that ease of repair.

I would like to give Eva Gouwens the opportunity to come back on what you said about modularity and the problems with connectivity from modularity. Of course, she has pointed out that Fairphone has a modular structure, and I did not want that to be calumniated by default.

***Eva Gouwens:*** Actually, Mr Mullen is right: modularity is not the holy grail. It is the tool that we use, and we think that for smartphones it is very fit for purpose. I am not going to shy away from how we had our issues with the stability of the phone. Luckily, we are now selling our third-generation phone, where we solved those issues and we now have a very stable phone.

It is not easy, but for me the main point is that in the product design you should make decisions based on designing a product that is long lasting, easy to repair and easy to recycle after its use. That is what we try to do, with the whole system of circularity focused not only on recyclability but, higher in the pyramid, on keeping the materials longer at their value, and the upgradeability and the repairability. I agree that modularity is not the holy grail. Every choice you make has pros and cons, and every category of electronics has its own dynamics, but it is important to make a more sustainable choice at the beginning in the product design.

Q141 **Marco Longhi:** May I start with a question to Andrew Mullen? By the way, these questions all relate to the position of producers on the right to repair. To what extent do you believe there is a trade-off between designing products for durability and ensuring that they are more readily repaired?

***Andrew Mullen:*** As I said before, I think there is a dynamic and a conflict between the two. We want a product to be durable; we want it to be repaired. As I said, we repair a significant number of products every year ourselves, as a result of those products being covered by a warranty. And that is not necessarily a one-year warranty; it might be a much longer warranty. We also do repairs out of warranty. So it is not in our interest to make products difficult to repair. At the same time, we do want products that last a long time.

One of the things to bear in mind, in terms of a repair, is the amount of time that an engineer might spend repairing a small or cheaper part, offset against the cost of repairing, of changing, potentially a more expensive part but the engineer spending less time on it. Quite often, that can be a cheaper option.

In terms of right to repair and consumers repairing their own products, or repair workshops doing that, there is clearly a place for those, but I think it is absolutely right that, as a manufacturer, we are concerned that people who are doing it are able to do so safely and not put themselves or, indeed, other people at risk. We recognise that some of the appliances that we make do—or can—if repaired incorrectly, present a risk. It is a fine balance and something that we keep under review.

Q142 **Marco Longhi:** if I may, I will follow up that question with another to you, Andrew. You have mentioned safety concerns about the repair of white goods. Do you think that the repair market for these products is adequately regulated at the moment?

***Andrew Mullen:*** I don't believe there is any regulation of the repair market for white goods. There is for gas appliances, obviously. Anybody who repairs a gas product must be accredited by Gas Safe in the UK. That does not mean that spare parts for gas appliances are not freely available on the open market for anybody who wants to give it a go. Similarly, if you take a product like a microwave oven, a microwave oven can be lethal if you take the top off it and you have plugged it in and you touch the wrong part. As I have said, we do not, when customers phone us looking for some help, wish to be obstructive. I have spent time on a technical helpline, helping people to repair products. You do really have to make a judgment as to whether they are competent to do it. Anything that was brought in to give consumers assurance that somebody who is repairing their products is able to do so would be very welcome.

Q143 **Marco Longhi:** Thank you for that, Mr Mullen. I have questions for all of you now, and perhaps I can start with Ms Eva Gouwens. Right-to-repair campaigners say that there are three pillars to support: product design, access to spare parts, and access to manuals. Could you talk us through

what your company's approach is on each of those issues and outline concerns that you may have?

***Eva Gouwens:*** I will not repeat myself too much on product design; I have already touched on the modularity there. What is quite crucial for us is the availability of spare parts. That is a bit related to the questions formerly asked about the obsolescence of those parts. It is actually quite a challenge. It is not as simple as just ordering a few additional parts. You need to have good forecasting. The life cycles and the production cycles of those components are often quite short due to the industry dynamics. So the availability of spare parts is really tough. We have struggled with that also in the past, specifically when we started. We also needed, more or less, to educate our own manufacturer a bit on why we wanted to do that, and to convince them to supply longer warranty and longer availability of parts and to improve the quality control in their processes to ensure that the phone remained in use for a longer period. When it is about spare parts specifically, I think a minimum amount of time that you should have those spare parts available could have a trickle-down effect towards manufacturers and suppliers. That would be a bit like the legislation around toxic chemicals, which also had that effect. If the whole industry needs to have spare parts available for so long, that will, in the end, have an effect deeper down in the supply chain and will influence how they produce, design and keep producing those spare parts.

Some worry that that would hamper innovation, but I think that we actually need more innovation like this in our industry—innovation on how we can provide spare parts for a longer period and how we can produce phones that last longer. The innovation that you see right now, which the industry is actually quite proud of, quite often does not really change the way that you use your device. I think longer support for the product, both in spare parts and in the design—and then manuals follow—is really needed for our industry.

Q144 **Marco Longhi:** Thank you. Kevin, do you have any thoughts on that?

***Kevin Considine:*** When we talk about repair, people do not understand, as Andrew mentioned, the level of repair that manufacturers such as us—*[Inaudible.]*

**Marco Longhi:** Sorry, we have lost you, Kevin. It seems to go automatically to mute sometimes.

***Kevin Considine:*** Apologies—we'll try again. I mentioned the issue of repair and the fact that I do not think that people understand the extent of the repair network that we have, as Andrew mentioned. We fix products under repair both in and out of warranty. We are able to pick up a device and get it back to you within five days, anywhere in the country—we have 100% coverage. We have mobile vans out and about all over the country covering about 94% of the country and we are able to pick up a phone, repair it and get it back to you within an hour. Similarly, we have operations on high streets where you can have a similar service. An awful lot goes on in repair.

One thing that I would say is that there is a lot of concern about the right to repair. We have mechanisms in place at a European level within certain policies that already address that. I do not think that we should lose sight of that. The waste framework directive talks about the right to repair and establishes criteria around safety, security and intellectual property rights that should be met to enable the right to repair. We have got the material efficiency standards—horizontal standards—that have been developed now at a European level and look at repairability, reusability and recyclability. Those are standards that I think will inform future policy discussions and set a precedent for product design measures, so I think that the mechanisms are in place to address this, and we should not lose sight of that.

Q145 **Marco Longhi:** Okay, but there are no particular concerns, as such?

***Kevin Considine:*** Well, there are particular concerns around product liability, for example. If we have to start advocating or supporting independent third-party repair, where does liability lie if there is a fault in a repair? Who is liable for that? There are genuine concerns around safety. That is probably not my area of expertise, so I will not touch on that per se, but I know that Andrew has picked up on some of those issues. There is genuine concern around who has control of that repair.

Q146 **Marco Longhi:** Thank you very much. Robert, I do not know if you were able to follow everything that has just been said, but do you have any thoughts?

***Robert ter Kuile:*** Mr Longhi, I appreciate the opportunity. Can you just really quickly repeat your question? I just want to make sure I am addressing the core issue that you would like addressed.

Q147 **Marco Longhi:** It is around right to repair and basically the three pillars around that: product design—I know we have already said quite a bit about that already—and access to spare parts and access to manuals. I am just wondering what your company approach is to all of those and if you have any specific concerns around them.

**Chair:** I am sorry to butt in, but Robert is really meant to be in the second panel, Marco. If you could just provide a quick answer, Robert, and then we will come back to you in the next panel.

***Robert ter Kuile:*** Absolutely. Thank you, Mr Chairman. Mr Longhi, just very quickly, we do provide support for our devices that are up to five years old, and we do also have numerous programmes around refurbishment and making sure that products stay out of landfill, but I will be happy to provide more details during our panel session.

**Marco Longhi:** Okay. I apologise if I asked you a question that was meant for someone else.

***Robert ter Kuile:*** That is quite all right, thank you.

Q148 **Marco Longhi:** Mr Mullen, if I could come back to you, then, and hopefully you are the right person I should be asking.

***Andrew Mullen:*** I think I have covered a lot of what I was going to say. One point that has been mentioned by both the other panellists—and it is an important point—is the issue of spare parts. We hold spare parts in the UK, as do most of our competitors, like Samsung, because if your product goes wrong, you are not going to wait for us to bring a spare part over from Turkey, where our factories are, or from anywhere else in the world. But what that means is we do have a huge redundancy in spare parts, because we have to have those parts available should they be required.

Those parts aren't covered by the WEEE directive. We talked before about sustainability and reusing materials. The longer we go on keeping spare parts to support long life of products, we are in danger of building a bigger mountain of spare parts that aren't covered by the WEEE directive and that we have to dispose of at some point.

**Marco Longhi:** Okay, thank you.

***Kevin Considine:*** Mr Longhi, can I just come in to make a point, please? If we are promoting repair, I think an important part of repair we must remember is that recovering faulty parts allows us to refurbish those parts to a factory standard and reuse them back again in our supply chain. If we open up repair to independent third parties, there is no guarantee that we get those parts back, so if we want to drive the circular economy, we need to try to get those parts back. That would drive a truly circular system.

The other thing I would say is that professional repair keeps the value of the product higher, and if we truly want to see a circular economy, we need to ensure that the inherent value of that product remains as high as it can through its lifetime. I believe that is only achieved through professional repair. I understand that there is pressure around this, to open up repair, but I don't think we should lose sight of that within this circular economy debate.

**Marco Longhi:** Okay, thank you all for your answers.

Q149 **Dr Offord:** Good afternoon everyone. It is great to hear about the recycling of your products. I have a mark 2 Land Rover that was manufactured in the year of my birth. What astounds me is that when I have taken it apart, not only is it disassembled very easily but I am able to recycle those parts I take out and buy new ones. How easy are your products to disassemble? Are they very easily recyclable in our current recycling regime? Who would like to go first?

***Andrew Mullen:*** I will take that first. In terms of recyclability, at end of life all our products—with the exception of dishwashers—are 95%-plus recyclable through the current UK recycling system. The reason dishwashers are different is that, to meet energy legislation, we have to put insulation in them and that insulation is not recyclable. Other than that, they are all completely recyclable. The packaging is also completely recyclable.

In terms of taking them apart, that goes back to the previous discussion, because if you are a manufacturer-trained engineer, you can take that

product apart very easily to fix it. If you are not, you might have some problems doing that. For an experience engineer who has been trained by the manufacturer, we get very few reports of engineers having problems taking it apart. As I mentioned, we repair products, so it is not in our interest to make them difficult to take apart.

Q150 **Dr Offord:** Before you go on, or anyone else answers, you said it is recyclable. Even objects such as Tetra Pak is recyclable, but actually very little of it is, because it is not always possible for local authorities. When you said it is recyclable, how easy is it for local authorities and others to take apart your products and then use those products for additional materials or other resources?

***Andrew Mullen:*** Any product that we make at the moment goes by the WEEE regulation, so it has to go to an authorised treatment facility. That falls into one of two categories: it will go either to a fridge reprocessing plant or to a large household appliance reprocessing plant. A lot of those in the current UK system tend to be car plants, so they will go through a shredder.

That allows the component materials to be recovered and they can then be used for other things. The steel can be set aside and can be made into— *[Inaudible.]* Plastics are more of a problem, because certain older products had chemicals that we now know should not go into new appliances. In terms of the newer products, the raw materials are very easily recovered.

Q151 **Dr Offord:** Ms Gouwens, that is particularly so for mobile telephones.

***Eva Gouwens:*** Yes. You started off with how easy it is to repair them and buy spare parts. In our case, that is quite easy, because of the product design. The question now moves more towards the recyclability of phones at the end of its life. I think every category has its own dynamics, but for smartphones one of the big issues is the collection of the phones. Most of the phones remain in the drawers of the users and do not go back to a point where they can be professionally recycled.

We did research for our Fairphone 2. A third party checked and the recyclability of a modular phone like our Fairphone 2 was greater. It was easier to recycle, because you can dismantle it already to a lower level at the start. Still, in the best cases, one third of the material was recovered as an original material again. That is quite low. Therefore, the limitations of the current recycling industry for smartphones emphasises that the long-lasting phone is the way to make the use of the materials most efficient and circular. That is what I would like to say on this topic regarding our products.

***Kevin Considine:*** As Andrew said, we make the products repairable. Therefore, they are easy to disassemble. There is a bigger issue there, if you do not mind me saying. When you look at how WEEE is collected in the UK, much of the small domestic appliances, power tools, toys and ICT equipment are all lumped in together.

The standard of treatment that we have in the UK—best label technique—dates to 2011. There is great disparity between the level of recycling we see in the UK. We see some great examples of innovation in recycling, but there is lots of evidence of rather outdated recycling methods, so I don't think we are maximising value from the WEEE that we are collecting. Even if you provide products that are easy to disassemble, ultimately, as Andrew has said, they are going through a shredder, so much of that is wasted.

We have done some work in Samsung promoting labelling on the backs of TVs, to aid disassembly. That is something we have led, but it is part of the larger TV-producer community. We have a cadmium label and mercury label on the back of TVs, so that recyclers can identify what is in the product or not, and treat it accordingly.

At a European level, there is the I4R platform, which is the industry trade associations for white goods and for digital technologies working together to develop product features to support recyclers on how to take apart products. That information exists and is available to recyclers, academics and so on. A lot of work has been done by producers to support disassembly.

To come back to my original point, we can provide all this information but if the technology and the standards are not there to drive improvement, then we are wasting our time.

Q152 **Dr Offord:** That is great, thank you. Mr Mullen made a point about chemicals within some of the products. I want to ask all three of you, how do your organisations remove some of those toxic chemicals from the products you currently manufacture?

***Kevin Considine:*** I am happy to take that first. In the Eunomia report that was mentioned earlier, Samsung was put forward as an example of best practice in regard to our chemicals policy. We have a four-stage approach and one of those stages is a voluntary phase-out of chemicals. For example, beryllium, PVC and a number of phthalates have already been voluntarily taken out of our products. I have mentioned the mercury and cadmium labels, so I think we are doing a lot around that.

Once again, I would still come back to legislation. We have some effective policies at a European level, but I think the UK still needs to follow them—REACH being one of them. A lot of evidence and work has been done through REACH to get a greater understanding of how chemicals in the substance and the preparation impact human health and the environment. A lot of work has been done about restriction and control of substances.

RoHS is an important piece of legislation for our industry. It is testament to that piece of legislation that you see over 40 similar pieces of legislation around the world. They provide an important platform for our chemicals legislation, and in leading the way in understanding and identifying chemicals that are most of a risk to us and our consumers.

***Andrew Mullen:*** I support what Kevin says. The legislation created by RoHS and REACH has dealt with the vast majority of these chemicals. With most of the rest of them, we don't need production any more. To a certain extent, it is a historic problem that has now been addressed.

Q153 **Dr Offord:** But does that specify specific chemicals?

***Andrew Mullen:*** Yes, it does.

Q154 **Dr Offord:** In the case of brominated flame retardants, everyone is now withdrawing and removing them, but they are not withdrawing chlorinated flame retardants. They are the same family of chemicals, but only specific ones are being removed. What is your policy and direction on removing a family of toxic chemicals, rather than the specific products?

***Eva Gouwens:*** This topic is not my expertise, to be honest, so I will refrain from answering. I am happy to write later to the Committee about it, but this is not my expertise.

***Kevin Considine:*** That is what they call a hospital pass, isn't it? As I said, I think we have the mechanisms in place. The evidence base is there. The great thing about the UK is that in our contributions to European policy, we advocate an evidence-based policy.

Yes, there is substitution within the REACH regulations, and we may be replacing within one family for another, but that is considered a suitable substitute. If it is not, it could go on the restrictions list and a sunset date could be set for it. I think we are moving towards the phase-out of these chemicals, but that has to be within the context of sustainability, so it is the evaluation based against economic, social and environmental benefits.

***Andrew Mullen:*** I agree with that. I think it has to be within a regulatory framework. That is already extensive, and if it can be improved, obviously we will follow that.

Q155 **Dr Offord:** Just one final question. Mr Considine has already alluded to this. The Royal Society of Chemistry has advocated product labels or a product database—Mr Considine says one has already been introduced—that would outline the chemicals in products and how easy they are to disassemble and recycle. Is that something that you would support, Ms Gouwens and Mr Mullen?

***Andrew Mullen:*** Yes. We are already working on an EU project, part of which involves us marking components with a QR code—effectively, a passport that shows exactly what materials are in the component and anything that aids recycling. One of the things that I have not mentioned previously—perhaps now is an appropriate time to mention it—is that we are also a WEEE recycler. We have two recycling plants in Turkey in two of our factories. Therefore, we have an interest in making sure that, when we recycle these products, we can reclaim as much useful material out of them as we can. We would support anything that improves recycling.

***Kevin Considine:*** When it comes to labelling, we need to remember that the energy label in the UK hasn't really resonated with the consumer. It is not a major driver for sales, so when we talk about a label, I get a bit nervous. You hear a lot of conversations about consumers wanting more information, and everybody thinks that a label is great, but actually there is evidence that suggests that a label hasn't necessarily worked for energy efficiency. What messages are you trying to get across? I would err on the side of caution.

I am happy to work towards supporting any type of project, but the report that you mentioned didn't really look at what is already going on in Europe, to be perfectly honest with you. The material efficiency standards that we have will set certain conditions that were outlined in the report. I mentioned the I4R platform, and there is also the SCIP database that has been established by ECHA, which will contain information on substances of very high concern in articles. That database will be open to all European and non-European members.

We have the opportunity. That information will exist on a database, and consumers will have access to it if they want. As I say, labelling sounds great, but in reality there is little evidence to suggest that it actually works.

Q156 **Dr Offord:** Any other contributions?

***Andrew Mullen:*** I want to support what Kevin said, and perhaps I should have been clearer in my answer. Yes, it needs to be a database that is open to recyclers. It is not a consumer label for the product.

**Dr Offord:** That's great. Thank you very much for your contributions.

**Chair:** Thank you, Matthew. Our last set of questions on design are from John Mc Nally.

Q157 **John Mc Nally:** I will keep my questions fairly brief. My first question is to Kevin and then Andrew. The Committee will develop recommendations for the Government to consider. Do you think this would be better done through regulations or economic incentives, or would a mix of both be the best way to ensure that products are designed to minimise their footprint, and are easier to recycle, repair and manufacture? As producers, do you think ecodesign should be mandated primarily through regulations or encouraged with economic incentives under an extended producer responsibility scheme?

***Kevin Considine:*** I am not sure I quite understood the question, but let me give it a go. Ecodesign provides the right platform to influence product design, and the European ecodesign requirements are setting design standards for the rest of the globe. I am a bit concerned about looking at extending producer responsibility as the mechanism to try to influence product design, because I simply think it won't work.

We have the potential for the introduction of a modulated fee coming soon with the WEEE regulations. I think that will play some role in separating

good design from bad design, but I don't think it will ultimately shape the design of products. I think that is still best achieved through the ecodesign requirement, which has done a lot on energy efficiency and is now looking at non-energy requirements.

Q158 **John Mc Nally:** Thank you. Andrew, can you comment?

***Andrew Mullen:*** I would agree with Kevin. Given we are all global and European manufacturers, ecodesign within the European regulatory framework is really important. I think using EPR to drive ecodesign, particularly given how recycling currently works in the UK, is going to present a challenge. I think right at the base of this is, what is it that we are looking to achieve? Is it to achieve product that lasts longer? Is it to produce product that lasts longer if it is repaired? Is it to produce more energy-efficient products to reduce energy consumption? It is probably a combination of all three, but I don't think we are necessarily clear at the moment on how those three should combine.

Q159 **John Mc Nally:** Okay, thank you. There are obviously a lot of complex issues to be thought about by the Committee in producing our report to the Government.

I will move on to Eva from Fairphone. You might like to know, Eva, that the person credited with developing the flat screen on the phones that we now use—the person who stabilised liquid crystal displays—was born and bred in my home town of Denny.

How would you like to see an EPR designed to encourage more sustainable design and to reduce e-waste, in a perfect world?

***Eva Gouwens:*** I agree with the last two statements. For Fairphone, on the ecodesign directive, the fact that it is now broadening its scope a little bit more towards material efficiency and spare parts availability is something that we really support.

Talking about the EPR, the current system is a bit too easy to circumvent. It scratches the surface, but it does not get to the core of the issue. The issue is wider than just paying a fee. We do think it needs a unified approach and we also think it needs some sort of level playing field—some sort of minimum requirement—to be in place.

For Fairphone, as I mentioned before, ecodesign is at the forefront of what we do. We try to lead by example. It is about modular design. What I would like to add—I am struggling a bit with time—is that for smartphones the issue is collection, and for refrigerators the issue is something completely different. We really need a unique approach. You need an approach per category; it is tough to combine them all in one set of regulations.

We think that a level playing field—setting up one unified set of minimum requirements—would increase the availability of spare parts and the awareness of ecodesign at the beginning of design of the product. We would encourage more sustainable design because we think that is the

best way to reduce e-waste—make those decisions already in the design process.

Q160 **John Mc Nally:** Thank you. My last question is to Kevin and Andrew. You will be aware that other European countries are introducing separate EPR schemes. Under the EU circular economy proposals, how effective—you have probably touched on this a wee bit earlier—are the economic incentives or the regulations likely to be if they are not harmonised across the whole of Europe?

***Kevin Considine:*** I apologise; I don't quite understand the question.

Q161 **John Mc Nally:** It was following on from your earlier answer. Other European countries will be introducing separate EPR schemes under the EU circular economy proposal, so how effective are these economic incentives or regulations likely to be if they are not in harmony across Europe?

***Kevin Considine:*** I have to say, I do not know an awful lot about what new EPR regimes are being introduced in other European countries. I do know that in the UK, there has been some discussion about, for example, looking at furniture or mattresses and extending it to other products. A lot of the debate about the circular economy is moving away from recycling, but I would say that really importantly, all products that come—*[Interruption].* I am still on; can you hear me?

**John Mc Nally:** You have come back in again, yes.

***Kevin Considine:*** Sorry, I think there's a problem with the line. I wanted to say that when we talk about the circular economy, we kind of push recycling aside now. It is not seen as a very attractive conversation topic, but ultimately, all products become waste at some stage. We are talking about the circular economy, but what we have not addressed since the WEEE regulations came into force is an effective WEEE system in the UK. Producers are still complaining about the system that they have, and other actors are probably complaining about the system we have, but maybe for other reasons.

For plastic and batteries, we have problems with the systems. EPR is an effective measure. I have talked an awful lot about harmonisation with Europe, and EPR gives us an opportunity to do something a little bit differently when we come out of Europe. One big thing I wanted to say was about targets. We can actually set new targets, and those targets can be a little bit more specific. As you pointed out, maybe a bit more targeting will drive the behaviour we are seeking to achieve, because the targets we currently have are a rather crude mechanism.

**John Mc Nally:** Thank you. Are we okay for time, Chair?

Q162 **Chair:** We are going to ask Andrew to respond, and then we need to move on, I think.

***Andrew Mullen:*** I will try to keep this very brief, then. I very much agree with what Kevin said: from a European perspective, what is really

important is ecodesign and commonality there. In terms of the EPR, the UK has an opportunity to be much more creative, and target setting is something that could definitely be addressed. Perhaps we could move away from a system that is based on tonnage placed on the market, which probably bears very little resemblance to products coming off the market, and look for something that is a lot more creative and a lot nearer what we are seeing coming off the market.

**John Mc Nally:** Thank you very much, all three of you.

**Chair:** Thank you, John, and thank you to our panellists from the first panel: Andrew Mullen, Eva Gouwens and Kevin Considine.

## Examination of witnesses

Witnesses: Robert ter Kuile, Matthew Manning and Astrid Wynne.

Q163 **Chair:** We are going to move straight into our second panel. It is a good segue from what Andrew was saying about the volume of production, because we are now talking to a group of well-known retailers. I welcome Robert ter Kuile from Amazon in the US, Astrid Wynne from Techbuyer, and Matthew Manning from Dixons Carphone. Could you introduce yourselves by saying what your responsibilities are at those organisations? Just say your name, where you are from and what you do.

***Astrid Wynne:*** Hello. My name is Astrid Wynne, and I am the sustainability lead at Techbuyer. That means that I look at our core business and am involved in research projects to figure out how we can make what we do more mainstream and how we can improve circularity, particularly within the data centre industry and particularly for IT hardware.

***Robert ter Kuile:*** Hi, I am Robert ter Kuile with Amazon. I am the worldwide director of environmental assurance and protection. My teams mainly look after environmental compliance and some research conservation, and support our sustainability goals globally.

***Matthew Manning:*** I am Matthew Manning from Dixons Carphone. Our brands in the UK are Carphone Warehouse and Currys PC World. I am the compliance and recycling operations manager, and I look after all waste streams that we generate as a business across the UK and Ireland—in stores, in our supply chain, and also from our customers, particularly around waste electricals.

Q164 **Chair:** Thank you. Both Dixons and Amazon are now well-known household retailers in this country, but Techbuyer is not, so I will start with you, Astrid, if I may. Could you tell us a little bit about your business model? I understand that it is built primarily on the whole concept of refurbishing and reusing electrical equipment.

***Astrid Wynne:*** We buy, refurbish and sell data centre IT hardware—servers, storage and networking. We have started branching out into PCs

and laptops, but that is our core business. How that works is that we buy redundant IT hardware from a variety of sources—I can give you details on the supply chain later—we strip it down to core component parts; we test everything on the way in; we data-sanitise all data-bearing devices; we store it; and then we ship it to new customers, either as spares and upgrades for their existing machinery, or as fully configured machines for new users, so we rebuild the machines.

About 10% of what we do is classed as remanufacturing, and refurbishment is about 80% of our business. We also stock small quantities of new parts as well, for hybrid solutions and a variety of alternatives for component parts. We are economically quite successful, which I suppose is quite surprising for a company with our background. We were ranked 102 in *The Sunday Times* Fast Track 200 last year. We have just won a Queen's award for enterprise—in international trade, not for sustainability.

Q165 **Chair:** What proportion of the product that you take in are you unable to sell?

***Astrid Wynne:*** Minimal. I mean, servers, storage and networking machines are quite hard-wearing. When we have equipment that comes into our warehouse, often the incoming product has been not used, because it has been in a back-up or test environment. You are basically looking at cold-pulled devices, which are effectively new; they are just not out of the box. Some of our equipment is bulk buy, so organisations that have overbought IT equipment are looking for a market for that. I do not know our recycling statistics—I can get them—but I do know that they are very low.

Q166 **Chair:** You are not taking in product from consumers, therefore, so it is not used in a more conventional consumer sense.

***Astrid Wynne:*** Yes, I would say that is true. We are starting to do that more with the PC and laptop offer, but it tends to be enterprise.

Q167 **Chair:** Okay, that is very helpful. I am going to keep going at quite a pace, because I am conscious that we took longer than expected with the first panel.

Matthew, Dixons is obviously one of the largest electronic retailers in the country. You deal directly with consumers, significantly. What are you doing to address this issue, which was raised by Andrew Mullen at the end of the previous panel, about the tonnes of electronic waste that is sold each year, only a very small proportion of which is recycled? The BBC has a report today on research by Material Focus showing that approximately 1.5 million tonnes comes into the market and about half a million tonnes is thrown away.

***Matthew Manning:*** Obviously, when the regulations came out, as a retailer we had the option to join the distributor take-back scheme or to set up our own take-back system. The UK was actually the only member state that allowed that derogation, so we set up our own take-back system. Why did we do that? I suppose that at the time it made us

unique, in terms of providing a service to our customers, and also to the public, because the route that we went down is that we allow anyone to come back, even if they did not buy any product from us—they can turn up with any waste electrical equipment and we will take it back in-store. We are also a producer, so what we take back in helps to offset our obligations, so it is also saving us money.

Also, because the units that we get back are typically in better condition than you might find if you took the WEEE to a household waste recycling centre, where it is typically thrown into a skip and not very well handled, it provides much better equipment for the reuse sector.

We completely agree with your point that there are some still scarily high numbers of units that are not being recycled. I think it was only today that the Eunomia report came out and showed that about 150,000 tonnes of WEEE is going into the residual waste stream, which is 25% of WEEE that is going down official AATF routes.

To make it easier for our customers, we have, on top of increasing the volumes we take back, put a leaflet in with all our own-brand products that says, "Thanks for buying a new product. It is likely that you are replacing an old one"—between 50% and 80% of the time, someone is buying a product to replace an old one that is either broken or faulty. Through Christmas and the Black Friday period last year, also we put a leaflet in dispatches for all our online sales, so when the customer got it, it reminded them that they could take any product back to one of our stores across the UK for free recycling.

Also, when we deliver big items, such as cookers and washing machines, we have always taken away the old one. At the end of 2018, we started a new service—the first in the UK—offering to collect small products when delivering big products. It is small products that are typically not recycled correctly because they are small and consumers can easily put them in their bin. That is why we see the big volumes coming through residual waste. In the first whole year of its operation last year, the volume of small electricals we collected was up 215%. So just making it convenient for consumers has had a real positive effect.

Even though we have been doing take-back in our stores since 2007, a survey we did two years ago showed that only 45% of our customers knew that we did take-back. However, of the 55% who did not know, 85% would have used it, had they known. So the whole area around communications is really key to making people recycle.

Q168 **Chair:** Robert, Amazon is best known for delivering products to the home. Do you have any take-back schemes for electrical products?

***Robert ter Kuile:*** We do have take-back schemes. We participate in the UK and EU EPR markets, and we have Amazon recycling, which is an opportunity for our customers to recycle their electronic products. We provide that recycling through the DTS and EPR take-back schemes. Over

the past 10 years we have recovered about 10,000 tonnes of WEEE that had been disposed of.

Q169 **Chair:** Is that mostly in the United States, or are you talking about the UK?

***Robert ter Kuile:*** That is in the UK and the EU. I will be providing mainly UK and EU data today. I apologise; I will be clearer about that.

Q170 **Chair:** That will be helpful. It seems to me that you have an enormous opportunity or challenge, depending on how you look at it, in turning the juggernaut that Amazon now is. Its reputation until recently has been as one of the worst performers in terms of transparency of what it is doing, in relation to not only the environment but other areas such as taxation, which we will not go into here. In 2017, Greenpeace described Amazon as one of the least transparent companies in the world in its environmental performance. You have come to the company relatively recently. Perhaps you can tell us some of the things you are doing to improve on that performance.

***Robert ter Kuile:*** Absolutely. I appreciate the opportunity to talk about our sustainability journey. Just to be clear, we recognise at Amazon that sustainability is indeed a journey. We have been working hard behind the scenes to bring our scale to be able to bring lasting impact. This is why we recently announced and co-funded the climate pledge. As you know, the climate pledge is our commitment to meet the Paris climate agreement 10 years early.

With that announcement, we have also launched a climate pledge fund. Right now, we have a fund of $100 million that we are investing in reforestation and protection of wetlands and peatlands. With that announcement, we also committed to being 100% renewable energy by 2030. Just recently, we increased this and were able to bring that commitment five years earlier, so we will be at 100% renewable energy by 2025. In addition, we recently brought a $2 billion climate fund that is investing in innovative companies that are looking to have a positive impact in the climate space.

In terms of recycling and products, of course we participate in the EPR schemes that my teams lead and run globally. We also have voluntary take-back and recycling programmes with Amazon second chance, our Amazon warehouse deals and our refurbishment. We also participate in and provide information to our sellers and vendors. That information is readily available on our website.

Q171 **Chair:** The pledge you have just referred to is obviously very welcome news, but you have got your work cut out. In the first year in which you reported your emissions, which was 2019, you reported that they were 15% up on 2018. In the current year, given the increase in home delivery, which has been happening because of covid, in the UK and all around the world, one has to imagine that it will go up before it starts coming down. What steps are you taking to get it down for next year?

***Robert ter Kuile:*** That is a great question, because it gives an opportunity to talk about greenhouse gas accounting. As you know, with greenhouse gas accounting, as you found in our sustainability report, we index. The indexing is very important, because we index to per dollar of gross merchandise sales. On our 2018 versus our 2019 numbers, we have a 5% decrease as we index across, so while our growth and deliveries may be going up, when indexed against our gross merchandise sales per dollar, the number is actually going down. That follows the greenhouse gas protocol and other global and scientific-based tracking mechanisms, where we are truly reducing our climate change impact.

Just to be clear, this is a journey—we know that we still have further to go and other opportunities. That is why, on the back of the $100 million pledge, we have put the $2 billion fund out there. That is why we are accelerating our commitment to 100% renewable energy, and it is why we continue to find ways to innovate and to bring new ideas to the market for our customers.

**Chair:** Thank you. I will now hand over to Caroline Lucas.

Q172 **Caroline Lucas:** Thank you, Chair, and to our panellists. I was going to come to Robert first as well, if that is all right. How do you ensure that overseas producers using your platforms are part of producer compliance schemes for e-waste?

***Robert ter Kuile:*** Ms Lucas, that is a great question. We take our EPR compliance very seriously. I can tell you that is something that my teams have been working on globally, certainly before I was here, but we have been ramping that up and investing in that space.

One of the challenges in European jurisdictions that we face right now is the myriad different regulations and requirements for registration. It is quite burdensome to ensure registration and that fee payments are made. That is why we are bringing new ideas to the market to help normalise this and make it easier for compliance—for overseas sellers, for our sellers and vendors, and for anyone else who wants to participate in our simplified compliance method. We advocate this system because it makes it easier for sellers by removing the administrative burden, for enforcement authorities to have one single point of contact and know that all fees and reporting have been made, and for the compliance schemes that we participate in.

In fact, that is a new concept that we are bringing forward. We have signed an agreement with the Italian Ministry of the Environment to pilot the idea, and we have had some great discussions over the past two years with DEFRA. We have been engaging with them and with other stakeholder groups to bring this idea to the UK.

Q173 **Caroline Lucas:** It is good to hear that there is some creativity on compliance going forward. In the meantime, while you are still subject to existing legislation, what would be your response to some research that suggested when looking at LED light bulbs, for example, that of the first

120 listings on Amazon, 91—in other words, 76%—were non-compliant free riders that would have made no contribution at all to the UK recycling costs? Right now, that is a real problem, is it not?

***Robert ter Kuile:*** One of the things that Amazon is set up for is that we have three basic business models: Amazon retail, in which we are the producer and seller of the products; our fulfilment by Amazon, so FBA, where we provide a service to sellers and retailers; and our merchant fulfilment network, or MFN. Products that are within the FBA or the MFN on the online marketplace are the responsibility of those sellers and producers under the current EPR mechanisms that are in place. That is why we are offering this opportunity with the simplified compliance method to help bridge the regulatory gap that is in place.

In addition to your question about the 120 sellers, one of the challenges that we have since we are not a regulatory enforcement body is actually knowing if somebody is registered or not. Some of the items that you will find on our website may have been purchased by a seller and the fee was already paid by whoever they purchased it from and they are simply putting it into the market with the fee already paid. Some of them may be registered; you find a different name on the website versus the registration that has already been placed with the EPR schemes. When we have had non-compliant sellers flagged to us, we take that very seriously and we perform our own research and investigation, notifying the sellers.

Q174 **Caroline Lucas:** Could you do that proactively? Could you not have more due diligence and make sure yourself before you allow them on your site?

***Robert ter Kuile:*** Yes, we actually have many programmes where we proactively communicate with our sellers and vendors. We provide regulatory guidance, in six different languages, throughout Europe—we provide that guidance free of charge. We are also actively working with our sellers and vendors across the EPR mechanism so that they understand what their requirements are, and then we are working with the various different schemes throughout Europe and the UK to ensure that that communication is brought outside of Amazon, as well.

Q175 **Caroline Lucas:** There is clearly, despite all of that, a serious problem with free riding. One part of that is whether the compliance fees have been paid and another part is whether someone from overseas can say that they are a small producer when in fact they are producing tonnes of WEEE and so on. In terms of being able to tighten that up, would you support proposals for online marketplaces to be classed as the producers of the products sold on the market?

***Robert ter Kuile:*** We do welcome the introduction of new regulatory requirements. However, I would be cautious about placing the burden on the online marketplace. Rather, the simplified compliance model allows us to be the intermediary and to pay the fees on behalf of the distance sellers to ensure that everything that is sold on the Amazon website is covered by our reporting. We follow the standards for auditing and our books are wide open in the regulatory and scheme audit process.

This is a methodology that, as I mentioned, we are already piloting in Italy. We are in discussions with DEFRA and have been talking with other EU environmental agencies and Ministries because we recognise that distance selling can be challenging, but a lot of that challenge is really based in the current regulations and the significant burden that those distance sellers find, especially with SMEs. If we step back into the UK or Europe with SMEs, the burden that they see with the regulatory reporting can be restrictive to their ability to enter the market.

Q176 **Caroline Lucas:** I am sure that there might be some burden for them, but there is also a lot of free riding going on by companies that know exactly what they are doing and are making absolutely no effort to comply. To the contrary, they are trying not to comply because it is cheaper for them not to. Mr Manning, would you support proposals for online marketplaces to be classed as the producer of the products sold on their platforms?

***Matthew Manning:*** It is certainly a recognised issue in the UK and it is commonly raised at various workshops on WEEE regulations. Obviously, we are in a global marketplace, so we should not be closing borders to people. It should not be done in a way that circumvents national legislation with those companies gaining an unfair competitive advantage. It is not just WEEE that they are potentially not financing; they might also not be hitting standards on packaging batteries and various chemical and product safety legislation.

In a fairer model—it sounds like the one that Amazon has put in place—they would pay those fees and then charge them back to those distance sellers; that would be a quick way to do it. Currently, there are probably thousands of distance sellers all around the globe. Just looking at the UK, it would be very difficult to police them. A simplified way to manage that and recover those costs, which are currently missing from the system, would be welcome.

Q177 **Caroline Lucas:** You would prefer that as a solution, rather than the suggestion by a number of organisations that monitor compliance that platforms themselves be classed as producers?

***Matthew Manning:*** Yes, that option would work. The marketplace would pick up the fees, so they would report the volumes from the distance sellers, and the platform recharges that back to the producers ultimately. The end result is that you get the money into the system, either from the platform paying it and not recovering it, or the platform paying it and then recovering those costs from those distance sellers.

Q178 **Caroline Lucas:** My last question is about concerns about the safety of electronic products and parts being sold through online marketplaces. Robert, given that that is likely to have increased through the covid period, what are you doing about safety in particular?

***Robert ter Kuile:*** We take our product safety very seriously. We perform hundreds of millions of analyses on our product pages on a daily basis, and we are constantly scanning for products that are unsafe due to recall,

or even for customer input. We look at hundreds of millions of customer analyses and their feedback on the products that we sell on a daily basis. The AIs and the machine learning tools that we have in place to look for that allow us to immediately take down products that we deem to be unsafe.

As you mentioned, during covid-19, that is definitely an important issue for Amazon, and something that we know we need to continue to innovate in. That is why we have actively removed more than half a million products because of concerns or issues that were raised about them. In the UK, this is an active, ongoing process, and we take it extremely seriously. In fact, any associate—anybody within Amazon—has the ability to pull what we call an andon cord if they see something wrong with a product or have an adverse customer input. Our customer associates, when they receive calls, are able to immediately take a product down, even if it is an unfounded or unconfirmed safety issue, just so we can ensure the safety of our customers. We then put the product back up if it is deemed safe. We take that very seriously.

Q179 **Caroline Lucas:** It is good to hear that you take it seriously, but we know that it is a massive problem. I wonder what you think about the role of legislation and regulation in this area. At the end of the day, someone needs to be held accountable for putting those products on the market. There is a big argument to say that if we cannot track down the original person, you are the ones who are bringing it to market.

***Robert ter Kuile:*** I mentioned the different business models that we have with retail—FBA and MFN. Under FBA and MFN, especially in the current regulation structure, they are the sellers and producers. Even within those models, we still apply our restricted product rules and do the same scraping and data analysis of the hundreds of millions of data points on a daily basis, across all our offerings—whether it is within retail or FBA and MFN, even if we are not the producer of record, because we take that seriously.

Q180 **Caroline Lucas:** You specifically said that it is one of the three areas where you do not feel you are accountable, and I wonder why not.

***Robert ter Kuile:*** I'm sorry, Ms Lucas: if that came across as me saying that we are not accountable, that was not my intent. We are absolutely accountable for the safety of our customers. As you know, Amazon is customer obsessed, so we monitor all our products across the board. I was trying to address your comment about the regulatory requirement and who is accountable and ultimately responsible under the current regulatory framework. Because the sellers and producers under the FBA and MFN models actually meet the requirements of sellers and producers, they are ultimately responsible.

Q181 **Caroline Lucas:** I was just trying to tease out whether or not you would be in favour of extending that kind of regulation so that the marketplace—Amazon in this case—would be the accountable body in all cases. It is not about what the current legislation says, but about

whether, for example, we need changes to the online harms Bill, which is currently going through Parliament, to make that clear right across the board.

***Robert ter Kuile:*** I would say that, in general, regulations that require a single entity to be responsible for a vast array and wide range of products would be extremely complicated and very challenging to put in place. We are always happy to engage in constructive discussions with various stakeholders, certainly within the UK, on ideas and ways to bring about the changes that you think are necessary.

**Caroline Lucas:** Thank you.

**Chair:** Now to Jerome Mayhew for questions on collections.

Q182 **Jerome Mayhew:** My first question is for Mr Manning. First, I would like to say how impressed I am by Dixons Carphone's take-back procedures, which you already have in place. We know there is a problem here. From a previous session, we know that not only does a fair chunk of electronic waste go into landfill, but a huge amount is going nowhere except into the attic or drawers. I am afraid I am guilty of that as anyone else. I nipped off halfway through the session see what I could find in a drawer in my house, and in under a minute I came up with half a dozen dead phones and devices. This is something that really needs to be fixed.

We have talked a lot about the producer's responsibility. We know that retailers have a piece of the pie in the sales process and so have a corroborating responsibility to fund the collection of WEEE. How important is it that the retailer takes back the collection of electronic waste? Where does that fit on the level of importance?

***Matthew Manning:*** First, thank you for the praise of our take-back service. We are very proud of it. To your question, retailers play a really vital role. Ultimately, they are the last port of call to the end user, because they are the ones selling the product. Personally, for us, I think it's vital, and I am happy about the changes coming in from the start of next year that make it mandatory for large retailers to offer take-back. Certainly the UK has one of the lowest densities of household waste recycling centres in Europe, which means that there are not a huge number of places for people to go. You found this, and I know, even though I work in the sector and do recycling, that I have tucked away somewhere electricals that are ready to go to be recycled.

Retailers are often in more convenient locations than household waste recycling centres. They have longer opening hours and better transport links, certainly for people who do not have cars. If you asked them, "Where is your local tip?" they might not know, but, if you say, "Where is your local retail park?" they will know where that is. There is almost always a Currys PC World there, but, come next year, there will be other retailers there who will take stuff back.

What is also really important around retailers is the communication side of things. I touched in a previous answer on what we have done to

communicate to our consumers when they are buying new products in store. Certainly, when we rolled out our collection service, the text message they get when they are getting a delivery reminds them to have any small stuff ready and we will take it back.

A couple of years ago we did a collection trial focusing on WEEE with high critical raw materials—typically laptops, phones and IT—with a company called Axiom. As part of its research, which involved us, another retailer and a charity, it found that retailers were more trusted for consumers to hand over those data bearing devices rather than taking them to a tip, because essentially that is a free-for-all. Those data concerns are probably why you find a lot of things like phones and laptops hoarded away. Having that network of retailers opened up—not just ourselves but with others coming on board—suddenly opens up thousands of sites, and hopefully now people will dig out those old phones and laptops and take them back in for recycling, to allow those materials to be recovered.

I think retailers also have—we certainly have—active trade-in services, where people can bring in old laptops, phones and games and get money for them. People often do this with their mobile phones already. That is a strong area, and potentially growing as well. We are finding that we are getting a lot of interest from different types of categories now who are keen to do some form of trade-in, so that they can push their brand. For us, it means we can collect more WEEE and recycle it, pulling it out of the attics, the cupboards and the drawers, and ultimately pulling it out of the residual waste stream, because some people are putting the WEEE down that route.

Q183 **Jerome Mayhew:** It is really striking that we have a long way to go on this. We recover the least amount in the whole of Europe by the take-back route at the moment.
You may not be able to answer this question, but I will ask it just on the off chance that you can: I notice that Ireland, which has many similarities with us in terms of customer behaviour, has the highest rate with over 56% recovery via take-back. Are you aware of any differences in the system that they are operating that could explain the big difference between our percentage recovery and theirs and, if so, is there something that we could learn from their system?

***Matthew Manning:*** Yes, absolutely, and I look after all our take-back stuff in Ireland, as well, because we have stores there, too. One of the first key differences is that you have mandatory take-back in stores. In the UK, retailers were obviously given the option of "do it yourself" or join the DTS; very few went down the DTS route. That is a big difference.

Also, in Ireland they do a lot of work around marketing and promotion. With the funds that producers are paying into in Ireland, a good chunk is ring-fenced, basically to shout about recycling. We do not see a huge amount of that in the UK—the way it is set up in the UK, it has been really just us for the last 10 years trying to shout about take-back. It is quite hard to get a consistent take-back message when there is only really one

retailer really doing take-back, whereas in Ireland everyone does it, so there is consistency.

I can also give examples from Norway, where we also operate stores. In Norway, there is also mandatory take-back. Norway has 60% fewer stores than we have in the UK, but they collect seven times more WEEE than they do, because take-back has been mandatory there since 2007, whereas with us we have kind of been in our own little corner trying to shout about it when no one else is doing it, so there is no consistent messaging. Hopefully, making it mandatory across the board and also driving the message will drive up those volumes in the UK.

Q184 **Jerome Mayhew:** Okay—roll on next year. Thank you very much for that.

Mr ter Kuile, I was really interested by your earlier answer that you recommend the simplified compliance payment scheme that you are proposing. Why not have a simplified take-back scheme as well for Amazon? As I understand it, for about 50% of your products you are being treated as a marketplace as opposed to being directly responsible for the product, and because many of those sellers are international, it is impossible for them to offer a take-back service. Should it not be you who are responsible for take-back, as you are in the best position to do it?

***Robert ter Kuile:*** As you know, Mr Mayhew, in the UK the DTS—distributor take-back scheme—has been quite effective. We are glad to be part of it and support it, and we see it as an effective mechanism for increasing take-back across the UK as a whole.

Q185 **Jerome Mayhew:** I don't buy that, actually, and I just showed you the reason why—a fistful of my own failure to comply. It is not actually effective. We just need to look at the difference between the UK, which has the lowest rate in Europe, and Ireland, which has a very similar economy and very similar culture—I am part-Irish myself—yet they have got 56% take-back in Ireland. They lead us on many things and this is one of them. Would you try that answer again, please?

***Robert ter Kuile:*** Sure. Just to be clear, we need to improve take-back. That is something that I have personally given direction on to my teams; including in the simplified compliance model, something that we are directly looking for is increased take-back. We can increase the fee payments, we can make the regulatory reporting burden easier, but if we do not actually increase the take-back, then, frankly, none of that really has the impact that we are looking for.

The ultimate goal here is to improve the environment and improve the processing, to ensure that we are enabling the circular economy. We have been improving the communication to customers. We have been trying to launch new programmes, like Amazon Second Chance, which informs our customers about opportunities for recycling and how they can do repair and upcycling of the products and the packaging that they have.

We have a new link on the Amazon UK webpage that is easily found. You just click on "Recycling" and it takes you to a host of information about drop-off locations and how you can process the WEEE that you have. You were just showing items on the screen, Mr Mayhew. If you go to our recycling page, you will find information on where you can take those directly. We fully agree that we need to bridge that gap. It is a gap that we have globally but that we are working on very specifically in the UK and EU.

Q186 **Jerome Mayhew:** All that sounds great, but what conceptually do you oppose about Amazon deliveries recovering, taking back, products and being responsible for them? Let's not pretend that you do not have the capacity, the wherewithal, or the in-country infrastructure. So what conceptually, apart from cost and it being a distraction from your core business model, do you oppose about Amazon being a take-back facility?

***Robert ter Kuile:*** That is actually a very good question, and I appreciate your asking it. It is part of the challenge that we run into globally, not just in the UK and EU. This gets into my broader teams: one of the teams that I have is around hazardous waste. As you know, some of the items that show up in the recycle bins or recycle streams, particularly with WEEE, are designated as hazardous waste in many countries. If a battery is leaking or has been damaged, if there are challenges with the items that have been placed in facilities to be recovered, it can be a hazardous condition in which to transport them. The regulations recognise this and actually restrict the transportation or various transportation methodologies, and who can collect an item and how they can handle it, with appropriate training and requirements. That is extremely detailed, because we are trying to protect not only the customers, with proper disposal and processing, but the drivers and the people who are picking the items up.

If you look across our distribution network, you see that we work with a wide range of distributors and companies that actually deliver the products. They are not always Amazon vehicles that are going to houses; they are regular third parties. They don't always return to an Amazon location; they typically go to other routes and service other companies. Using that system would actually reduce recovery, because the frequency with which we would be able to get to the houses with a dedicated Amazon truck—well, it just doesn't work within our system.

That said, we do have programmes whereby we go and pick up large items. Where we are registered for large WEEE take-back items, like refrigerators and washing machines, our customers have that ability and we will send out a third party company to pick those items up, specifically to ensure that they are recovered and processed properly. In addition, we provide Amazon Second Chance and the recycling information that I mentioned to you.

**Jerome Mayhew:** Thank you. Chair, I know we are short of time; I will hand straight back to you.

***Robert ter Kuile:*** Chair, I am sorry, but you are on mute.

**Chair:** Thank you. I was just asking Nadia Whittome to join us and to unmute, so I was hoist by my own petard.

Q187 **Nadia Whittome:** This question is first for Astrid and then for Matthew. What can the Government do to improve the routes that we have for the collection of old technology in a high-quality way for reuse? Of course, currently, we have different methods of collection for e-waste—namely, DCFs, regulation 50s and regulation 43s. What do you think can be done to improve those?

***Astrid Wynne:*** On the consumer side?

**Nadia Whittome:** Both.

***Astrid Wynne:*** I like the idea of mandating retailers to take back e-waste, because that creates a network of multiple locations where e-waste items can be collected, rather than trying to silo them through tiny little depots. Also, if you are looking at a retailer, the chances are that they know more about what to do with the waste and can also find appropriate recyclers for each product category, which is going to be difficult if you are dealing with a waste and resource centre that has lots and lots of different products coming through its doors.

I also think that, potentially, this could be an opportunity for innovation. We know that recyclers are innovating and looking at things like bioleaching and the recovery of critical raw materials from e-waste. They are looking at monetising those. Some the most ground-breaking work has been done here in the UK. What they are lacking is an economic impetus, in some cases, but also quantity of equipment in order to develop their databases and make what they are doing more effective.

We know that one company is working on using microbes to digest ICT equipment. There are a million and one products that they could be looking at, but at the moment they are just looking at PCBs—printed circuit boards. They are looking at the recovery of precious metals in the first instance. If they had a critical mass of materials to widen their scope, and Government support in order to drive that innovation, they could potentially take something that is done on a small scale into much larger production. If you tie it to innovation and the work that BEIS is doing then, potentially, you have a more realistic answer to what you do with the waste at the end of it. It becomes more valuable, and therefore you get more in.

Q188 **Nadia Whittome:** Thank you very much, Astrid. Matthew, do you have anything to add?

***Matthew Manning:*** Yes. As I mentioned earlier, it is well recognised that through a retail take-back system, the electricals that are handed over stay in a much better condition compared to those at household waste recycling centres. Typically, if you go there, either stuff is manhandled quite roughly or the smaller stuff is thrown into a big skip and damaged pretty much straight away.

Through a retail take-back system you also reduce the risk of fires, which you can often see happening in places because the items are not crushed. The way we have set up our take-back is that items are brought back in store and handed over to a colleague—it is not an unmanned bin—and they are then put on a pallet and back-cooled.

For the larger items when we deliver to homes, we are removing a product that has been in situ. It essentially comes out as it was in the home, and it gets taken back to one of our depots. All our depots, across the country, have a reuse partner. We work quite heavily with an organisation called the Reuse Network. They have people on site who see the equipment come back. They look at it, grade it and pick items based on certain makes and models that they know either have common faults—they might steer clear of those—or are easily repaired. Last year, we helped over 10,000 low-income families through the Reuse Network to gain access to refurbished white goods.

Last year we did a sample of the small electricals that we got back through our stores, to get a picture of what was reusable out of the stuff that people are handing back. Typically, a higher proportion of what we get back through our stores is IT. Our reuse and recycling partner analysed those loads and found that 73% of the tablets, 53% of the laptops and 30% of the computers we got back were reusable.

Through retailer take-back, which obviously will be expanded come next year, there is great scope for companies that are in the business of reuse to get their hands on better and higher-quality WEEE than they typically would if they drew stuff out of the local tip. I think retailers are a very good route for driving that side of the economy and growing jobs. If there is more stuff coming back, they need to hire more people and train them up.

***Astrid Wynne:*** Can I come back on that from an enterprise point of view? A lot of the collection is based around consumer goods. There is an enterprise version of having things dumped in drawers, primarily because of security concerns. We know that a lot of enterprises are storing equipment that could be reused, recycled and put on to the secondary market, and that is all based on security concerns because they believe that the data and the hardware cannot be separated.

There are very good ways of sanitising data that have been approved by military organisations and top-level security organisations around the world. If there is more education around that and there are potentially regulations put in place about enterprises not being able to store usable equipment indefinitely, or at least having to report on and justify what they have stored, you will see more of that equipment coming back on to the market and coming back into the use phase.

**Nadia Whittome:** Thank you, Astrid. Chair, would you like to make progress on to the next question?

**Chair:** I think we should. Thanks very much indeed, Nadia. Thanks for

your help. Over to you, Alex Sobel.

Q189 **Alex Sobel:** One of the barriers—either real or perceived—that prevent the reuse and resale of equipment like computers, tablets and so on is around the data that is contained within them, and the removal and protection of that data. This is a question to Matthew or Astrid: are these real or perceived issues, and what effect do they have on the presentation and the reuse and resale of IT equipment?

***Astrid Wynne:*** They are perceived rather than real risks. You have organisations like the US Department of Defense saying that you can sanitise data and recover hardware; you would say that their security standards are pretty reliable. There is also the fact that you can drill holes in hard disk drives and still recover data from them, so there is a misconception there as well.

Data is an incredibly valuable asset and it needs to be protected and sanitised, but there is a lack of awareness about how easy or doable that is with the correct software and the correct collection processes in place—having a secure chain of custody from the client's facility to your facility, for example; having that asset tracked and logged; and having it all done by members of staff who have been security vetted themselves. There are accepted practices that have been adopted by some fairly high-level organisations, which we are starting to see come through in public sector tenders in some ways.

If there was more scope for that, or if that was supported by legislation—in terms of, if companies are not doing it, can they justify why not? There will be some cases in which companies can justify that, but if you ask the question, it becomes that they have to have a reason for not doing it, rather than taking a perceived risk in doing it and worrying about the consequences.

Q190 **Alex Sobel:** Okay, in the interests of time, I will move on. Astrid, I will ask you one more question to wrap up the remaining points.

Used IT could provide a good option for public sector procurement. What are the barriers for that to happen and, more generally, for people to use refurbished products? What more can be done to make people feel secure about the use of these refurbished products? As an extension to that, is there an issue with certain companies maintaining a monopoly over the repair and refurbishment of products, which is a further barrier?

***Astrid Wynne:*** There is quite a lot there, and I will try to answer quickly. In terms of procurement, yes, there is an issue. We are getting feedback from the people who carry out our tenders and our framework applications that organisations are saying that they are not allowed to give a refurbished or recycled option.

That is mostly about a perceived risk. We have proved with the University of East London that refurbished equipment is just as reliable as new equipment; we have proved that the previous generation of equipment can be upgraded in such a way that it outperforms the latest generation of

equipment; and we have proved that there is no energy loss as part of that. We have put together quite a lot of data around that, but we are still getting blocked by procurement practices of, "Nobody ever got fired for using IBM." It is that kind of mentality.

You could do the same thing and flip it, and say, as legislators, "Okay, that's fine. You don't have to make provision for refurbished and recycled equipment in your procurement procedures, but if you don't do that, can you justify why not?" There will be some cases—there will be some environments—in which you need the latest, greatest set of IT equipment; but not always. If there is no reason in terms of performance or risk, and we issue a three-year warranty as standard, then the first thing to do is to say, "Justify why you are saying no outright, without even considering it."

The second thing is that in terms of standardisation, there is very little that exactly covers refurbishment of ICT, necessarily. For our company we know—definitely not. So we are looking at collecting together certifications for quality, environmental responsibility and security, and building those into this suite of certifications that says, actually, we do things as well as we can do. We would welcome standards that expand upon that and are recommended practice in procurement policy for the public sector, because if there are viable standards that stand up to scrutiny and the public sector are using them, that brings them into the mainstream.

The third thing that we think about is extended producer responsibility, because that incentivises manufacturers to extend their warranties, make the equipment last longer and potentially even use refurbished parts as part of their upgrades—again, that brings that conversation into the mainstream. It jumps over that perceived risk, which we are confident isn't there. We are confident that we can prove that, but we would say that, wouldn't we? If the onus is put on people to prove why that is not so, then you are getting somewhere. There are other things that I could say, but I won't.

**Alex Sobel:** Thank you. I think it is time to move on, and I will hand back to Philip now.

**Chair:** Thank you, Alex. The final set of questions is from Claudia Webbe.

Q191 **Claudia Webbe:** I want to ask questions around the extended producer responsibility area. Of course, I come from a perspective where I believe that producers should bear the full responsibility for the environmental and financial impact of the products that they produce. I think that that is important. I want to ask my first question to Matthew. Matthew, I want to know: what is your view on how an extended producer responsibility system could work in the UK, and how do you believe the current proposals will impact on retailers such as yourself?

***Matthew Manning:*** Quickly, on the retailer side of things and the changes that are proposed there, obviously we are already set up for those changes, because in terms of the take-back side of things we have being doing it.

Jumping on to the EPR bit, I think the conversation around EPR on WEEE is certainly very different to the one that is happening around packaging. They are both starting in very different places in terms of regulations, and it is quite well reported that the fees that packaging producers are paying are around 10% of the true cost of treatment within the UK. One of the changes they are looking to bring in is the conversation around full net recovery—so putting significantly more cost on those packaging producers and reducing the burden on councils.

Moving that on to WEEE, the EPR principle on that is slightly different, so it does not exceed the cost that is necessary to provide waste management. Generally, if you look at the cost that producers are paying under WEEE, they are pretty reflective—they are picking up pretty much all of the cost there. The question that then comes is: how do we take it up, in terms of what we are collecting in the UK? The volumes we are collecting are pretty stagnant and we haven't hit the targets for the last two years, and thus are using the compliance fee. So the question is: if things like kerbside collection are mandatory for councils, who is going to finance the retrofitting of all the vehicles, and the communication campaigns? I think there is scope there for saying that within an EPR model, producers should be financing that, because ultimately they are going to benefit from collecting more WEEE at the kerbside as they will be less reliant on the compliance fee.

On the compliance fee side, this year the Material Change "Recycle Your Electricals" campaign is being funded through the money raised through the compliance fee. If we get to an ideal situation where the UK is hitting its targets and there is no compliance fee, the question is: where is that money going to come from to continually fund those campaigns to tell the consumer what to do?

Again, there is a valid question, which says that there needs to be a continual pot of money coming from producers to fund that communication. It is not so good if you hit your target and then drop back down again; we need to keep that consistent messaging so that consumers continue to know what to do with their waste electricals. That could be through a household waste recycling centre, an improved retailer take-back system or through kerbside collection.

Ultimately, it is down to convenience. People want the easiest way to recycle. For packaging, you can put it in your bin at the front. But for WEEE, very few councils do kerbside and you have to go out of your way to do it, if it is not getting collected from your doorstep.

Q192 **Claudia Webbe:** Thank you. I know we are short of time, so I will move on. Astrid, how would you like to see the extended producer responsibility system designed to ensure that more IT equipment incorporates refurbished equipment?

***Astrid Wynne:*** That is a tough one. As members of the secondary market, we are trying to figure out how that would work. The business model of equipment producers tends to be focused around new products.

If you are looking at extended producer responsibility, you are potentially giving them control over the secondary use of their products, which has the potential risk of making the market less competitive.

Having said that, in broad terms it would be beneficial, because it would encourage equipment manufacturers to think about the value in their equipment and to retain that value for as long as possible. That has benefits in terms of bringing reuse and recycling into the mainstream. It would be seen as a mainstream product offer, which means that more people are likely to take it up.

When you have a new manufacturer also promoting secondary use, the question arises of how far that will be viable. There needs to be consideration in the legislation around that issue, and more investigation must be done on how that would potentially work with the manufacturers.

***Matthew Manning:*** We will potentially start to see certain brands and manufacturers going down the individual producer responsibility route, either to offset their own obligations or to try to build in and set targets around closed-loop and recycled content.

Apple's trade-in is an example, with its robot called Daisy. It is looking to get iPhones back, break them apart and recover the materials. Over the next five to 10 years, you will see a lot more brands reach out to households to get those products back through trade-ins, offers or even a circular business model such as leasing, in which they essentially still own the product so they can get it back and either refurbish it or recover the parts to be used in new products.

***Astrid Wynne:*** There is also a disincentive on cost. We know that some equipment manufacturers have their own refurbished options on their equipment. Those are usually facilitated by third-party organisations, under contract to the original equipment manufacturer. You are getting double pricing in the market: the money paid to the equipment manufacturer and the money paid for the repair, which is then passed on to the consumer. That makes it less financially attractive for a consumer to buy a refurbished product. If you have a more free-market approach with third parties and service operators in there, you will get a more competitive business model or offer to market.

Q193 **Claudia Webbe:** Thank you both for that. I have a final question for Robert. We know that other European countries will also introduce separate extended producer responsibility schemes under the EU's own circular economy proposals. With the range of producers on its platform, how will Amazon manage the complexity of paying different fees in different countries so that the various producers that sell on your platform can understand and cope with those different fees?

***Robert ter Kuile:*** Miss Webbe, one of the underlying challenges that we have with the EPR regulations in the UK and Europe—and, frankly, globally—is the myriad and patchwork of different ways of going about implementing the regulations. It makes it extremely challenging and it is

very costly, especially for SMEs or smaller producers, to meet those requirements. We have seen it as a barrier to entry into various different marketplaces across the EU, and then from the EU into the UK. It limits selection for customers. That is why we are advocating for the simplified compliance model for online marketplaces, because it would consolidate the reporting. It would simplify the reporting and make the enforcement of the reporting and the fee payment much simpler for the schemes and for the regulatory bodies. It would eliminate the complexity while increasing the fees. As I mentioned before, the ultimate goal is to increase take-back and recycling.

I think you are right on. Finding a methodology—how do you report with the 14 categories in France versus the 18 categories in Germany versus the requirements in the UK?—is a large burden. Within my teams alone, we have over 70 people working on that, just in the reporting that we have to do because of that complexity. So I very much welcome the opportunity, particularly in the UK, as we have been doing in discussions with DEFRA, to bring about that simplified model so that we can overcome some of those burdens and remove those challenges, particularly for SMEs.

**Claudia Webbe:** Thank you. I wish we had more time to ask you a few more questions, but I believe we are out of time, so I will hand back to the Chair.

Q194 **Chair:** I am afraid we have overrun. I will ask Matthew just one more question of my own. Robert gave us a view about the delivery improvements that Amazon intend to make on their emissions from delivery vehicles. Have Dixons seen a big increase in home delivery through covid, and what are you doing in that area?

***Matthew Manning:*** We deliver large items on our own fleet, and then smaller household electricals are done through the likes of DPD and Royal Mail. On the carbon front, we have recently signed up to the British Retail Consortium's taskforce on climate action. We and 19 other retailers are setting out a roadmap to be net zero ahead of the Government's 2050 target. From our own energy management we achieved our energy reduction targets ahead of our original 2020 target, so we are currently in the phase of setting science-based targets to cover scope 1, 2 and 3 emissions to really drive that down. We are currently exploring, within the delivery of our own vehicles, alternative fuels to reduce the carbon impact further.

Q195 **Chair:** On your net emissions target, you said the BRC are looking to get to the 2050 net zero by that time, or are you going to try and do it earlier?

***Matthew Manning:*** The taskforce is looking to achieve it ahead of 2050.

Q196 **Chair:** But you have not set a date.

***Matthew Manning:*** Not yet. We and 19 other retailers are drafting the roadmap for how we achieve that within the retail sector.

**Chair:** Thank you. I would like to thank our guests, Matthew Manning, Robert ter Kuile and Astrid Wynne. I thank members of the Committee for bearing with us for this slightly lengthened session. I also thank the previous panellists, and I thank Andrew Bax, our Committee Clerk, for putting together the brief.