



House of Commons
Environmental Audit Committee

Electronic Waste and the Circular Economy: Government Response to the Committee's First Report

Third Special Report of Session
2019–21

*Ordered by the House of Commons
to be printed 24 February 2021*

Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

Current membership

[Rt Hon Philip Dunne MP](#) (*Conservative, Ludlow*) (Chair)

[Duncan Baker MP](#) (*Conservative, North Norfolk*)

[Dan Carden MP](#) (*Labour, Liverpool, Walton*)

[Sir Christopher Chope MP](#) (*Conservative, Christchurch*)

[Barry Gardiner MP](#) (*Labour, Brent North*)

[Rt Hon Robert Goodwill MP](#) (*Conservative, Scarborough and Whitby*)

[Helen Hayes MP](#) (*Labour, Dulwich and West Norwood*)

[Ian Levy MP](#) (*Conservative, Blyth Valley*)

[Marco Longhi MP](#) (*Conservative, Dudley North*)

[Caroline Lucas MP](#) (*Green Party, Brighton, Pavilion*)

[Cherilyn Mackrory MP](#) (*Conservative, Truro and Falmouth*)

[Jerome Mayhew MP](#) (*Conservative, Broadland*)

[John McNally MP](#) (*Scottish National Party, Falkirk*)

[Dr Matthew Offord MP](#) (*Conservative, Hendon*)

[Claudia Webbe MP](#) (*Independent, Leicester East*)

[Nadia Whittome MP](#) (*Labour, Nottingham East*)

The following were also members of the Committee during this session:

[Mr Shailesh Vara MP](#) (*Conservative, North West Cambridgeshire*), [Feryal Clark MP](#) (*Labour, Enfield North*) and [Alex Sobel MP](#) (*Labour (Co-op), Leeds North West*)

Powers

The constitution and powers of the Committee are set out in House of Commons Standing Orders, principally in SO No 152A. These are available on the internet via www.parliament.uk.

Publications

© Parliamentary Copyright House of Commons 2021. This publication may be reproduced under the terms of the Open Parliament Licence, which is published at www.parliament.uk/copyright.

Committee reports are published on the Committee's website at www.parliament.uk/eacom and in print by Order of the House.

Evidence relating to this report is published on the [inquiry publications page](#) of the Committee's website.

Committee staff

Martyn Atkins (Clerk), Andrew Bax (Committee Specialist), Medha Bhasin (Second Clerk), Jim Camp (Committee Operations Officer), Nicholas Davies (Committee Specialist), Laura Grant (Committee Specialist), Caroline Soderman (POST Fellow), Ben Smith (Committee Support Apprentice) and Jonathan Wright (Committee Operations Manager).

Other staff of the committee during the inquiry

Lydia Franklinos (POST Fellow), Lloyd Owen (Clerk) and Sascha Sajjad (Committee Operations Officer).

Contacts

All correspondence should be addressed to the Clerk of the Environmental Audit Committee, House of Commons, London SW1A 0AA. The telephone number for general enquiries is 020 7219 8890; the Committee's email address is eacom@parliament.uk.

You can follow the Committee on Twitter using [@CommonsEAC](https://twitter.com/CommonsEAC).

Third Special Report

The Environmental Audit Committee published its First Report of Session 2019–21, *Electronic waste and the Circular Economy* (HC 220) on 26 November 2020. The Government's response was received on 17 February 2021 and is appended below.

Appendix: Government Response

Executive summary

The Government thanks the Committee for its report on the transition to a more circular economy for e-waste and its recommendations for future action. We note the ongoing challenges in regard to the management of e-waste and, whilst great progress has been made through the implementation of the Waste Electronic and Electrical Equipment (WEEE) Regulations in capturing this material for recycling and reuse, more needs to be done to minimise the environmental harms associated with this waste stream.

In the 25 Year Environment Plan, the Government pledged to leave the environment in a better condition for the next generation. Key to this is the move towards a circular economy that will keep resources in use for as long as possible while reducing waste and reliance on primary materials, some of which are increasingly scarce. This ambition is the cornerstone of our Resources and Waste Strategy with its focus on whole product life cycle from production, in-use through to end of life. It is also a central theme of our forthcoming Waste Prevention Programme, in which we will set out how we will drive action to reduce the use of certain products, and encourage reuse, repair and remanufacture of products. The new Programme will set out action in relation to a number of product groups, including electronic and electrical equipment, and will be published for consultation in the new year. The Environment Bill carries forward this commitment and lays the foundations for the implementation number of measures that will help to achieve these ambitions.

One approach for driving more sustainable product design and effective waste management systems is to invoke the 'polluter pays' principle by ensuring producers are made financially responsible for managing the products they place on the market when they become waste. As the Committee is aware, a UK-wide producer responsibility system is already in place for WEEE, meaning producers who place more than 5 tonnes of electronic and electrical equipment onto the market each year must finance the costs of collection, treatment, recovery and recycling of those materials when they becomes waste. These Regulations seek to reduce the amount of WEEE going to landfill by encouraging its separate collection and subsequent treatment, re-use, recovery, recycling and environmentally sound disposal.

All separately collected WEEE arising at LAs has been properly treated and financed by producers since the introduction of the WEEE Regulations. This supports our aim of making the best use of our resources which is vital for both our environment and our economy. The Government remains supportive of the core principles of the 2012 WEEE Directive, being the promotion of re-use, recycling and recovery of WEEE in order to reduce the quantity of such waste to be disposed. To this effect, the UK has, and will continue, to implement these principles through the WEEE Regulations following our departure from the European Union last year.

But the Government is committed to going further. Now that we are no longer members of the European Union we have an opportunity to develop better regulations in relation to the management of e-waste in order to achieve the desired environmental outcomes more effectively. While the WEEE system has been broadly successful in meeting recovery and recycling targets, we recognise that it can do more to increase collections, encourage more reuse, drive more sustainable design decisions and tackle the problem of online marketplaces who we recognise often don't meet their financial obligations. This is why we committed in the Resources and Waste Strategy 2018 to consult on reviewing the WEEE Regulations to tackle these areas and look at ways that reforms can better support the drive towards the circular economy and improve resource efficiency. We want to ensure alignment between the WEEE system and the principles embedded in the Resources and Waste Strategy for future development of Extended Producer Responsibility systems.

In developing the review, we are working closely with the Devolved Administrations and other government departments, including BEIS, to ensure alignment between the ambitions of wider ecodesign policy and the WEEE Regulations. BEIS and Defra have jointly commissioned research which will underpin a prioritisation of product groups and horizontal measures, addressing both the resource and energy efficiency of electronic and electrical equipment, to inform future policy development. The Government has committed to launch a world class energy related products policy framework in 2021. We will push for products to use less energy, resources, and materials, saving carbon and helping households and businesses to reduce their energy bills with minimum effort.

We are also working closely with key stakeholders, ranging from producers, through to local authorities, treatment facilities and re-use organisations, in order to gather their views on how the system could be best amended to maximise opportunities for recycling and reuse and encourage better design of products..

The publication of the Committee's report and the recommendations are therefore particularly timely and we are pleased to see that much of what has been recommended is broadly aligned to the areas we are seeking to address through the review of the WEEE Regulations, product information requirements, and current thinking on future Ecodesign for energy-related products.

Recommendation 1: We recommend that the Government reconsiders the use of substantiated estimates in the E-waste system when evaluating performance.
(Paragraph 30)

We note the Committee's concern around the use of substantiated estimates and potential issues with their reliability.

We know that a significant amount of white goods such as cookers and washing machines, are treated and properly recycled outside of the producer funded WEEE system. They have an intrinsic scrap metal value that results in a payment made by metal recyclers to collectors on delivery of these items for treatment. For this reason, significant quantities are managed outside the system of collection and treatment, financed by producers that is established by the 2013 WEEE Regulations. Nevertheless, it is important to understand the volumes of equipment that is captured outside of the producer led system to assist in setting meaningful targets and to gather evidence on the wider environmental impacts of policy. The use of estimates based on research minimises burdens on businesses, often

SMEs that would otherwise have to report data. It is also worth noting that the current legislative framework specifically provides for the use of “substantiated estimates” in reporting requirements and that such reporting should cover WEEE collected from all routes – not just that financed by producers.

The data and methodology is based on a study undertaken by WRAP and we have high confidence in this methodology. We intend therefore to continue using these estimates where it is helpful to do so in understanding more about the flow of WEEE outside of that which is financed by producers

Recommendation 2: DEFRA must set long term targets that align with existing commitments like zero waste to landfill. The targets should have milestones at clear intervals, to allow certainty for businesses and investors. They must be set using independently verified data not self-reported data. It must be clear that these are collection targets for both re-use and recycling to prevent recycling being prioritised over keeping valuable EEE in circulation—an area we will return to later in this report. (Paragraph 37)

We thank the Committee for their recommendation around setting longer-term targets and we understand the case for action in this area in terms of creating greater certainty for businesses and investors.

As the Committee will be aware, setting household collection targets is a mechanism which enables us to place financial obligations on producers to maximise the amount of WEEE that is collected and properly treated for reuse or recycling. This is achieved as producers will either meet this financial obligation by collecting physical WEEE or by paying a compliance fee in lieu of undertaking sufficient physical collections to meet their targets. We have set ambitious and stretching targets in order to encourage Producer Compliance Schemes to collect as much material as possible.

Setting targets on an annual basis allows us to adjust targets according to trend data, including the amount of EEE that is placed on the market and the amount of WEEE that has been collected in previous years. We do note that some stakeholders have raised the issue of entrenched short-termism in the system. We will explore this issue in more depth when we consult on reviewing the current regulations and seek views and evidence on whether the way targets are set at the moment is constraining long-term planning and if that is the case what changes might be appropriate.

In relation to setting reuse targets, this is an area we will continue to explore throughout our engagement with stakeholders as part of the process of reviewing the WEEE Regulations and will make an evaluation of their impact ahead of our consultation which will be published later this year. As part of the review of the Regulations, we will also explore other ways in which more reuse could be encouraged in the system and consult on a range of policy options.

Recommendation 3: Our high streets are under severe pressure and current regulations, coming into force from 2021, could unfairly entrench the competitive advantage of online retailers and marketplaces like Amazon. As a matter of urgency and at the latest by the end of 2021 online retailers and marketplaces must have an equal obligation to collect electronic waste from customers. (Paragraph 68)

Recommendation 4: To prevent a potential loophole with take-back being offered only at remote, inconvenient warehouses, the regulations should follow the exemplary innovation shown by AO.com and Dixons Carphone. Online retailers and marketplaces for electrical and electronic equipment must arrange and pay for the collection of like-for-like electronics from customer's homes on delivery of new electronics. They must also offer to collect any electronic waste defined as "small" at the same time. (Paragraph 69)

Recommendation 5: In any future producer responsibility system online marketplaces like Amazon should be responsible for ensuring that all EEE that is sold on their platforms is fully compliant with the law. Furthermore, producers should be required to pay exactly the same fees and follow the same rules selling online as they do offline. The Government should explain how it will address all of these concerns when it publishes its consultation on new E-waste regulations in 2021. (Paragraph 71)

[Combined response to Recommendations 3, 4 and 5]:

We thank the Committee for their recommendations around the enhancement of retailer obligations and the need to ensure parity in the collection obligations between online sellers, platforms, retailers. We welcome this opportunity to clarify our views on the current obligations of retailers in the existing WEEE system and our plans to consult on enhancing these in the forthcoming consultation on the review of the Regulations.

As the Committee is aware, retailers can currently discharge their Regulation 42 obligation by joining the Distributor Takeback Scheme (DTS). It is worth noting the success of this scheme in that it has raised over £13 million from retailers since 2007 and has provided £9 million funding to Local Authorities to establish and register their Civic Amenity Sites as Designated WEEE Collection Facilities and £1 million of subsequent site maintenance funding. This funding has also been used to support projects across the UK designed to increase levels of collection and reuse.

A consumer attitudes survey by Ipsos Mori has shown convenience plays a large factor in ensuring householders dispose of their unwanted electrical items properly and 72%¹ of consumers surveyed said they would use collection points at supermarkets and shops. Recognising the role retailers can play in the enhancing the collection network, the UK Government made a decision to require large retailers to provide in store take back from 1st January 2021. As such, their membership to the current DTS will expire from this date. Online only retailers of any size and small retailers with an annual turnover of under £100k of turnover/year in electrical products will be able to remain in the current DTS which expires on December 31st, 2021. We exempted smaller stores from the decision to mandate take-back due to the logistical and operational difficulties associated with requiring them to implement take back. Online stores and small retailers will continue to contribute to the WEEE System through membership of the Distributor Takeback Scheme (DTS) until end of December 2021, which will in turn benefit LAs. Defra will consider any new proposals from industry for a DTS to replace the existing arrangements next year that meet the criteria set out in the WEEE Regulations.

1 <http://sciencesearch.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=20257&FromSearch=Y&Publisher=1&SearchText=EV0278&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

However, we recognise that online sellers and platforms must do more in terms of contributing to the collection network and fulfilling their producer responsibility obligations more broadly. We will therefore look at obligations imposed on retailers, online platforms and internet seller obligations under our review. We will explore options to extend those obligations to make it easier for householders to ensure unwanted items are re-used or recycled. Crucially, we want to ensure online sellers play a full part in providing supporting collection of WEEE and that retailers are not disadvantaged compared to online competitors.

We recognise that online marketplaces can facilitate the activities of sellers who place electrical goods on the market without fully meeting their producer responsibility obligations. That's why in our Resources and Waste Strategy, we highlighted this as one of the key areas for reform, to ensure that all sellers (or those facilitating sale), whether they are online or not, are compliant with producer and distributor obligations set out in future regulations.

This is not a WEEE specific problem and work is ongoing within the context of introducing Extender Producer Responsibility for packaging to ensure that online platforms take on new obligations that mean products placed on the market by their sellers attract similar obligations to that supplied via traditional routes. Those same principles will form an important part of the review of the WEEE Regulations and we will consult on our proposals.

Recommendation 6: The Government must make this [kerbside collection] mandatory for local authorities, with the cost paid for by producers and those smaller retailers or online marketplaces still exempt from collecting E-waste directly from the public. (Paragraph 70)

The Government recognises the importance of ensuring that the UK has a robust collection infrastructure which makes it easier for householders to dispose of their unwanted electrical equipment. Householders are able to return WEEE free of charge to the local Civic Amenity Site where they are resident, and whilst we are pleased to see high collection rates for larger equipment which is often either deposited here or taken back by retailers, we are well aware that more needs to be done to maximise opportunities for collection of small electrical items which are currently often being lost to the residual waste bin.

That's why in addition to exploring how we can enhance retailer and internet seller take-back obligations; we are also exploring options for rolling out kerbside collections for WEEE. Kerbside collection services already exist in some areas, funded by money raised from the Compliance Fee fund. Research has been commissioned to evaluate the success of these projects and the potential for further roll out across the country. Through extensive stakeholder engagement we are exploring how kerbside collections can be effectively rolled out and how the costs should be apportioned across the various economic operators. We will consult on options for delivering this ambition as part of our review of the WEEE Regulations later this year.

It is worth noting that kerbside collection delivered by Local Authorities may not always be the optimum solution. Unwanted items that are returned to retailers or online sellers, rather than deposited at Household Waste Recycling Centres or a waste transfer station

will often be handled and stored differently and in a way that increases re-use potential. Therefore, in addition to kerbside collections we will also explore in tandem ways in which we can enhance retailer obligations in order to provide a more diverse range of collection points for consumers. Options as to how we go about this will form part of our consultation later this year.

Recommendation 7: As a complement to the monitoring per capita material consumption there must also be a target in place to reduce consumption to a sustainable level in line with the research highlighted in this report. Due to the increasing number of electronics and the materials contained within them there should be a sub-target for per capita resource-use in electronics that is in line with this wider target. (Paragraph 76)

We thank the Committee for its recommendation around monitoring per capita material consumption and placing a target in order to reduced consumption to a more sustainable level. Material resources are at the heart of our economy and we consume them in large quantities. They are essential for meeting our basic human needs, supporting economic activity and creating social value. Global resource use is more than three times higher today than in 1970 and continues to grow. Currently, we discard too many products and materials before their useful life is over. This drives additional resource use and associated greenhouse gas emissions. Although increasing amounts of waste are collected for recycling, much of our waste still ends up being incinerated to generate energy or sent to landfill.

Resource use and waste is a complex system and environmental impacts exist at every stage of a material's lifecycle and it is important to consider how targets can drive long term action across the whole resources and waste system, as changes in one part may impact on others.

We are seeking powers in the Environment Bill that will enable us to require that consumers are provided with information about the environmental performance of the electronic and electrical products they are considering buying, for example including recycled content, or reparability. Mandating the provision of this sort of information can help consumers to make more sustainable purchasing decisions and reduce their consumption of resources.

Another important aspect of the Environment Bill is the power to set long-term, legally-binding environmental targets. We believe that setting targets will provide a strong mechanism to deliver long-term environmental outcomes. We are exploring the possibility of setting a legally-binding target to increase resource productivity. This will build upon progress towards achieving the long-term vision of the 25 Year Environment Plan and help tackle some of the serious challenges that remain. The Resources and Waste Strategy for England re-affirmed commitments in the Industrial Strategy and 25 Year Environment Plan to double resource productivity by 2050. The target setting process will review the level of this ambition based on the evidence to establish what a legislative target could be.

Recommendation 8: The UK Government must confirm that it intends to follow the approach taken by other countries to ban the practice of intentionally shortening the lifespan of products through planned obsolescence. (Paragraph 85)

Recommendation 9: To overcome this issue, we recommend that the Government require producers to label their electrical and electronic products outlining the product's expected lifetime, including how long a device will receive software security

upgrades. To enhance the label to be more informative, products that are particularly durable when compared to similar products in their categories should include a “durable” accreditation. This is a method undertaken in Austria. (Paragraph 93).

Recommendation 10: We support this proposal and urge the Government to bring this forward with the aim of removing electronics with unduly short lives from the market. The expected lifetime label must be linked to the minimum lifespan guarantee. Particular attention must be paid to where the burden of proof lies between consumers and producers. (Paragraph 94)

Recommendation 11: The Government must enshrine the right to repair in law, enforcing access to (1) repair manuals; (2) access to affordable spare parts for products; and (3) ability to repair products without repairers needing access to physical or software tools specifically designed to be a barrier to independent servicing or repair. (Paragraph 109)

Recommendation 12: Technology companies, repair organisations and the UK Government should collaborate to ensure safety is ensured during the repair of electronics. This could be through creating professional standards that will in turn drive more consumer trust. This collaboration should also look at the protection of intellectual property. (Paragraph 110)

Recommendation 13: The Government should mandate that products be labelled with a repairability score, based on the products design, the availability and cost of spare parts, access and ease of use of repair manuals. This will incentivise companies to go beyond the minimum requirements already established. Companies with better repairability scores should be rewarded with a reduction in modulated fees for their extended producer responsibility scheme contributions. (Paragraph 111)

[Combined response to recommendations 8 – 13]

We thank the committee for their recommendations around driving better ecodesign and consumer information for electrical products. We recognise the importance of these measures given our overarching ambition to transition to a more circular economy in which we maximise the value of our resources for longer. Ecodesign is an essential part of this ambition and can help to minimise the impacts of products on the natural environment across their lifecycle. The government also shares the Committee's desire to ensure that electronic and electrical equipment is designed to last and we agree that there is no place on the market for planned obsolescence of any sort. We have a range of policy measures in place and forthcoming which aim to increase product lifetimes and renew consumer confidence in the reliability and longevity of their purchases, thereby directly tackling premature obsolescence.

BEIS has recently consulted on draft Ecodesign Regulations that, for the first time, include requirements that product manufacturers make available to repairers certain spare parts and information; and to improve the ease of disassembly in order to assist better material recovery at the end of a product's life. Subject to the outcome of the consultation, these requirements will enter into force in Great Britain in 2021 (they will apply in Northern Ireland automatically under the Northern Ireland Protocol). The new requirements apply to certain white goods, such as household refrigerators and washing-machines, as well as televisions.

Government will explore whether requirements to improve reparability and material efficiency could be considered for a wider range of products, for example covering modular design for repairs and upgrades. BEIS and Defra have jointly commissioned research which will underpin a prioritisation of product groups and horizontal measures, addressing both the resource and energy efficiency of electrical products to inform the development of future Ecodesign policy, and the Government has committed to launch a world class energy related products policy framework in 2021. We will push for products to use less energy, resources, and materials, saving carbon and helping households and businesses to reduce their energy bills with minimum effort.

We are currently seeking powers in the Environment Bill to require the provision of specified information on resource efficiency for any product, including energy related products. Introducing labelling or information requirements means that we can specify the provision of certain information about products. This will help consumers and businesses make more sustainable purchasing decisions, and facilitate applications such as product passports, expected lifetimes and product reparability (for example a reparability rating, common faults and remedies, spare parts that are available and where to source, instructions for common repairs and upgrades, and so on).

We are committed to ensuring that consumer safety considerations are taken on board as we try to go further in policy to support greater durability, reparability and recyclability of electrical products. Policy development will give due consideration to the interplay between consumer safety, intellectual property law and eco-design.

Finally, we will also explore whether and to what extent the principle of eco-modulation could be applied to the WEEE system to incentivise more eco-design of electrical products. Applying this principle could mean that manufacturers who design their products to more sustainable have a modulated financial obligation under the WEEE Regulations. In our review of the WEEE Regulations, we will consult on how this principle could be best introduced in practice to incentivise better eco-design of electrical products and how it might support our broader eco-design policy, as outlined above.

Recommendation 14: The UK Government should encourage reparability through reducing VAT charged on the repair of electrical and electronic products. (Paragraph 112).

The Government is considering a wide range of policy levers to support its commitments to doubling resource productivity and eliminating avoidable waste by 2050, as well as contributing towards Net Zero.

The intended outcomes of future policy are to require products to be designed to be more durable, repairable and recyclable, and increase ease of remanufacture, as well as requiring information on the resource efficiency of products including environmental impact across the lifecycle, reparability and recyclability. The Government will also consider to what extent modulated fees could be introduced to the WEEE system to encourage producers to design their products in a more resource efficient way.

VAT is a broad-based tax on consumption with the standard rate of 20 per cent applying to most goods and services. Exceptions to the standard rate do exist, however these have always been strictly limited by legal constraints and fiscal considerations. Whilst the

rationale of reducing VAT on repairs is appreciated, this must be viewed in the context of over £50 billion of requests for relief from VAT since the EU referendum and in response to Covid-19.

As Budget 2020 acknowledged, VAT and excise make a significant contribution towards the public finances. VAT raised around £130 billion in 2019/20, and helps fund the Government's priorities including on health, schools, and defence. Any loss in tax revenue would have to be balanced by a reduction in public spending, increased borrowing or increased taxation elsewhere. Given this, although the Government keeps all taxes under review, there are no plans to change the VAT treatment of electronic items at present.

Recommendation 15: The Government must increase the incentives for re-use so that all parties benefit from further re-use, in particularly making re-use evidence worth more than recycling evidence. (Paragraph 116)

Recommendation 16: The UK Government should set similar re-use targets for producer compliance schemes, with penalties levied when targets are missed. These targets must be set long term and ratchet over time to give the industry clarity and time to prepare. (Paragraph 117)

[Combined response to recommendations 15 and 16].

The Government recognises the importance of encouraging reuse to ensure products as well as materials are kept in use for longer, reducing costs and greenhouse gas emissions from extraction and processing. We therefore committed in our Resources and Waste Strategy to explore the feasibility of introducing measures aimed at encouraging increased levels of reuse in our review of the WEEE Regulations.

There are various ways in which greater reuse of unwanted equipment can be facilitated and encouraged; these include designing products to last longer and to be more easily repairable (e.g. with modular components) and diverting unwanted working equipment away from waste sites (e.g. to charities). It is worth noting that considerable re-use of working equipment already takes place through both informal channels and donations as well as via online websites and platforms that specialise in the sale of used items.

We are discussing with industry stakeholders, as part of our ongoing engagement with them on the WEEE Regulations review, how to design a system which facilitates and encourages greater levels of reuse over recycling of unwanted equipment. We will fully explore the potential role of reuse targets, including consideration of where in the system such targets may be most usefully applied and how exactly reuse should be defined and accurately monitored. We will also explore modulating financial obligations placed on producers under the WEEE Regulations in way that incentivises collections for reuse over collections for recycling.

The re-use potential for WEEE returned to retailers and internet sellers in store or on delivery of new items is far greater than at local authority recycling centres where items are often exposed to the elements and so we also need to consider at which point of the system it is most beneficial to target regulatory intervention. The review of the WEEE regulations provides an opportunity to look at how we can divert more WEEE into those routes and thereby drive-up re-use potential and we will therefore consult on a number of policy proposals to this effect.

Recommendation 17: Manufacturers of electronics must ensure that their products are recyclable and dismantlable by waste treatment operators. The Government must apply incentives, potentially through the extended producer responsibility scheme, for the design of products that are easy to recycle. (Paragraph 126)

[See combined response to recommendations 8 - 13].

Recommendation 18: Producers, via producer compliance schemes, should provide information to recyclers about the materials, including quantities, in their products. A clear date should be set for this to be mandatory. Once the national material datahub is operational then manufacturers' information should be linked to this. (Paragraph 127)

We are pleased that the Committee shares our view that producer should give clearer information about the materials and other resource efficiency aspects of their products. As we have explained in our responses to other Committee recommendations, we are seeking powers in the Environment Bill which may be used to mandate producers to provide better information about the material content of their products to consumers and end of life operators to facilitate better treatment and material recovery. Coupled with the Government's Waste Tracking system, which will enable granular data on the location and content of waste materials, these policies are expected to stimulate increasing value retention and recovery of critical raw materials for reuse.

Recommendation 19: We recommend that the Government fast-tracks the national materials datahub to track critical raw materials in the UK. The aspects that focus on critical raw materials, E-waste and toxic chemicals should be operational by 2023. (Paragraph 128)

The Government recognises that a lack of reliable data on the availability of secondary materials is cited by industry as a barrier to their use. It is recognised that a National Materials Datahub may help address this issue by providing comprehensive data on the availability of raw and secondary materials, including chemicals, across the economy to industry and the public sector, and by modelling scenarios around material availability.

The Office for National Statistics has worked with government, devolved administrations, academics and industry to understand the need for a "whole system view of the material economy in the UK". From the comprehensive use cases, we have learnt that the lack of material data and standardisation are secondary challenges. The primary challenge is the inability to navigate the complex inter-relationships of policy, regulation and legislation across sectors to truly assess the impacts of unintended consequences from Government's policies and regulations.

While at present, the National Materials Datahub project is on hold, discussions are being had within government to establish the demand for the project going forward and future options for funding it.

Recommendation 20: Clear targets for E-waste treatment facilities that are based on capturing value, including critical raw materials, and their environmental impact must be set. (Paragraph 133)

The WEEE Regulations stipulate a range of recycling and recovery rates for e-waste treatment facilities for each of the categories of equipment, which they must meet as a

condition of their approval. Whilst we do not have explicit plans to introduce further targets on critical raw material recovery we welcome the opportunity at this stage to set out some broader points on this issue which will be of interest to the Committee, as well as our other plans to enhance recycling and extraction of high value materials.

We have a world class UK recycling industry for recovering PGM (platinum group metals) from catalytic converters. The success of this industry is based on multiple factors; existing technology that allows viable recycling, a reliable feedstock, and the value/market for the extracted critical material. Therefore, the viability of this industry and more importantly the likelihood of investment in that recycling sector is governed by the market price for the recycled critical raw materials

Whilst the above example focuses on catalytic converters rather than electrical and electronic equipment, we believe the same principles apply. Specifically, if a market exists green investors and recycling technology will enter the market. An example in the electrical sector is LED lightbulbs which contain REE (Rare Earth Elements).

In a bid to support circularity and build on specific commitments in the Resources and Waste Strategy, we will bring into play innovation to enhance both recycling and extraction of high value materials. Specifically, we will explore introducing:

- Product passports - which will identify the quantity and type of critical raw materials within a given product.
- Waste tracking - which will look at ways of tracking the quantity and type of waste generated, and what happens to it. This could potentially provide information on the location and amount of waste materials that could be put to more productive use, and support investment and recycling.

We believe these examples of action provide a clear demonstration of the Government's commitment to enhance recycling and extraction of high value materials and that we are committed to ensuring e-waste treatment facilities operate to the highest standards when processing materials.

Recommendation 21: Recycling methods covered by Best Available Treatment Recovery and Recycling Techniques, and recycling and recovery targets must be ambitious with a shift away from recovery towards high-quality recycling. There must be a clearly defined and communicated long-term pathway, with milestones, showing when and how E-waste treatment centres must improve their recycling of E-waste to capture as many materials as possible and remove toxic chemicals. This clear pathway will allow businesses to raise finance and invest in advance to reach these mandatory targets.
(Paragraph 134)

Any shift from recovery towards more high-quality recycling would need to be achieved through the setting of more challenging recycling targets. Best Available Treatment Recovery and Recycling Techniques (BATRRRT) sets standards that promote best practice in WEEE treatment and protect the environment but does so within the existing regulatory framework.

BATRRRT is an extension of the principles of Best Available Treatment (BAT), which is set out in legislation governing Industrial Emissions in operations that undertake the

recovery and recycling of WEEE, and this is currently being reviewed by the Environment Agency. New overarching guidance will incorporate BAT, BATRRT and other appropriate measures all in one place. The Agency is currently working closely with industry and formal consultation on new enhanced guidance is planned for early 2021.

Recommendation 22: Government investment in low-quality Energy from Waste plants should at the least be matched by investment in higher quality recycling methods that mean materials, particularly rare and valuable ones can be re-used. Energy from Waste, though important to prevent items going to landfill, should be treated as a low priority in UK waste infrastructure investment strategies. (Paragraph 139).

In relation to the investment in high quality recycling methods we believe a number of actions can come together to make progress in this area. We believe government's primary goal should be to provide necessary incentives to drive up higher quality recycling methods. We note in the WEEE system for example that stakeholders have raised a number of questions around the short termism in the system in relation to annual target setting which may hinder the certainty needed to foster longer term arrangements and investment opportunities. We will therefore explore whether a longer-term approach to target setting would promote more certainty and, as a result, more investment into higher quality recycling methods.

Recommendation 23: The Government must take strong steps to overcome the problems besetting the system by mandating that producers, compliance schemes, local authorities and AATF enter longer term contracts to create partnerships and longer-term certainty. It must also ensure that the market is regulated to a high-enough standard to prevent unscrupulous operators. (Paragraph 147)

We note in the WEEE system that stakeholders have raised a number of questions around the short termism in the system in relation to annual target setting which may hinder the certainty needed to foster longer term arrangements and investment opportunities. We will therefore explore whether a longer-term approach would promote more certainty and, as a result, more investment into higher quality recycling methods and will consult on such an approach in our forthcoming consultation on the review of the WEEE Regulations to be published later this year.

Recommendation 24: The Government should find ways of driving the use of more recycled materials in new products. This could be done through taxes on virgin materials, or through rewarding producers that use recycled products through eco-modulated fees. (Paragraph 150).

The Government notes the importance of stimulating the use of more recycled materials in products and is considering a range of policy options to achieve this ambition. Under existing Ecodesign powers, the Government is able to set regulations for a range of electrical products mandating minimum resource efficiency standards. These relate to aspects such as durability, reparability and recyclability, but could also be extended to include requirements for the materials that go into the product. Last year BEIS published a Call for Evidence seeking views on how Ecodesign policy can be improved for a range of energy-related products in the UK to maximise their energy and resource efficiency.

BEIS and Defra have also jointly commissioned research into which products have the greatest potential for resource efficiency improvements. Evidence gathered from these workstreams will form the basis of our Ecodesign policy in the future.

We will also explore, as part of our review of the WEEE Regulations, how embedding eco-modulation of producer financial obligations can support wider eco-design policy by incentivising manufacturers to go even further in designing more sustainable products. In developing this policy, we will consider which criteria could be used to form the basis of the modulation, including any potential for recycled material content to be included in this criterion. We will seek views on eco-modulation as part of our consultation on reviewing the Regulations.

Recommendation 25: However, due to the serious impact of E-waste on human health and the environment, both here and overseas, and the sheer quantity potentially being exported illegally, the Environment Agency should deem all electrical and electronic exports as risky and in need of more stringent requirements before exportation is allowed. (Paragraph 159)

We agree with the Committee about the serious impact of illegal e-waste exports. The Government and the Environment Agency are both well aware of the devastating consequences on environmental and human health where e-waste is exported unlawfully and is not treated in appropriate recycling and recovery plants that are regulated to equivalent standards of UK plants.

The Government and the Environment Agency are both committed to ensure all e-waste and e-waste derived materials are exported lawfully and under the correct controls.

The majority of exports of e-waste are already deemed high risk and therefore either banned from export or notifiable. A legislation change would be required in order to make currently lawful exports of used EEE and WEEE-derived materials a higher risk or notifiable for shipment.

Lawful exports of used EEE would not be recorded or monitored by the Environment Agency as the Trans-frontier Shipment Regulations only cover waste items. Used items must undergo testing or an assessment before export to ensure they can be reused directly or with minimal repair. Any used EEE that has not been assessed or requires testing and/or more substantial repair must be considered to be waste and treated accordingly. A shipment of used EEE that has not been tested and needs more than minimal repair and is exported as non-waste would constitute an illegal shipment.

The Environment Agency have also recently updated guidance on the impact of Persistent Organic Pollutants (POPs) on the management of e-waste. This means more types of e-waste are considered to be hazardous and must be managed as a higher risk waste. An e-waste industry sponsored study found high levels of POPs and associated hazardous materials in many types of e-waste, and the new guidance instructs waste holders to assume that their items contains POPs unless they can prove otherwise. The POPs regulations also mean that once electrical equipment containing POPs is deemed to be waste it must be destroyed and cannot be re-used or recycled. This also means it cannot be exported unless for specific treatment for destruction.

We are aware that there are concerns regarding the international shipment of e-waste and used EEE from many countries and the Basel Convention is working on new proposals for its technical guidelines on e-waste particularly regarding the distinction between waste and non-waste and the shipment of used items for repair. These guidelines would be adopted into UK law if agreed by the Basel Convention

Recommendation 26: The presumption, unless proved otherwise, should be that electronics are not usable. All electronics should be tested and proved to work before exportation. No good should be exported that needs repair to be workable. There should be harmonisation of this across the UK to prevent goods being moved from one nation to another for exportation purposes. (Paragraph 160)

The Government does not believe current legislation and case law allows us to deem all used electronics as not usable. There would need to be a change or clarification in legislation to allow for this approach. We also do not want to unnecessarily restrict the legitimate re-use of valued equipment within the UK.

However, we agree there is a need for clearer environmentally-oriented guidance on the definition of waste regarding used equipment. The Government and the Environment Agency will explore the requirements for new guidance and will work with, the devolved environment agencies and stakeholders in conjunction with this year to review the current guidance.

Recommendation 27: The Environment Agency in England should be undertaking stronger enforcement activity and should be actively collecting data and information to estimate the actual quantities of E-waste being exported illegally. (Paragraph 161)

The Environment Agency takes an intelligence-based approach to its compliance and enforcement work so it can target resources most effectively at improving compliance and targeting illegal activity. The Environment Agency collects data and intelligence and uses it to direct its activities according to risk as well as a range of other factors.

Recent legislation changes, as a result of the adoption of Basel changes in international waste management, will result in more plastics from e-waste being notified. This will mean the Environment Agency will have more data collected on plastic exports, and fewer high-risk exports of mixed e-waste. It has communicated all these recent changes to business and will be following up with appropriate compliance monitoring. Robust enforcement action will be taken where good intelligence is gathered to pursue sanctions.

A number of industry-led initiatives have sought to provide estimates of illegal exports of e-waste, and the Environment Agency has provided data to support those reports. It will continue to gather evidence of mis-descriptions of waste and seek to ensure that up-stream movements of materials are appropriately described and managed.