

## Green Alliance - Written evidence (EGD0002)

### About Green Alliance

Green Alliance is a charity and independent think tank focused on ambitious leadership for the environment. Since 1979, we have been working with a growing network of influential leaders in business, NGOs and politics to stimulate new thinking and dialogue on environmental policy, and increase political action and support for environmental solutions in the UK.

This submission draws upon concepts and evidence Green Alliance has worked on for the Circular Economy Task Force (CETF) and the Tech Task Force, business led groups we convene to identify policies to drive resource efficiency. It also draws on recent evidence we have developed with academic consortium including the Centre for Industrial Energy, Materials and Products (CIEMAP) and the Resource Recovery from Waste programme (RRfW). Our most relevant recent reports include *Fixing the system* and *Completing the circle*, published as part of our work for CETF, *Less in, more out*, published with CIEMAP, and *Building a circular economy*, published with RRfW. These publications cover in greater detail topics relevant to this inquiry.

### I. Should the UK welcome or be worried by the EU's Circular Economy proposals?

#### a. How much further do they move EU policy, and how ambitious are they compared to the UK's resources and waste strategy?<sup>1</sup>

Both are powerful statements of intent that signal a desire to move from a linear take-make-use-dispose economy to one that is more circular, that maximises resource value and minimises waste.

That being said, although the UK's resources and waste strategy (RWS) gives theoretical prominence to minimising waste and the beginning of the material cycle – promising to improve production and design to maximise resource use – the consultations that have so far come out of the strategy, as well as the powers being taken in the Environment Bill, are overwhelmingly focused on 'end of life' solutions to waste and on recycling, not to the wider changes needed to bring about a circular economy.

The RWS initial consultations focused on correcting some of the longstanding shortcomings of England's disjointed recycling system:<sup>2</sup> implementing a deposit return system to increase recycling of used beverage containers; harmonising household and commercial waste and recycling collections; and

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<sup>1</sup> The official title for the resources and waste strategy is *Our Waste, Our Resources: A Strategy for England* (2018) and it is available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/765914/resources-waste-strategy-dec-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf)

<sup>2</sup> For more on the problems with the domestic recycling system, see: Green Alliance, 2017, *Recycling reset*

extended producer responsibility to hold packaging producers fully responsible for the end of life costs for the material they place on the market. While the final consultation may incentivise some improvements to design and at least some reduction in material used in packaging, these are unlikely to greatly diminish material used in the economy. It is also concerning that the second round of consultations had been notably delayed even before the current situation with COVID-19 arose, and that the review of the waste minimisation strategy – due in 2019 – has not yet happened.

To achieve the stated ambitions of the RWS, much more emphasis is needed on reduction of resource use in the first place and on design for resource efficiency, including through reuse, at the design stage. There should also be much more emphasis on new business models that are compatible with a circular economy and on ensuring infrastructure drives the necessary transformation. Our research has shown that the UK urgently needs to review its approach to infrastructure if it is to bring about a circular economy. Continued reliance on market mechanisms – explicitly promoted in the RWS – will continue to drive unsustainable resource use, only improving the linear economy and delivering limited recycling facilities. Defra's main infrastructure investment fund, the Waste Infrastructure Delivery Programme, through which £3 billion has been committed by government and industry to 2042, is dedicated to residual waste treatment, predominately generating energy from waste. This is despite being categorised as delivering 'domestic recycling infrastructure' in the RWS. In fact, there is no major government funding source for recycling infrastructure (or even a centralised assessment of capacity and needs), and support for resource efficiency and the circular economy focuses on research, rather than infrastructure provision.<sup>3</sup>

As in the UK, EU resource strategy has historically been over reliant on recycling targets to drive action, despite recycling representing the outer loop (i.e. the final stage) of the circular economy, and the headline target of the EU's 2018 Circular Economy Package was still a recycling target (65 per cent of municipal waste by 2035).

The EU's new strategy looks set to change this approach. Already, the EU has been a world leader in driving energy efficient products through the Ecodesign Directive and it has already begun the process of incorporating resource efficiency into these product standards. (The first set of resource efficiency/repairability standards were passed for fridges, televisions, lighting, washing machines and dish washers when the UK was still a member, and it voted in favour of these measures.<sup>4</sup>) The EU now looks set to enhance this approach through the CEAP, saying it will legislate for a new 'right to repair', eliminate premature obsolescence, restrict single use, eliminate greenwashing and so on. These measures seem to go farther than much of what the UK has

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<sup>3</sup> For more on the sort of infrastructure required to bring about a circular economy, see: Green Alliance, 2019, *Building a circular economy*

<sup>4</sup> <https://www.bbc.co.uk/news/business-49884827>

promised and certainly what it has legislated for, and it is unclear if the UK will follow suit. (See response to question 2.)

Ultimately, neither of these strategies will be successful if they are not backed up by ambitious policies, targeted investment, regulation and statutory targets and standards to drive them. From an environmental perspective, it was disappointing that the target to halve resource consumption included in a leaked version of the EU CEAP did not make it into the final version.<sup>5</sup> The leaked target was warmly welcomed by environmental groups at the time, and if the UK decided to pursue such a target, it could reasonably say it was being more ambitious than the EU. As it stands, the EU's strategy includes an aspirational target to halve generation of residual waste by 2030; the UK would also do well to follow suit and make such a target mandatory as well as others identified to drive the circular economy.

**b. When will the detail of the key new EU policies emerge?**

As with many other areas of environmental policy, the current situation with the COVID-19 pandemic makes it impossible to know.

**Sustainable product policy**

**2. As the EU drives green innovation by setting a wider range of standards to a larger group of products, how important is it that the UK maintains its commitment to matching or exceeding the EU approach?**

**a. Where would it be advantageous to exceed the EU approach?**

The EU's ecodesign measures for energy using products have been highly successful at improving energy efficiency and saving money: by 2030, they are expected to save 140TWh of electricity, equivalent to five per cent of EU consumption, as well as €20 billion on household and business energy bills.<sup>6</sup> It is important that the UK at least keeps pace as the EU tackles resource efficiency and circularity by: implementing the right to repair; improving information provision at the point of sale; enhancing product guarantees; designing out premature obsolescence, including by ensuring software can be updated; eliminating greenwashing; promoting green public procurement; and so on.

Meeting ecodesign and other product standards will be necessary for UK businesses to sell into the EU market, even in a World Trade Organisation trading scenario. The UK should continue to co-operate with the EU on ecodesign and ensure product standards are applied domestically. Lower standards in the UK would allow imports of poor quality goods, undermining

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<sup>5</sup> <https://www.euractiv.com/section/circular-economy/news/leak-eus-new-circular-economy-plan-aims-to-halve-waste-by-2030/>

<sup>6</sup> <https://static1.squarespace.com/static/57d64e6629687f1a258ec04e/t/5c861f93ee6eb059ac4e7668/1552293784296/ECODESIGN+PACKAGE+BRIEFING.pdf>

domestic businesses, saddling consumers with higher bills and inferior products, and increasing resource consumption and energy use.

There are areas where the UK could go farther, though, including in developing more ambitious energy and resource efficiency standards for products that are not common in other European markets, such as kettles and toasters. The UK should also commit to using the resource efficiency powers being taken in the Environment Bill for non-energy using products, and should set out policies that would allow them to deliver resource efficiency benefits beyond the areas currently targeted by the EU. The overdue waste prevention plan provides the perfect vehicle to do this.

## **Packaging**

### **3. Is the Government's aim for all plastic packaging to be recyclable, reusable or compostable by 2025 achievable, given that the Commission has proposed a similar target for 2030? Are there additional actions Government needs to be taking to ensure that the target will be met?**

There is a key difference between the two targets: the EU's target includes the idea that material must be reusable or recyclable in 'an economically viable way' by 2030. This is a more ambitious and more environmentally beneficial target, and it therefore it makes sense for the extra time to allow for appropriate systems and infrastructure to be developed to actually reuse, recycle or compost plastic rather than simply only allowing material that technically meets the criteria onto the market. Technically, most plastic is already reusable, recyclable, or compostable, but the systems and infrastructure do not exist to ensure it happens in practice.

Taking compostable materials as an example, at present many compostable materials are incinerated or landfilled due to a lack of collection and treatment infrastructure. This includes material that was introduced to the Houses of Parliament when it switched to compostable packaging in October 2018. Even though it provided dedicated composting bins, all of the material collected in the first six months was sent to incineration because of contamination.<sup>7</sup> After this was exposed, a bespoke supply chain that allowed composting was established.

This approach missed out on an opportunity to eliminate single use material entirely and also highlights a wider challenge. Parliament is a relatively closed estate, with control over what is sold and how it is collected. Ordinary cafes and other managed facilities, which are also increasingly introducing single use compostables, have little influence over infrastructure and supply chains to ensure proper treatment. Only effective policy can make sure the right system is in place.

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<sup>7</sup> <https://www.foodservicefootprint.com/footprint-investigation-parliament-burnt-by-compostable-pledge/>

We therefore believe that materials should only be introduced where separate collection infrastructure will allow them to be properly and easily handled at end of life, which would help fulfil the requirement of being treated in an economically viable way. This can be done by aligning product guidelines and producer responsibility regimes with the EU target.

In the case of compostable plastic, another key step to getting this right is to ensure that only material that degrades in real life treatment conditions is allowed onto the market, and a composting stage should be added after anaerobic digestion (AD). AD is the default treatment for food waste in the UK, but the process is too fast to handle material like compostable plastic. Other European countries like Italy have made AD followed by composting mandatory. The UK should follow suit. It should also develop and enforce better compostability standards, as even certified compostable plastics, especially rigid materials, do not necessarily degrade in the UK's composting infrastructure, as standards allow for longer treatment times than are actually practiced.<sup>8</sup>

## **Mandatory recycled content and boosting markets for secondary raw materials**

### **4. Will the Commission's proposed approach of introducing requirements for mandatory recycled content for packaging, vehicles, construction materials and batteries, be better or worse at promoting markets for secondary raw materials than the UK's policies in this area?**

As we are still awaiting the measures the government will introduce through extended producer responsibility, etc, it is difficult to judge. The government's plastics tax (a type of mandatory recycled content measure as it will only be charged to packaging containing less than 30 per cent recycled content) has already led to increased investment in plastic recycling capacity, even before its official introduction. According to WRAP, since the start of 2019, plans to build over 250 kilotonnes of plastic recycling capacity have been announced.<sup>9</sup> This includes the UK's biggest multi-polymer plant, being developed by Viridor near Bristol. This shows the power of pull measures to drive action, but it is not the only sort of measure that could increase recycled content. Other potential measures include public procurement and support for domestic infrastructure and the use of its outputs.<sup>10</sup>

In addition to proposed mandatory recycled content, we also recommend introducing targets for reuse. This is particularly crucial for sectors where high recycling rates are already achieved (although it may be largely low value recycling/downcycling). One example is the construction sector: this sector

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<sup>8</sup> For more, see Green Alliance, 2020, *Fixing the system*

<sup>9</sup> <https://www.wrap.org.uk/plastics-market-situation-report-2019>

<sup>10</sup> For more on pull measures and how they could be used to set up effective markets for secondary resources, see Green Alliance's 2018 publication, *Completing the circle*.

already achieves recovery rates of 91 per cent,<sup>11</sup> with the vast majority of materials either recycled, composted or used for energy generation.<sup>12</sup> Yet, there is hardly any reuse, even for items where it would be viable and desirable, not least to maintain embedded carbon. Despite the fact that 50 per cent of construction steel is deemed suitable for reuse, for example, only five per cent is actually reused. And similar considerations apply to EV batteries, which are estimated to retain 70-80 per cent of their capacity after they reach the end of the life in a vehicle and could be repurposed for stationary storage applications. Given the expected large uptake of EVs, the UK could meet all its forecast deployment of battery storage in 2030 and 2035 by repurposing EV batteries.<sup>13</sup>

Importantly, the commission's proposal to introduce requirements for mandatory recycled content is complemented by a suite of other measures that are seeking to promote resource efficient supply chains, including linking product and building design issues to end of life considerations, promoting greater traceability and better collection systems, and improving the efficiency of recycling. Therefore, we recommend the UK adopts a similar approach to ensure that, alongside targets of recycled content, measures also address all stages of a product's lifecycle to minimise resource use and secure their productive utilisation in the economy.

**a. Should the UK be focusing on promoting markets for secondary raw materials in the same sectors?**

The sectors identified in the commission's action plan are all sectors that we recommend the UK target as well, given their large environmental footprint and the strategic role of the resources they utilise (such as cobalt, lithium and rare earth metals). As highlighted in our response to question 4, secondary materials markets should not be limited to recycled materials, but also to reuse.

Secondary material markets for these products would support greater resilience of UK businesses through a domestic source of secondary materials and promote faster decarbonisation, since reused and recycled materials are lower carbon than virgin ones.

**b. Would divergent policies here create issues for UK manufacturers, for example, the UK car industry?**

Divergent policies are more likely to add burdens for businesses and cause disruption, by requiring compliance with different sets of regulations. This would be particularly damaging in the case of globalised supply chains that

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/874265/UK\\_Statistics\\_on\\_Waste\\_statistical\\_notice\\_March\\_2020\\_accessible\\_FINAL\\_rev\\_v0.5.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/874265/UK_Statistics_on_Waste_statistical_notice_March_2020_accessible_FINAL_rev_v0.5.pdf)

<sup>12</sup> <https://www.ukgbc.org/resource-use/>

<sup>13</sup> Green Alliance, 2018, *Completing the circle*

have part of their production in Europe and for UK firms for which Europe is currently the biggest market.

Furthermore, divergent policies may have implications in terms of where the infrastructure and systems to support secondary markets are established. As discussed in the answer to question 5, the UK could run the risk of missing out on capturing valuable secondary materials if it does not incentivise collection and effective reuse and recycling of resources in the economy. This potentially exposes UK businesses to supply chain risks by continued reliance on import of virgin (or secondary) resources.

#### **5. How important is the first-mover advantage in promoting markets for secondary materials? Does the UK risk getting left behind?**

Decisions about where to locate critical infrastructure for reuse and recycling are likely to be influenced by the scale of secondary material markets. As such, a delay in promoting such markets may result in the UK missing out on the development of such infrastructure.

Crucially, this could have implications for other industries that depend on those materials. For example, decisions about where to locate EV battery manufacturing facilities may prioritise locations where secondary critical raw materials, such as cobalt, can be sourced locally, rather than relying on imports. And this, in turn, could have implications on where to locate EV production – with estimates from the Faraday Institution that failure to attract EV battery gigafactories could cost the UK 105,000 jobs by 2040.<sup>14</sup> Currently, the UK relies entirely on imported critical raw materials essential for low carbon technologies, yet there is no infrastructure for their domestic recycling.<sup>15</sup> Failing to promote secondary materials markets in the UK, in line with or ahead of the EU, could result in those materials instead being exported for high value reuse and recycling in the EU.

### **Digital product passports and a European Circular Dataspace**

#### **6. How important are compatibility and cooperation between the UK and EU in developing electronic product passports and materials databases?**

Compatibility and cooperation in developing electronic product passports is key to avoiding excessive burden for businesses, particularly for products that are likely to move across borders, as it would avoid companies having to comply with two sets of product passport requirements. It is also essential to support resource efficient solutions, in the UK as well as the EU, since the use of compatible sets of data would enable better tracking, forecasting of materials stocks and flows, and development of circular economy systems and infrastructure.

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<sup>14</sup> <https://www.theguardian.com/business/2020/mar/15/not-investing-in-electric-car-battery-production-could-cost-uk-105000-jobs-study>

<sup>15</sup> Green Alliance, 2018, *Completing the circle*

Similar considerations apply to materials databases, which may inform the passport process. Developing joint databases will enable businesses to better assess and report their supply chain risks and environmental footprint linked to material use, which will increasingly come under scrutiny. It would promote innovation in resource efficient solutions, by promoting better data about resource use to inform opportunities for material efficiency, reuse and recycling, including opportunities for cross-sector collaboration. And it will support investors in promoting low carbon markets, through enhanced visibility and benchmarking, by facilitating the development of a common set of data and metrics.

Importantly, cooperation in developing digital passports and materials databases could also help accelerate the development of the National Digital Twin and the UK's National Materials Datahub. (The government said it would support the datahub its RWS, but funds are yet to be committed to its development.) Cooperation in this area would provide a comprehensive and streamlined approach to data gathering and reporting, while ensuring it is cost-effective by avoiding duplication in business reporting requirements.

### **Engagement with EU policy development**

#### **7. What access, if any, have you had to discussions about the European Green Deal, and how can Government support you in your engagement with European partners?**

### **Recommended actions for Government**

#### **8. What should Government be doing in the short and medium-term given the announcement of these policies?**

Government should be make resource efficiency a national strategic priority, set policy to promote better use of resources across all sectors of the economy and cooperate with the EU on creating a truly circular economy.

The case for action is clear:

- **Economic benefits:** the average UK manufacturer now spends five times more on resource inputs than they do on labour and the Institute for Manufacturing has conservatively estimated that better use of resources could yield £10 billion in additional profits to the manufacturing sector. This would raise productivity, particularly in regions that are currently lagging behind and, as discussed in our response to questions 4 and 5, it would also reduce exposure to volatile markets in critical raw materials, enhancing business resilience.<sup>16</sup>

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<sup>16</sup> Green Alliance, 2017, *Lean and clean*

- **Jobs:** Green Alliance's previous research, in collaboration with WRAP, has shown that a transformative approach to a circular economy could drive growth, creating over half a million new jobs in Britain, with over a fifth of these being net jobs, reviving employment prospects in declining manufacturing regions, and providing jobs at all skill levels.<sup>17</sup>
- **Climate benefits:** Promoting resource efficiency would also help the UK get on track towards the legally binding net zero target. Work by Green Alliance, with the Centre for Industrial Energy, Materials and Products, has shown that resource efficiency offers considerable potential to cut carbon. Using and losing fewer resources in production processes and getting more out of products in just five key sectors (construction, vehicles, electrical equipment, clothing and textiles, and food) could reduce emissions by nearly 200 MtCO<sub>2</sub>e by 2032.<sup>18</sup>

To promote greater resource efficiency in the short and medium term, the government should, as a priority:

- Accelerate delivery of the resources and waste strategy, particularly of the waste prevention plan, which should set out a range of ambitious policies to end the linear economy.
- Establish sector specific partnerships to promote resource efficiency, jointly led by Defra and BEIS. These should promote sharing of best practice, identification of innovation and resource efficiency priorities, sector benchmarking and standard setting.
- Conduct an immediate stocktake of existing infrastructure for recycling, reuse, remanufacturing, followed by an assessment of the level of circularity and resource reduction desired and a roadmap to get there. These could be conducted through close cooperation between the Infrastructure and Planning Authority and the National Infrastructure Commission.
- Fast forward the delivery of the Industrial Energy Transformation Fund, to support resource efficiency in manufacturing, and complement this fund with an additional £400 million circular economy starter fund, as recommended in our recent report, to support projects that deliver carbon savings through better design, durability, reuse, refurbishment and high quality recycling.<sup>19</sup>

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<sup>17</sup> Green Alliance, 2015, *Employment and the circular economy*

<sup>18</sup> Green Alliance, 2018, *Less in, more out*

<sup>19</sup> Green Alliance, 2019, *Building a circular economy*

