

Briefing

How a circular economy can unlock UK prosperity



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Political parties of all stripes have promised to bring security and prosperity to the UK if elected to government. Regardless of which party wins the general election, a more circular economy can help to increase prosperity across the country. A circular economy would put an end to throwaway living and reduce the amount of raw materials required to meet society's needs and so improve economic resilience and help with the cost of living. It is also an important way to tackle climate change and nature's degradation.

Turning this vision into reality requires a reinvigorated approach. Green Alliance, along with our business partners in the Circular Economy Task Force, has identified many benefits, including:

- **Jobs:** An ambitious approach to repair, remanufacturing, reuse and recycling could create over 450,000 jobs by 2035, including thousands of new jobs in occupations suffering high rates of unemployment.¹
- **Growth:** On average, studies say better use of resources in manufacturing should increase GDP by three per cent by 2050. For context, the UK Climate Change Committee estimates it will cost around one per cent of GDP to transition to net zero by 2050.²
- **Net zero:** Resource use is a major driver of climate change and resource efficiency is an underused climate policy that can deliver quick wins to reach net zero. Improving material use could reduce domestic greenhouse gas emissions by 200MtCO₂e by 2032, and two billion tonnes by 2050.³
- **Resilience:** The impact of nature's degradation on supply chains could wipe six per cent off UK GDP by 2030 which is more than the impact of the global financial crisis of 2007-08.⁴ Supply chain risks are generally of most concern in relation to the critical raw materials (CRMs) needed for energy infrastructure and other economically vital areas. But careful energy demand management could halve the UK's need for CRMs, like lithium, by 2030, meaning that reused or recycled CRMs could meet 80-100 per cent of remaining demand by 2050.⁵ This approach would deliver a more secure and autonomous energy system.
- **Cost of living:** WRAP has found that reusing products could save hard pressed UK households together between £2 and £8 billion per year, equivalent to up to £280 on average for a household every year.⁶ Reducing food waste could save an average household £600 a year.⁷

How to bring about this prosperity

The recommendations in three areas presented here would grow the circular economy and enhance UK prosperity.

1. Commit to cross governmental working on resources

Creating a circular economy is about much more than just adjusting how waste and recycling are dealt with. It is about a new approach to the economy that promotes innovative new business models, driving growth through improved resource productivity and reducing supply chain risks the UK faces as a resource poor country. It is about increasing value adding activity and jobs in UK, delivering high quality homes and consumer products with lower impacts on people's pockets and the planet. In short, it can benefit us all, but will only do so if politicians and relevant government departments are pulling in the same direction to make it happen.

UK policy inaction in this area partly stems from how policy responsibilities are distributed across departments and low recognition of the business and societal benefits action would bring. A new approach to resources means it must be seen as a cross governmental priority, understood as central to reinvigorating the economy and not siloed as a waste issue.

How to improve cross departmental buy-in is up for debate. Some suggest a joint or cross departmental unit. Green Alliance has previously suggested a joint ministerial task force.

But key to success will be ensuring new ministers across departments recognise the need to pull together in the same direction towards the long term goal of revolutionising UK resource use by creating a resilient circular economy and put in place the governance systems to enable it to happen. Those departments that must be bought in to a shared goal include the Treasury with its focus on growth and governmental spending; the Department for Energy Security and Net Zero, as resource use is intricately tied to carbon emissions; the Department for Business and Trade, with its control of industrial strategy; the Department for Levelling Up, Housing and Communities, which oversees planning and is responsible for housing, which is resource and carbon intensive; the Cabinet Office, which co-ordinates governmental priorities and leads on public procurement; and the Department for Environment, Food and Rural Affairs, which leads on resources and waste and owns much existing legislation, including around environmental targets.

2. Reboot the UK's plan for resources

With cross departmental buy in, the new government can effectively reboot the approach to growing the circular economy.

The outgoing government's 2018 resources and waste strategy's aims to maximise resource use and minimise waste are central to achieving a circular, zero waste economy. It correctly identified that early supply chain interventions, sustainable production methods, influencing consumer

choices and the need for better data, monitoring and evaluation were all vital.

But, as commentators like the National Audit Office have noted, this high level strategy was not matched by effective long term plans and initial policies on packaging were severely delayed.⁸ The new government should grasp the early opportunity to reinvigorate this approach with clear plans to deliver, including for high impact sectors like construction, electronics, batteries, textiles and food. This should involve consultation with businesses, like those in the Circular Economy Task Force, and environmental groups, who have the evidence, expert knowledge and experience to inform fast action and help realise the benefits quickly.

Changes we recommend prioritising, include:

- **Better data:** Poor data on material use throughout supply chains hinders understanding of impacts and limits the ability to address them. As a starting point, the next government should bring the long promised National Materials Datahub into being, to understand material flows in the economy, and develop product passports to track materials and enable circular initiatives. It should mandate disclosure of scope 3 emissions by large, listed companies to drive better use of resources through supply chains, something the previous government conducted a call for evidence on.^{9,10}
- **Economic incentives:** Existing circular businesses are being held back by a lack of policy clarity and an economic system that favours wasteful, linear practices. Important aspects to iron out include ensuring that VAT favours activities like repair and refurbishment, rather than incentivising unnecessary purchases and demolition.¹¹ The UK should learn from the central bank of the Netherlands, which is developing an approach to more fairly represent the risks of linear business models.
- **High standards:** By the most conservative estimates, ecodesign standards already save the average UK household at least £100 on their annual energy bills each year, while reducing UK emissions by eight million metric tonnes of CO₂ equivalent (MtCO₂e).¹² The UK is falling behind the EU, which recently agreed new requirements for tablets and phones, including around durability and repairability. Without action, the UK market, unlike the EU's, could allow low quality products, with all the frustration and environmental impact they cause.
- **Producer obligations:** Extended producer responsibility (EPR) aims to make producers responsible for the lifecycle impacts of their products. The new government will inherit wide ranging powers to create obligations for producers through the Environment Act 2021. So far, this has been limited to initiating an EPR scheme for packaging. New EPR schemes are needed for other sectors, which should consider targets around resource reduction and reuse as well as recycling.

3. Set a target to bring resource use within planetary boundaries

A new approach should centre on an ambitious resource reduction target, which can act as a north star to inspire action across the economy, eliminating unnecessary material use and waste at all stages of the production cycle.

Per person use of raw materials in the UK is over twice what is sustainable, with waste baked in at every level of the economy. In the absence of a target to focus and drive action, improvements in resource use have been erratic. The UK's material footprint, a measure of the primary food, fuel, metal and mineral resources extracted to meet final demand, jumped in 2021 and currently sits at 16.5 tonnes per person per year, which is more than double the UN's suggested sustainable range of six to eight tonnes per person per year.¹³

Powers in the Environment Act 2021 mean the next government can set an overarching target to reduce England's material footprint and bring it in line with what the science indicates is needed. This should be at the heart of meeting the UK's wider climate and nature ambitions as, globally, resource extraction and processing now drive 55 per cent of greenhouse gas emissions and 90 per cent of biodiversity loss.¹⁴

Previous Green Alliance research for the Circular Economy Task Force has shown that significant progress is achievable for some high impact sectors. With house building high up the political agenda and construction using more material and producing more waste than any other sector, our research found that techniques available today could reduce upfront material use in the construction sector by 35 per cent.¹⁵ In the clothing sector, maximising ambitions to reuse, recycle and enable fewer purchases could reduce resource use by 63 per cent.¹⁶

Reducing resource use will benefit innovative businesses. Circular construction business models can increase profitability, improving financial returns by as much as 26 per cent.¹⁷ Reuse is increasingly viable in the fashion industry, with PwC research showing that innovative business models significantly increase the retained value in clothing.¹⁸

Learning from the Netherlands

The Netherlands is a good example of a country that is ahead of the UK in its action to reduce resource use and has grasped the benefits of a circular economy. It has taken action in all three of the areas we recommend. Circularity is embedded in policy, and development has been guided by a clear target and an ambitious strategy involving cross government working.

The country's goal is to halve its raw material consumption by 2030, with a longer term aim of becoming fully circular by 2050.¹⁹ Additionally, it has set specific goals for high impact sectors like construction, which is the largest producer of waste and a major emitter of greenhouse gases, as is the case in the UK.

Progress has, in part, been due to a senior minister acting as an early champion for the issue. Stientje van Veldhoven, the cabinet member responsible for the environment, promoted circularity internationally; she pushed for worldwide adoption of the EU's Green Deal commitments on reuse and organised a 2021 World Circular Economy Forum on the links between climate change and the circular economy. Her enthusiasm secured cross departmental buy in, and the previous Dutch coalition agreement included at least 11 references to the circular economy, explicitly linking it to climate policy.

Amsterdam has become a flagship circular city, with a focus on three key sectors: food and organic waste, consumer goods and the built environment. It has launched over 200 circular economy projects, including a live database and dashboard on material flows throughout the city, as well as a specific digital inventory of construction materials available to architects.²⁰

This briefing was produced by Green Alliance and considers the views of the [Circular Economy Task Force](#), a business led group convened by Green Alliance. Current members include: INCPEN, SUEZ, WRAP and Zero Waste Scotland. It is supported by IOM3, whose CEO, Colin Church, chairs the group.

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Endnotes

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² Green Alliance, 2023, [Profit without loss methodology](#)

³ Green Alliance, 2018, [Less in, more out](#); and WRAP, 2021, [Net zero: why resource efficiency holds the answers](#)

⁴ Green Finance Institute, April 2024, [Assessing the materiality of nature-related financial risks for the UK](#)

⁵ Green Alliance, 2021, [Critical point: securing the raw materials needed for the energy transition](#)

⁶ WRAP, 2022, [The role of reuse in helping families through the cost-of-living crisis](#)

⁷ WRAP, November 2023, [Food surplus and waste in the UK – key facts](#)

⁸ National Audit Office, June 2023, [The government's resources and waste reforms for England](#)

⁹ Green Alliance, 2021, [Circular business: what companies need to make the switch](#)

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¹² Green Alliance, 2020, [Design for a circular economy: reducing the impacts of](#)

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¹³ Green Alliance, 2024a, [Measuring up: the potential of targets to reduce resource use](#)

¹⁴ UNEP, 2024, [Bend the trend: pathways to a liveable planet as resource use spikes](#)

¹⁵ Green Alliance, 2023, [Circular construction: building for a greener UK economy](#)

¹⁶ Green Alliance, 2024b, [Changing fashion: what people want from a greener clothing industry](#)

¹⁷ Arup, 2020, [Realising the value of circular economy in real estate](#)

¹⁸ PwC, 2024, [Circular fashion: making resale a reality](#)

¹⁹ Government of the Netherlands, the Ministry of Infrastructure and the Environment and the Ministry of Economic Affairs, 2016, [A circular economy in the Netherlands by 2050](#). The reduction target excludes biotic resources.

²⁰ Ellen MacArthur Foundation website, 2024, '[Aiming for 100% circularity: Amsterdam](#)'