

Circular Solutions: England's Strategy to Halve Residual Waste by 2042

11th April 2024

Under the Environmental Targets (Residual Waste) (England) Regulations 2023, a binding commitment has been made to halve the per capita production of residual waste by 2042 relative to 2019 levels. The chart (Fig. 1) suggests that this is not going to happen at current rates of progress.

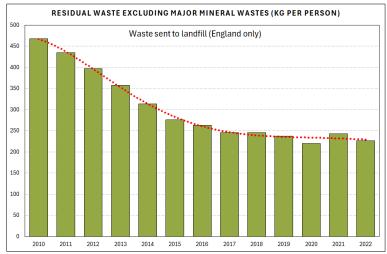


Fig. 1: Residual waste (excluding MMW) sent to landfill

Statistics recently-released by Defra¹ reveal that we are not even on track to meet the interim markers for 2027 across different material types (see Fig. 2). A significant change in approach is needed. So, what can be done?

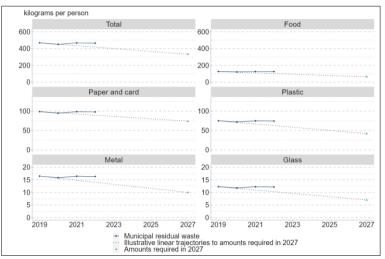


Fig. 2: Municipal residual waste by types of material, kg per person, England.

¹ <u>www.gov.uk/government/statistics/estimates-of-residual-waste-excluding-major-mineral-wastes-and-municipal-residual-</u> waste-in-england/estimates-of-residual-waste-excluding-major-mineral-wastes-and-municipal-residual-waste-in-england

The Stagnation of Recycling Rates

Recycling rates in England have hit a plateau. Tinkering with labels on packaging may help slightly, but will not catalyse the dramatic shift needed. Similarly, imposing a moratorium on the development of new Energy from Waste (EfW) facilities is unlikely to decrease the amount per person going to landfill; in fact, it is more likely to increase it. Be careful what you wish for.

Beyond Recycling: Addressing the Core Issues

"We need to recycle more," is the obvious answer, as though that would solve all of our problems and make the charts head in the right direction. But we cannot recycle more if there are not enough facilities with capacity to cope with more feedstock. And even if we were to build more plastic recycling facilities in England, for instance, does the market actually exist for the additional recycled plastic granulate or products that those facilities would produce? Plastic production is affected by oil prices, and so the recycled plastic sector often finds itself left high and dry whenever there is a fall in oil prices. The challenges extend beyond plastics, affecting various recyclables subjected to global commodity price fluctuations. Flooding the market with additional dry mixed recycling may not be the holy grail some might consider it to be. 100% recycling is not necessarily a helpful aspiration.

Rethinking Landfill Tax and Waste Infrastructure

A sustained uplift in Landfill Tax might help; it has worked before with the Landfill Tax Escalator. Indeed, that escalator explains the unmistakable decline in landfilled waste until 2015 which is surely not coincidentally - when the Escalator policy ended. But, again, we encounter the same issue: if the residual waste is not going into landfill, where can it go? It is all very well pronouncing the wish for waste to go somewhere other than landfill and even waste-to-energy; however, without sufficient infrastructure or market support, there is a higher risk of illegal waste dumping or questionable exports to distant lands under the misleading guise of 'recovery'. There have been numerous media reports over the years exposing cases where waste supposedly sent for recovery was actually just being dumped in a distant land.

The Need for Waste Reduction

The ultimate solution to our waste dilemma lies not in disposal methods but in reducing waste generation at its source. This entails a profound re-evaluation of consumer culture and production systems; we cannot simply burn or recycle our way out of this mess. Applying punitive levies on end-of-life treatment options such as landfill or EfW is akin to taxing food banks in the hope of reducing their prevalence. The real remedy lies upstream, beginning with an institutional acceptance that 'Reduce' is at the peak of the waste hierarchy. Are our politicians bold enough to say that there are only so many pairs of shoes an individual needs, or coats, or gadgets, or cars? On the one hand, our leaders are tasked with growing the economy and, on the other, reducing waste and emissions. Perhaps the two things are not compatible and someone should acknowledge that with frank honesty. This need not necessarily mean restrictions on choice or curtailing consumerism, though dramatic change may require impactful actions for the sake of planetary sustainability and the survival of various species including our own. Bold policies are required to acknowledge that, without transitioning to a new economic model, our consumerist society will continue to produce increasing amounts of waste, particularly as we yield to the temptation of click-to-buy.

Innovating Packaging

Apart from the scenario of global puritanical simplicity, which would be unappealing to many, another way to reduce waste is to assess the reasons why waste occurs in the first place, as it is a systemic design flaw. Packaging is often seen as the root of the problem, the negative impact of plastic. However, plastic is not inherently evil; it is indeed a wonder-material that has proven itself to be incredibly versatile. Those advocating for phasing out plastics should take a moment to look around their houses and consider the numerous items made of plastic or containing plastic components. Packaging can certainly be reduced. How many of us have purchased something small only to receive it in a large box? There are always new and innovative ways to decrease the amount of packaging per item, eliminating the unnecessary box within a box.

Embracing Remanufacturing

The true solution, however, does not solely lie in the lightweighting of beef mince packaging, although such initiatives are valuable. Instead, it is crucial to explore pathways to remanufacturing. We currently live in a throwaway culture, where the norm is to purchase, use and then discard items into bins of various colours. At the point of disposal, we have embedded failure, irrespective of whether it goes to landfill, EfW or recycling. In many ways, they all equate to 'throwing it away', wasting resources or energy, such as needlessly crushing and melting a perfectly functional glass jar to create another identical one. How then can we shift towards an economy where objects or nonconsumable products are returned to the manufacturer for remanufacturing via a reverse-logistic process? There are examples of this in operation currently, it can be done. If laptops and photocopiers can be refurbished, what's stopping us from applying the same principle to toasters, hair dryers, televisions, ovens or washing machines? The principle extends to trousers, hats, jumpers, shoes and shirts, as well as carpets, lampshades, wardrobes or chairs. It is surely possible. In each case, you may well be saying, "They can be." However, the refurbishment of pre-loved items is currently more a niche or hobbyist pursuit than a widespread industry. Could this be the dawn of the next industrial revolution, one that could significantly benefit our communities by creating tens of thousands of truly sustainable jobs? If the items that we readily dispose of were eliminated from the waste system altogether because they form part of a closed-loop recovery-and-remanufacture process, then we would be well on our way to halving the amount of residual waste disposed of per person. Moreover, if governments were to encourage the purchase of remanufactured goods through a progressive tax system, a new cultural paradigm could emerge.

Towards a Circular Economy: The Future of Sustainability

To meet our sustainability obligations, investing in the foundational elements of a circular economy is crucial. This involves applying intelligence and ingenuity to processes to prevent resource leakage and energy wastage. If our leaders are genuinely committed to stopping environmental degradation, they must make bold decisions that entail rewiring our current systems. This transformation can occur alongside the existing model, with the new approach gradually replacing the old one. It does not have to result in the catastrophic collapse of any industry or sector. However, a change is imperative and must happen swiftly. Mere provision of an extra wheelie bin will not suffice.