

HIDDEN IMPACTS FOR CIRCULAR PLASTICS SYSTEMS

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Introduction

As England prepares for the rollout of Simpler Recycling, the University of Birmingham Plastics Network, in consultation with experts from RECOUP, the UK's leading independent authority and trusted voice on plastics resource efficiency and recycling, and the Bio-based and Biodegradable Industries Association (BBIA), has conducted an analysis of the challenges that the implementation of simpler recycling will have on plastics circularity. Simpler Recycling (SR) aims to help meet the UK Government's target of 65% recycling by 2035¹. By maximising the collection of recyclable materials, the amount of residual waste that goes to landfill could be reduced. Improved efforts by local authorities to separate and recycle plastics have been shown to have an impact: these efforts led to a five-fold drop in residual waste sent to landfills between 1996 and 2015². SR reforms will further reduce confusion around recyclable materials by standardising waste separation and collection across households and workplaces. As of 2025, workplaces have been required to separate dry recyclables, food waste, and residual waste, while households will follow from 2026. The overarching goals are to improve recycling rates, reduce contamination, and divert waste from landfills and/or incineration through clear, consistent collection practices.

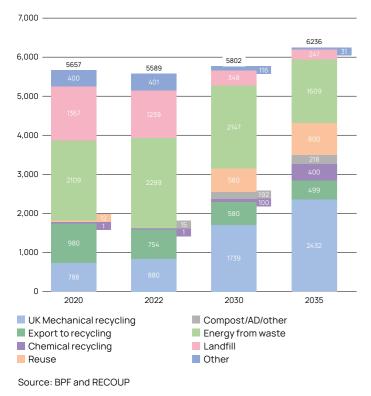
But any ambitious and extensive policy change is likely to have unintended consequences. To ensure the policy achieves its intended outcomes, ongoing evaluation will be critical, allowing for adjustments based on real-world feedback, resource constraints, and emerging technologies. This report aims to evaluate the infrastructure, regulatory, and economic challenges for plastics recovery as well as the future opportunities raised by the SR bill, thanks to insights from experts across local government and industry. This includes the environmental, economic, and social dimensions of the policy, its interactions with other policy instruments including Extended Producer Responsibility, the Emissions Trading Scheme, the Deposit Return Scheme, and the Plastic Packaging Tax, and how to best communicate the necessary information to the public. The insights revealed in this report will hopefully provide guidance to policymakers on how to understand its long-term impacts and inform future regulations, practices, and communications strategies.



Chapter 1: Infrastructure imperatives

Simpler recycling (SR) is projected to significantly increase the volume of recyclable materials collected across the UK. According to forecasts, the amount of plastic packaging available for reprocessing is expected to reach 1.6 million tonnes by 2030, a 52% increase compared to 2020^3 . Additionally, the amount of separately collected food waste is projected to more than double, reaching 4.8 million tonnes by the same year. But England's waste infrastructure is already under pressure, and many facilities are unprepared to accommodate significantly larger volumes of material. Based on projected changes to packaging and recycling regulations in the UK, there will be a 3 million tonne shortfall in processing capacity by 2035^4 .

Figure 1: Plastic waste flows



The failure of processing facilities to adapt in time could trigger unintended consequences, such as greater reliance on incineration or increased waste exports. Many remote businesses and households need to have plastics and other materials transported long distances due to a lack of local infrastructure and inefficient logistics. Emissions from incineration and transport of waste will increase the UK's carbon footprint at a time when the country is already not on track to meet its carbon emission targets.

Under the current system, wealthier areas of the country with established waste infrastructure and more advanced technology are better positioned to benefit from new reforms, while poorer or more rural councils may struggle more. This risks deepening the gap between councils and regions. In a 2024 poll, 70% of businesses in Greater London were aware of SR, compared to 33% in the South West and 28% in the South East⁵. It may also exacerbate a gap between large and small businesses: 70% of businesses with over 500 employees said they had already made changes to prepare for SR compared to 5% of businesses with 10-49 employees. Additionally, rural areas often operate with more devolved or fragmented governance, which can lead to inconsistent policy application or gaps in service delivery. For this reason, infrastructure must not only be upgraded, but upgraded consistently and equitably, across all categories of recycling facility.

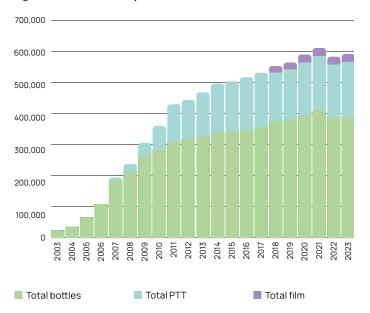


Plastic Infrastructure

One of the major changes under SR will be increasing the collection of hard-to-recycle plastics. Some experts noted that the issue may not be a significant increase in typical plastic collection but instead a change in the composition of the waste stream, as it will likely include a higher proportion of low-value materials, like flexible plastic film as well as plastic pots, tubs, and trays, which have fewer quick and easy recycling opportunities. If councils increase collection of these materials before having anywhere to process them, they will end up landfilled or incinerated, particularly as other policies, like the Deposit Return Scheme, reroute profits from materials like glass bottles and aluminium cans away from councils. Consequently, councils face a dual burden: losing access to profitable recyclables just as they are required to manage a larger share of lower-value, harder-to-recycle waste. This shift risks undermining public confidence in recycling systems, particularly if residents suspect their efforts lead to incineration rather than genuine recycling. Mechanisms for returning a portion of DRS profits to local authorities or allowing councils to operate certain elements of the scheme themselves may help councils deal with this conflict.

Many local authorities are also locked into long-term incineration contracts, which limits their ability to divert recyclable material from incineration or Energy from Waste (EfW), even when better options emerge. The Local Government Association (LGA), representing local authorities in England and Wales, has expressed concerns that these contracts have left councils unable to explore the use of more sustainable solutions⁶. "In the commercial and industrial sector, there are much shorter waste management contracts, while the municipal sector relies on long-term contracts for financing, so they can't move away overnight," explains one expert. The government is not prepared to enable councils to break these long-term contracts.

Figure 2: UK household plastics collected



Source: RECOUP UK Household Plastic Packaging Collection Survey 2024

According to the 2024 RECOUP UK Household Plastic Packaging Collection Survey, by 31 March 2027, 312 more local authorities will need to begin collecting plastic films and flexibles to comply with requirements⁷. However, recycling options for this film remain limited. Chemical recycling, the main route, is expensive and lacks sufficient infrastructure, with only a handful of UK plants in various stages of development8. Alternatively, plastic film could be processed into Solid Recovered Fuel (SRF) (a high-yield energy source derived from incineration of dry, non-hazardous waste which is carefully processed to ensure a high standard of fuel) but UK capacity for SRF production is also limited when compared to incineration9. "You can separate [flexible films], but finding a home for them is a completely different matter," says one local government officer working in environmental services. With few scalable options and not enough promising technologies for film recycling in development, EfW incineration or export may become the default destination for the flexible films collected under SR.

The markets problem

The challenge of recycling hard-to-recycle plastics is about market viability as well as physical capacity. At present, there is a lack of stable, profitable end markets for materials like flexible plastic films. "Councils are forced to collect and process problematic material, but no one's forced to buy it," says one local government officer. "It's frustrating to do all that work to collect flexible plastics only to send them to EfW, but if there's no viable market for the material, what choice do struggling councils have?" As a result, more recycling collections do not necessarily translate into more actual recycling, especially when consumers see plastic being collected but not actually recycled, which can significantly erode public confidence in the system.

On top of this, handling and processing costs are expected to rise as new materials enter the waste stream. "If we're stimulating the supply of recyclable materials but not also stimulating demand, prices will fall and revenues will drop, which ultimately means costs increase," warns one recycling expert. The success of collecting plastic films will depend heavily on material quality and the existence of scalable markets. While several chemical recycling facilities are under development in the UK, and some European markets are better developed than the UK's, the infrastructure remains costly and insufficient to absorb the expected volumes. The current material value of plastic films is not enough to offset transportation and disposal costs.

Figure 3: Regional Disparities: UK Recycling Infrastructure
UK Sorting Infastructure
Chemical Recycling





Reprocessing Sites



Source: RECOUP (2022)

To address this, the government must play a strategic role in stimulating and developing end markets. The plastic packaging tax (PPT) is a step forward, since requiring producers to include at least 30% recycled content in plastic packaging creates a direct economic incentive for using recycled plastics. The development of chemical recycling via mass balance can contribute further. But paying the tax and buying virgin plastic is still cheaper unless recycled plastic is made more cost-effective. More targeted action is needed, like connecting councils and tech innovators, tax incentives for new technologies, investment in scalable recycling solutions, and the creation of an advanced national plastic recycling or innovation hub. Without such coordinated efforts, expanded collection risks expending the resources to separate plastic films from residual waste only for them to end up back in the same place. "Recycling needs to be viable across collection, processing, and markets," says one recycling executive. "If any part of that chain breaks, the system fails. It needs to be a complete loop."

Upgrading Material Recovery Facilities (MRFs)

There will be a significant transitional phase as MRFs work to upgrade their infrastructure to meet the demands of SR. When the policy is first rolled out, a significant proportion of local authorities will be unprepared for full compliance, with some predicting a lag period of approximately two years. While some operators are optimistic that their existing capacity can handle the increased material, this is not universally the case.

There is a lack of recycling treatment capacity in the country to start with. There are 108 MRFs across the UK, ranging in size and capacity and collecting a total of 4.2 million tonnes of material annually 10; but existing MRFs are getting older and not many new ones are opening. And few are accustomed to working with the new categories that will be imposed under SR. The current MRF fleet needs adjusting to enable the separation and processing of pots, tubs, trays, and flexible plastics.

The high cost of scaling up recycling infrastructure is a major barrier to successfully implementing SR. New MRF projects and upgrades require substantial capital investment. For example, Hampshire's planned facility is expected to cost £50 million over a 25-year period. But the financial burden does not stop at construction, since long-term operational costs add further pressure and are difficult to forecast. Compounding this challenge is the lack of clarity around the readiness of existing and future MRFs to handle the expanded waste streams that SR mandates. "The biggest weakness for SR at the moment is uncertainty around whether the MRFs are ready, what they need, and how long it will take," says one recycling expert. Without a clearer roadmap for the necessary infrastructure development, councils may struggle to meet new obligations.

New legal schemes to engage industry in adopting new recycling technologies may be necessary to fund infrastructure upgrades. The mechanism used for the UK's Carbon Reduction Commitment (CRC) Energy Efficiency Scheme, which closed in 2019, could serve as an interesting model for incentivising innovation. Companies were required to purchase allowances that were equivalent to the amount of energy they consumed each year; that money went into a collective pot, which was redistributed to all participants

in the scheme based on performance. To incentivise producers to develop new recycling technologies, that mechanism could be used to create a self-funded first mover advantage, paying out a bonus to operators who recycle the most plastic film.

Sorting technology

Sorting is another crucial component of the recycling process, and current infrastructure will need to be upgraded to manage the volume of increased dry recyclables coming into MRFs. Given that plastic, glass, and metal will be co-collected under SR, effective sorting is key to the integrity of recycling processes. Mixing plastics with glass and metal isn't good for plastic recycling as glass can contaminate and damage the machinery. Another risk is the incorrect sorting of compostable plastics, which are hard to distinguish visually from conventional plastics, making manual or optical sorting ineffective without advanced systems like infrared or UV code scanners. The lack of compatible sorting technology limits the proper disposal of compostables outside of closed-loop systems where material flow is controlled.

There is growing recognition among packaging manufacturers of the need to collaborate with infrastructure operators to align material design with real-world sorting capabilities. Advancements in Al and robotics suggest a future where smart sensor-based sorting is widespread, solving many of these issues. Sherbourne Resource Park in Coventry, the most advanced MRF of its kind in the UK, uses specialist Al technology to process dry mixed residential kerbside recycling in the most sustainable and efficient way possible, with 18 sorting robots and 14 optical sorters, yielding a purer-than-industry-average recyclate¹¹. Most facilities, however, remain outdated, and the necessary technologies can be prohibitively expensive, limiting their deployment. For privately owned facilities, a compelling business case will be essential to make such upgrades financially viable. This underscores the need to stimulate demand for recyclable materials and strengthen end markets.

Food waste recycling

There is a similar lack of preparedness in infrastructure for organic recycling ahead of the implementation of mandatory food waste collection. This is expected to significantly increase the quantities of waste collected; Wales' Workplace Recycling policy, which has similar features to Simpler Recycling, provides some insight into how it may work in practice. Following the implementation of Workplace Recycling, Biffa is collecting over 67% more food waste in Wales than before the regulations; 900 tonnes of organic waste is being diverted from energy recovery incineration to anaerobic digestion (AD)¹². Biffa's experts say that England could see a nearly 70% increase in food waste collection following SR¹³. Every local authority will be required to collect food waste for recycling by 31 March 2026, apart from those with existing incineration contracts. Like with plastic recycling, many will need to upgrade their facilities to account for increased collection.



Anaerobic digestion vs in-vessel composting

In the UK, the two most common methods for processing food waste are anaerobic digestion (AD) and in-vessel composting (IVC). Each offers distinct benefits, but also diverging limitations, particularly when it comes to compostable packaging. AD involves breaking down food waste in an oxygen-free environment to produce biogas (used as a renewable energy source) and digestate (a fertiliser). In contrast, IVC uses oxygen in enclosed systems to turn organic waste into compost.

Compostable plastics are a growing consideration for the UK recycling industry, accounting for approximately 8,000 tonnes of consumer plastic packaging annually¹⁴. While no composting infrastructure can break down conventional plastics, IVC is capable of breaking down compostable plastics, as opposed to AD systems. Consumers who are unaware of this distinction may end up putting compostable packaging – such as food waste caddy liners – in their food waste stream, contaminating the digestate, which in turn disqualifies the AD process as a form of recycling. This can be remedied either by improving communication about how to dispose of compostable plastics, or by increasing the use of IVC.

Despite the advantages of IVC, current UK policy and infrastructure overwhelmingly favours AD. Under the new SR guidance, AD is the preferred treatment for food waste because its outputs of biogas and digestate allow it to be classified as a form of recycling, and the guidance does not account for the existence of compostable products that are not food waste¹⁵. Without intervention, the imbalance between AD and IVC could worsen, limiting viable end-of-life pathways for compostable materials. IVC infrastructure can collapse quickly when funding and policy support diminish, leading to near-exclusive reliance on AD. "In Wales, in the span of about five years, IVC was almost entirely wiped out," warns one expert on composting and anaerobic digestion.

The compostables dilemma

Food packaging is a major contributor to the plastic waste crisis. The 2022 Big Plastic Count survey in the UK revealed that 83% of the average household's plastic waste consisted of food and drink packaging, with fruit and vegetable packaging being the most prevalent 16. Some manufacturers have introduced compostable alternatives, such as fruit and vegetable stickers and food waste caddy liners. However, public understanding of compostable labels remains limited, leading to confusion about correct disposal routes and potentially undermining the goals of SR.

Most compostable plastics are not suitable for home composting, a fact that is not widely understood by consumers. As a result, these items are often mistakenly placed either in plastic recycling bins, where they risk contaminating the stream, or in food waste bins, where they can clog machinery in AD systems or compromise the quality of digestate. For instance, the use of food waste caddy liners has been found to improve collection rates, but there is currently no system in place to allow liners to be composted in the food waste stream. In the absence of sufficient IVC capacity, many compostable items ultimately end up in residual waste, creating further confusion and potentially an impression of greenwashing if customers pay a premium for a compostable option but have no way to dispose of it. Without clearer guidance, and better infrastructure, the unintended consequences of compostable packaging could include increased contamination, reduced collection efficiency, and diminished public trust in recycling systems.





The future of composting: the Italian blueprint

Italy's Biorepack initiative, established in 2018, is Europe's first Extended Producer Responsibility (EPR) scheme for compostable plastic packaging. Alongside the National Association of Italian Municipalities, Biorepack partners with and funds local authorities or their delegated operators to recycle compostable packaging waste together with municipal food waste, and works to promote the collection of compostable plastic with food waste. They aim to recycle 50% of compostable plastic packaging by 31 December 2025 ¹⁷.

Although integrating compostable packaging into Simpler Recycling would require substantial and complicated changes, there is still potential to streamline the process down the line. Italy offers a model where AD and IVC systems are used sequentially. This approach allows for the capture of energy through AD while ensuring that compostable plastics are properly broken down during the IVC phase. While the UK currently lacks the IVC capacity to replicate this model, it represents a valuable long-term goal for infrastructure development – one that would enable facilities to recover greater value from compostable plastics, both through energy generation and the production of high-quality compost.

Chapter 2: The policy landscape

Interactions with other policies

Simpler Recycling is one component of a wider network of UK policies aimed at tackling plastic waste, set against the broader contexts of net-zero commitments and the evolving Global Plastics Treaty. It is not an isolated initiative, but part of a layered policy ecosystem that seeks to change how materials are managed, reused, and valued. As such, SR interacts closely with other policies pursuing aligned objectives: reducing waste, lowering greenhouse gas emissions, stimulating innovation, and creating economic value from material recovery. These shared goals are economic and strategic as well as environmental. Together, they form a complex regulatory framework reshaping the UK's waste and recycling infrastructure.

However, the cumulative effect of overlapping policies has created strategic uncertainty, making it difficult for producers and local authorities to make clear decisions. To fully grasp the implications of SR within this fragmented landscape, a forward-looking, systemsbased approach is needed, anticipating how policies will interact over time. "There needs to be a broader, macro-level review that maps all the major drivers, not just in waste, but in resources, finance, and policy, to ensure everything is aligned," says one recycling industry expert. "Right now, many of these forces seem to be pulling in different directions." The following section outlines several of the most significant policy drivers and explores how they may lead to unintended consequences if SR is implemented without accounting for overlapping policies and schemes.

Emissions Trading Scheme (ETS)

The upcoming inclusion of Energy-from-Waste (EfW) incineration in the UK Emissions Trading Scheme (ETS), expected around 2028-2030, could transform the economic landscape for packaging materials. The ETS requires companies to buy emissions permits for the CO2 they emit, placing a financial cost on carbon-intensive activities. The introduction of ETS for EfW facilities will impose a cost on the incineration of fossil-based materials, such as conventional plastics. This is intended to incentivise the diversion of high-carbon waste streams toward more sustainable alternatives like recycling. It also creates an added incentive for better upstream sorting and material separation, reducing contamination and increasing the viability of closed-loop recycling systems.

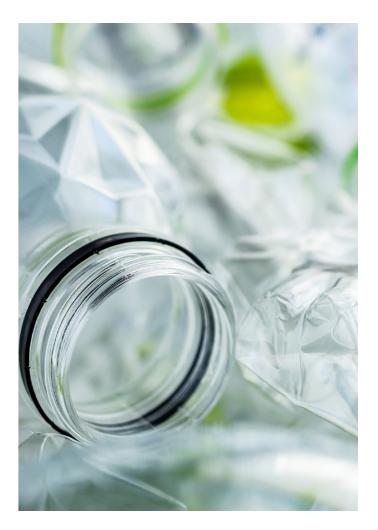
But this change to the ETS may collide with the practical implementation of SR, particularly in the early phases as the infrastructure adapts. As councils shift more waste out of landfill and into recovery or recycling, EfW use may increase during the lag period while MRFs upgrade. If these infrastructure improvements are not in place by the time the ETS for EfW comes into effect, SR could inadvertently impose higher operational costs on councils. Compounding this issue is the lack of viable end-of-life pathways for certain difficult-to-recycle materials under SR, with exports and EfW incineration often serving as fallbacks. "The ETS changes are trying to move material away from EfW, but councils are being forced to put more into EfW because of SR," explains one local government officer. "By improving your recycling, you could end up increasing your ETS costs, at a time when most councils are already struggling financially." Even with a high-purity waste stream, certain materials remain inherently difficult to recycle. Their presence in the system highlights a gap that infrastructure alone cannot bridge. Simply passing the cost burden onto councils or consumers is unlikely



to drive meaningful change. Addressing this issue will require incentivising private research and development, potentially through stricter product standards and design-for-recycling requirements to either eliminate these problematic materials or develop scalable solutions for their processing.

The unintended costs of this contradiction are the most pressing concern for councils. According to one expert, the ETS changes may cost a council between £5 and £12 million per year extra on top of the current EfW bill, with few policy instruments offered to help offset the cost, creating a potential financial crisis point for local authority waste services. Any energy expended to separate plastics, if they are just burned in the end, is a net increase of carbon emissions.

The ETS has the potential to stimulate innovation across both material development and sorting infrastructure by making the incineration of recoverable or recyclable materials economically unattractive. Bio-based alternatives may become more commercially viable, as they typically carry a lower carbon liability than fossilbased materials and will not incur the ETS tax if incinerated. At the same time, the prospect of higher emissions costs could incentivise investment in advanced technologies, such as Al-powered sorting systems, which can improve capture rates, reduce contamination, and enhance the overall financial efficiency of recycling operations. However, realising these benefits will depend on effective support during the transition. Local authorities must be equipped with adequate funding and technical support to adapt to the dual challenges of implementing SR and complying with new ETS requirements. Without this support, councils risk being penalised for infrastructure gaps and operational constraints beyond their control.



Deposit Return Scheme (DRS)

The Deposit Return Scheme (DRS) in the UK is set to launch on 1 October 2027 across England, Scotland, and Northern Ireland ¹⁸. Wales also intends to launch a separate DRS to the joint UK scheme, which will include glass. The joint UK scheme will charge a refundable deposit on single-use drinks containers made from aluminium, steel, or polyethylene terephthalate (PET) plastic, which consumers can reclaim by returning the containers to participating outlets. Drinks containers are a major source of plastic pollution; a survey by the Marine Conservation Society found that 97% of UK beaches were polluted with drinks-related items ¹⁹. A number of DRS initiatives around the world are working as intended, with Germany's scheme reportedly having a 98% return rate across 130 000 retail collection points ²⁰. Digital DRS schemes may further help implementation by letting consumers scan a QR code before putting waste in kerbside collection, with Wales exploring the possibility ²¹.

While policymakers hope DRS will be effective at reducing pollution and increasing collection rates, it may have unintended impacts on local authorities. PET and aluminium are high-value recyclables, and capturing them before they reach MRFs risks reducing the resale value of waste and leaving councils with hard-to-market plastics. This means that local authorities could be losing revenue just as they face increased collection costs for food waste and plastic film under SR. One expert estimates that aluminium cans account for as much as 35-40% of a council's income from recycling. DRS has the potential to improve recycling outcomes, but its impact must be assessed alongside that of SR to best predict the overall outcomes on those who will bear the costs; additionally, there should be infrastructure in place for local authorities to capture unclaimed material in the scope of DRS. There is a need to improve communication and coordination channels between local and central government.

Extended Producer Responsibility (EPR)

Extended Producer Responsibility (EPR) is a policy instrument designed to shift the financial and environmental burden of packaging waste management from local authorities to the producers who place packaging on the market. Under the UK's newly implemented EPR scheme, producers are now obligated to fund the full net cost of collecting, sorting, recycling, and disposing of household packaging waste. One of the key objectives of EPR is to create a sustainable funding stream for local authorities, enabling them to improve recycling systems and expand collections. In this context, EPR and SR should be natural partners, with EPR able to directly support the rollout of SR ²². Without the funding generated by EPR, the ambitions of SR risk falling short. While EPR officially began in 2025 and SR for households is due to launch in 2026, the question is whether this timeline allows sufficient time for meaningful alignment; a formal review may be necessary to evaluate how effectively the funding mechanisms of these two policies are working together in practice.

The role of Recyclability Assessment Methodology (RAM)

Recyclability Assessment Methodology (RAM) determines how different packaging materials are prioritised and financed under EPR. Materials are assigned a colour-coded status of red, amber, or green based on their environmental impact and the current capacity to manage them. For example, compostable plastics are currently rated as "red," reflecting limited infrastructure to process them effectively at scale²³. Over time, red fees will increase, while green ones will decrease. This rating directly influences the EPR fees that producers must pay. There is therefore a case for linking these fees more strategically to infrastructure investment. If the UK intends to expand AD and IVC capabilities to accommodate compostable plastics, then RAM should be refined to ensure that collected fees are used to support this transition.

Plastic Packaging Tax (PPT)

The current Plastic Packaging Tax (PPT) imposes a fee on plastic packaging components with less than 30% recycled plastic, which are manufactured in , or imported into, the UK, aiming to encourage manufacturers to incorporate more recycled plastic into packaging²⁴. The current threshold may increase in the near future. The potential for conflict with SR comes from the focus on "recycled" as opposed to "recyclable" plastics. The PPT does not differentiate between materials that are technically recyclable and those that are recyclable with the current local infrastructure: for instance, multi-layer flexible films, which are difficult to recycle, may include recycled content and be exempt from the tax. Therefore, PPT may unintentionally advantage the use of materials that complicate collection or contaminate recycling streams under SR. Additionally, SR depends on improved domestic collection and sorting infrastructure, which would ideally generate recyclate to be used in PPT-exempt products, but PPT does not channel funding toward those systems. The synergy between the two policies could be improved by redirecting some of the PPT revenue to local authorities, to help them build the infrastructure necessary to produce recyclate at scale.

The Packaging Recovery Note (PRN) System

Packaging Recovery Notes (PRNs) and Packaging Export Recovery Notes (PERNs) are certificates purchased by businesses to certify that a certain amount of packaging waste has been recycled or recovered. The revenue generated from PRN sales is intended to support recycling infrastructure by funding collection, sorting, and reprocessing activities²⁵. PRNs and SR will therefore complement each other. However, PERNs complicate the relationship between the policies, as they have equivalent value to PRNs despite the risks associated with exporting plastic to be processed26. This may end up creating economic incentives to export plastic packaging, causing local recycling facilities to lose potentially valuable waste. At the same time that SR aims to simplify and improve local recycling performance, the PERN system may drive materials away from the UK system. This undermines confidence in reported outcomes and complicates the tracking of progress toward SR targets. The incentive to export is contrary to the goals of SR.



Chapter 3: Public understanding: communication and building trust

Effective public communication is fundamental to the success of SR. The policy's implementation hinges not only on infrastructure and legislation but on widespread public understanding and active participation. Without clear, consistent messaging, the intended benefits of the reform risk being undermined by confusion and non-compliance.

Polling found that 70% of people in England are unaware of the upcoming Simpler Recycling changes. People are unsure about which materials they will be able to recycle at home once the policy comes into effect, with 24% selecting fabric, 20% selecting wooden waste and 4% selecting hazardous waste. More concerningly, the public was not entirely unanimous in selecting materials that are already commonly recycled, with 72% selecting paper, 68% selecting plastic and 65% selecting card and glass²⁷. Closing this knowledge gap is essential. Undoing misinformation requires major public investment: campaigns, education, public information, behavioural interventions and clear labelling.

Ending greenwashing and combating confusion

One particularly important area in which to improve communication is the use of terms like recyclable, compostable, and biodegradable. Multiple eco-labels can be overused, ambiguously used or misapplied, creating greenwashing concerns and diminishing consumer trust. "People assume something labelled compostable or biodegradable breaks down anywhere; they don't understand the nuance of the process," says one expert. While there are industrial standards for what can be called biodegradable, they rely on specific parameters of disposal, and a lack of understanding of these parameters – such as the need for industrial composting – among

the public can mean that they are not met. 59% of people in the UK do not know what percentage of plastic labelled compostable can be composted at home and what should be composted under specific conditions using industrial equipment, and 24% thought plastic labelled biodegradable would degrade naturally in the environment within a few years²⁸. This sort of confusion leads to improper disposal, contamination of recycling streams, and a sense of disillusionment and impression of greenwashing when "sustainable" products don't behave as expected.

One element of preventing the appearance of greenwashing is closing the gap between what consumers believe happens to their waste and how recycling actually works. Consumers often assume that all sustainable-sounding materials are processed properly. The issue often lies in the disconnect between what the public expects and what is realistically possible. For instance, there are certain materials where the only viable treatment option is EfW or landfilling. However, the public may imagine a more idealised recycling process that is not achievable at scale or with current infrastructure.

With new legislation tightening scrutiny on environmental claims, vague or inaccurate green messaging poses new legal risks. The 2024 Digital Markets, Competition and Consumers Act 2024, for instance, increased the powers of the Competition and Markets Authority (CMA), which polices greenwashing claims, to fine companies for breaches of consumer protection law²⁹. Enhancing labelling transparency is therefore not only a matter of public trust and ethical responsibility, but also a necessary step to protect both government and industry from future legal challenges. The UK's Green Claims Code, developed by the Competition and Markets Authority, clarifies that responsibility for correctly labelling recyclable products falls on industry.



Rebuilding trust

Public trust is fragile, and perceived greenwashing in particular can damage credibility. SR has the potential to significantly improve consistency in recycling practices across the UK. However, its success will largely depend on whether it can influence consumer behaviour, an outcome that hinges on public trust, which remains low both in current recycling systems and the government's overall environmental performance.

Historically, incineration and the export of waste have triggered strong public backlash. This is especially true when people believed their waste was being recycled domestically, only to later discover it had been burned or shipped abroad. In a 2023 poll, 72% of the public believed the UK should be dealing with its own waste rather than shipping it overseas, and 53% supported an outright ban on waste exports³⁰. Despite this, there are life-cycle analysis scenarios where exporting waste to a receiving country with superior recycling capacity would be the most responsible option. Some UK waste is sent to other OECD countries, such as the Netherlands, France, and Spain, which often have better infrastructure³¹. Spain, for instance, is an innovator in chemical recycling, having recently enshrined it in law and adopted a proposal to promote the use of chemically recycled products³². In such cases, export is not a failure, but a strategic decision to ensure optimal environmental outcomes. Similarly. EfW incineration can sometimes be the most effective solution, depending on the waste type and context.

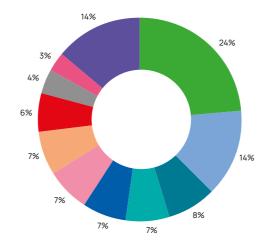


Figure 4: Export destinations of plastic packaging from the UK

Turkey 24%
 Germany 14%
 Spain 7%
 Indonesia 3%
 Belgium 8%
 Ireland 7%
 Other 14%
 Malaysia 7%
 Netherlands 6%

Source: RECOUP

However, when these decisions lack transparency or when the rationale behind them is poorly communicated, the public may feel deceived. This can undermine trust and reduce motivation to sort waste correctly. Communicating with the public about the limits of current recycling infrastructure, what still needs to change, and why it is still best to separate and collect recyclable waste even if some cannot be recycled will be a difficult task, but is important for maintaining public engagement and participation and avoiding greenwashing. Motivating behavioural change should be the prime goal of recycling communications, and this will not happen unless people have faith in the system.

Has past messaging worked?

Given the fragile nature of trust, there is a need to evaluate whether previous communication efforts have successfully informed and reassured the public. Have existing campaigns clarified what is collected, how it is processed, and what environmental outcomes are realistically expected? 60% of local authorities have an ongoing or continuous citizen communication campaign about recycling plastic packaging, but these campaigns are inconsistent across the country. For instance, 40% of local authorities ask citizens to leave lids on bottles but 13% ask for them to be left off. 12% listed lids as separate target items but did not specify if they should be left on the bottle or not, 5% said that they can be either on or off the bottle, and the remaining 30% do not provide any guidance. 54% ask for plastic bottles to be flattened or squashed, which may end up at odds with DRS³³. In another poll, less than half (47%) of UK citizens report receiving recycling information from their local council in the past year. Those who did receive recent communication report higher confidence in their recycling efforts and perceive recycling as more worthwhile34

Local authorities are the most trusted organisations when it comes to waste management. When asked who they trust most to make decisions on how waste is collected from their home and prepared for recycling, 52% of people say the local council and only 6% say the national government³⁵. SR emphasises the power of local authorities to make waste management decisions, so this aspect should be clearly communicated to avoid any perception that the national government is imposing its will on councils through this legislation.



Communication capacity

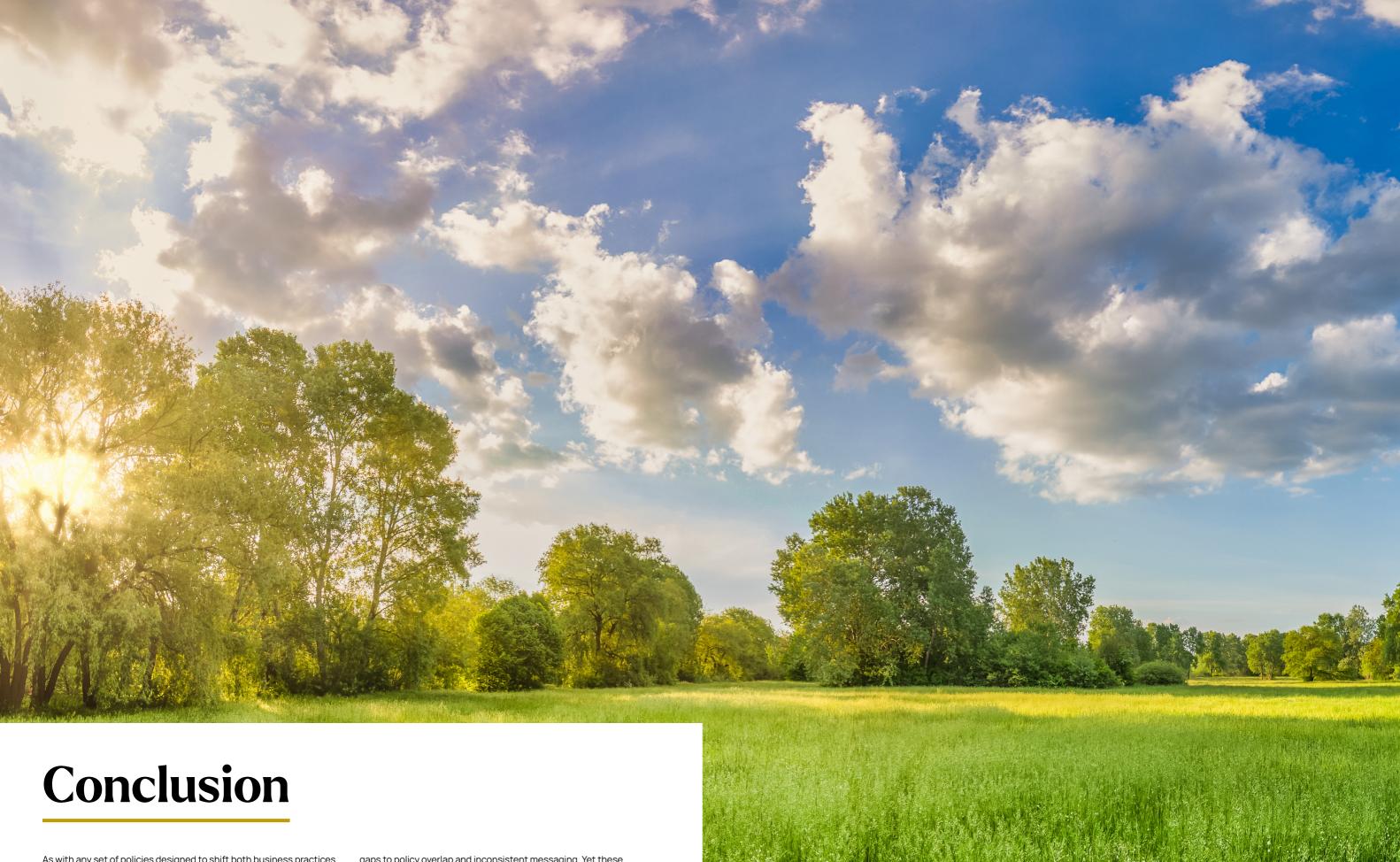
An essential obstacle is the fact that communication infrastructure is underfunded and fragmented. Local authorities lack dedicated funding and resources for consistent public education on systems like SR. For instance, EPR funding was expected to support education in recycling, but as EPR funds remain not ringfenced, they could be diverted to cover other budget shortfalls, leaving communication as an afterthought. Additionally, in recent years, local authorities' budgets have been stretched to the limit, and communication budgets can be one of the first to get cut, with forms of communication like council magazines having been significantly scaled back in the past.

Recycling policy in England is navigating a shifting political landscape where sustainability has become politically toxic in some circles and green targets are questioned ³⁶. To build broader support, it is essential to reframe the messaging around recycling and present it as a driver of national interests as well as an environmental goal. Emphasising themes such as economic sovereignty, resource resilience, technological innovation, and energy security can help position recycling policy as a strategic priority. By pitching these solutions as contributing to national resilience and economic strength, rather than just environmental stewardship, communications campaigns can gain wider political and public backing.

A simple message

Unified branding, a single logo system, and a simple, national message would go a long way towards improving the outcome of SR. Currently, the scheme does not prescribe or require specific signage or bin usage³⁷. While standardising bin colours would be difficult and costly across different local authorities, standardising logos is a simpler process. The EU is moving towards a harmonised labelling system for packaging. One key aspect will be informing consumers that products marked "compostable" are only suitable for industrially controlled conditions, not home composting, which will reduce contamination of the food waste stream³⁸. A similar system would be appropriate for the UK, preventing compostable plastics from contaminating other waste streams and providing a first step towards separately collecting compostable products. OPRL, a nonprofit providing recycling and refill labels to members, has taken an approach promoting labelling which explains what consumers should do with an item rather than what an item is - its "Recycle" and "Do Not Recycle" labels are widespread across the UK, and 3 in 4 consumers recognise and act on its labels³⁹.

It is important to note that not every local authority will be equally prepared for SR implementation at the same time, and a communications campaign should account for this lag period. A big national push must be carefully timed around local and regional preparedness to avoid giving the impression that not all councils are participating. This communications push must be a national priority and learn from the success of previous schemes. By aligning the rollout with transparent messaging and local readiness, the policy can gain the public support necessary for a smooth and effective transition.



As with any set of policies designed to shift both business practices and public behaviour, Simpler Recycling faces inevitable challenges. Political ambivalence towards environmental reform and a decline in public trust add complexity to the task of securing compliance. For this reason, those responsible for implementation must approach the transition with a clear-eyed understanding of the potential consequences, ranging from resource constraints and infrastructure

gaps to policy overlap and inconsistent messaging. Yet these challenges should not undermine the intent or ambition of Simpler Recycling. Instead, they should serve as a catalyst for thoughtful planning and sustained investment. With coordinated effort and clear communication, SR can be a transformative step toward a more circular economy, offering long-term environmental, economic, and social benefits that far outweigh the short-term barriers.

Policy recommendations/ areas for improvement

Invest in national waste infrastructure

- Develop a coordinated national plan to upgrade and equitably distribute MRFs, EfW plants, IVC and AD facilities. This strategy should align infrastructure development with regional needs and population density, while ensuring that rural and lower-income councils are supported.
- Introduce voluntary agreements that provide meaningful incentives for businesses to invest in domestic recycling and processing infrastructure. These could include tax credits, publicprivate partnerships, or regulatory support for investment in UK-based facilities. One example would be partnering with drinks manufacturers to set up recycling plants for their plastic bottles in the LIK
- Collaborate with councils to unlock funding for the modernisation of outdated MRFs and to address capacity limitations in mechanical sorting and storage. Mechanisms could include targeted low-interest loans, grants, or the ring-fencing of funds collected through related policies. For example, returning a share of DRS revenue to local authorities or enabling councils to administer components of the scheme directly would help ensure that funding reaches areas of greatest need.
- Allocate a portion of fees collected from compostable packaging materials toward the expansion of IVC infrastructure and the development of innovative organic waste treatment solutions.
- Provide transitional loans or tax exemptions to local authorities during infrastructure upgrade periods. This support would help reduce overreliance on EfW in the short term and avoid disruptions in service during critical transition phases.

Coordinate and integrate practices across SR, DRS, EPR, and ETS

Conduct a broad, systems-thinking informed, macro-level review to synchronise Simpler Recycling with the Deposit Return Scheme, Extended Producer Responsibility, Plastic Packaging Tax, and Emissions Trading Scheme policies, as well as other mechanisms governing waste, resources, and finance.

Develop viable end-markets for lowvalue and flexible plastics

- Use EPR and government procurement policies to stimulate demand for hard-to-recycle and low-value materials like films.
- Reform the PPT to introduce more market incentives, mandates, and targets for recyclable material. One possibility is a requirement for UK-sourced recycled content to help build a traceable, accountable domestic market, or a recycled content verification system for the UK.
- Incentivise private research and development to promote these markets, potentially through stricter product standards and design-for-recycling requirements.

Reevaluate policies to incentivise innovation

- Include incentives for innovation in SR legislation, allowing time and space for emerging materials to scale and be trialled responsibly. Consider options for circular funding schemes that incentivise industry to adopt new technologies.
- Establish a material classification system that gives innovative, non-virgin-fossil materials a pathway to inclusion in SR collection and processing
- Ring-fence funds raised through EPR and RAM for investment in treatment infrastructure for compostables and low-demand materials to stimulate innovation.

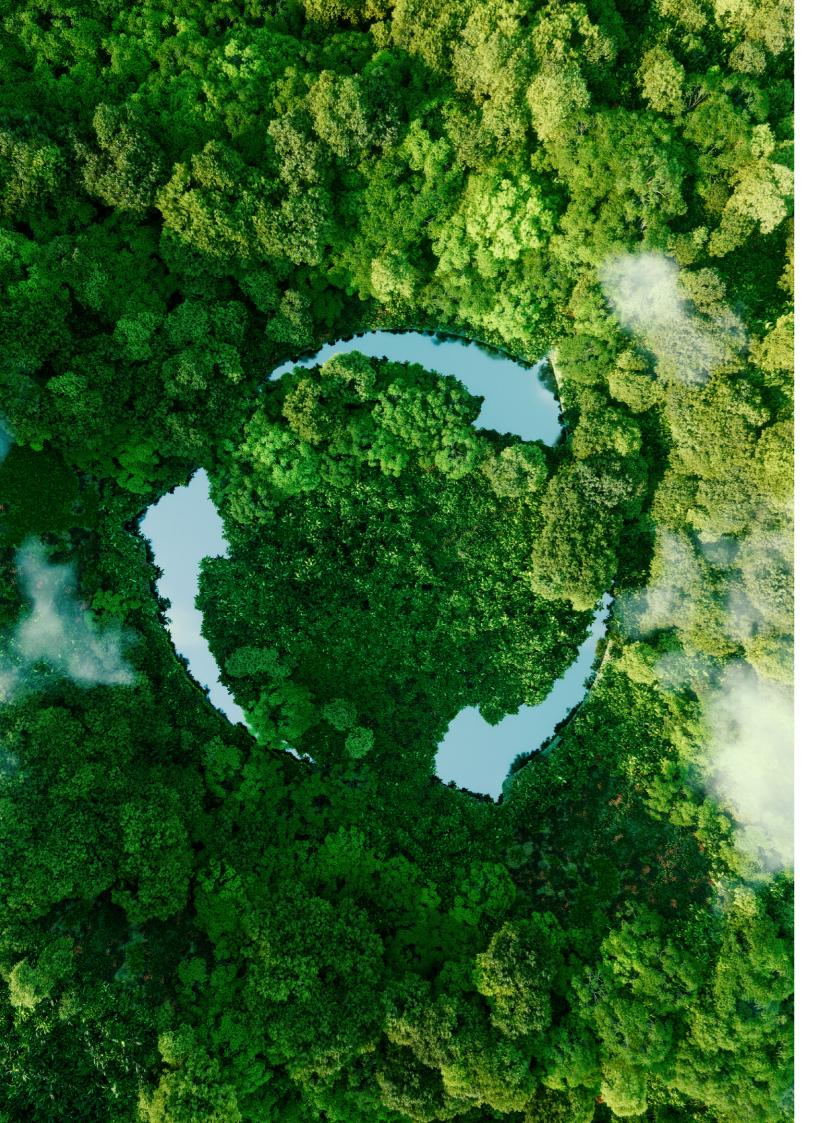
Standardise labelling

- Introduce a UK-wide labelling standard (building on the EU model) for recyclable, compostable, and biodegradable packaging. Digital Product Passports are also an option as an easily accessible source of information about how to recycle products.
- Regulate eco-labeling and ensure claims align with real-world processing capabilities, in line with Green Claims Code and greenwashing regulations.
- Encourage regional coordination to reduce disparities in accepted materials, bin colours, and waste messaging.

Launch a national communication campaign

- Fund a nationwide, multi-channel SR awareness campaign with clear, consistent messaging, akin to past public health campaigns (e.g., drink driving or fire safety).
- Provide a "one-stop" source of information (e.g. a website or an app) that clearly informs which materials can be recycled by which local authorities and where, how people can do it etc.
- Explain the limits of current recycling infrastructure as transparently as possible to avoid the appearance of greenwashing. One possibility is a digital dashboard system showing real-time recycling rates on local authority websites.
- Require a minimum portion of EPR payments to be allocated to ongoing public education and waste behaviour change campaigns
- Frame SR and associated reforms as critical to national resilience, energy security, and industrial strategy in addition to sustainability efforts





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