UK Household Plastic Packaging Collection Survey

2024

RECOUP

Leading a more circular plastics value chain

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2024

RECOUP is the UK's leading independent authority and trusted voice on plastics resource efficiency and recycling. As a registered charity, our work is supported by members who share our commitments including a more sustainable use of plastics, increased plastics recycling, improved environmental performance and meeting legislative requirements. We achieve these by leading, advising, challenging, educating and connecting the whole value chain to keep plastics in a circular system that protects the environment, underpinned by evidence and knowledge.

This report has been written, researched and supported by:

Laura Hutchings - Projects & Data Manager
Steve Morgan - Head of Policy & Infrastructure
Rob Haley - Policy & Infrastructure Manager
Veronika Pluharova - Projects Officer
Kate Sullivan - Education & Engagement Manager
Katherine Fleet - Head of Sustainability & Circularity
Emily Bullimore - Projects Officer

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FOREWORD

The RECOUP UK Household Plastic Packaging Collection Survey is a specialist, research-based report, providing evidence for stakeholders and decision-makers in the household plastics value chain to support sustainable plastic collection and recycling solutions across the UK.

Every year RECOUP circulates an online questionnaire to all UK borough, district, city and county councils, as well as waste partnerships, querying the main factors influencing their recycling collections and operations.

The responses provided grant the unique opportunity for the *RECOUP Survey* to provide a clear and comprehensive picture of the collection of household plastics for recycling in the UK. They also help to identify key challenges and opportunities that local authorities and waste management providers are encountering.

The *RECOUP Survey* is also supported by the Local Authority Recycling Advisory Committee (LARAC)[1] and the National Association of Waste Disposal Officers (NAWDO)[2], which is invaluable when collecting data and reporting results.

In 2024, the total number of local authorities stayed static at 361.

CHALLENGES TO THE SECTOR

The challenges faced by the waste and recycling sector are multi-faceted and complex. Global impacts such as the UK leaving the EU (introducing new hurdles and restrictions on the movement of material), drop in oil prices (making the use of virgin plastic packaging more attractive), and high operating costs all put a strain on the economic viability of UK recyclers.

Add to this cheap imports of virgin packaging and unverified packaging with recycled content from countries with significantly lower cost base and greater access to material, and it becomes clear why budgets and profit margins are becoming increasingly strained.

Investment in the sector is imperative if the UK is going to increase its capacity to recycle domestically, rather than relying on exports.

The current unfeasible financial situation has stunted developments in technology and infrastructure in the sector, and even seen some high-profile site closures. It is therefore unsurprising that 2024 has seen a larger proportion of plastic packaging declared as recycled being exported (611,000 tonnes - 52%) rather than reprocessed domestically (575,000 tonnes - 48%), further hindering opportunities for investment and growth.

2024 has seen some developments and clarity in areas of upcoming legislation. Examples include the release of the illustrative base fees for year 1 of *Extended Producer Responsibility* (EPR) for Packaging[3] [4], as well as the 2024 Autumn Budget[5] confirming EPR funding, and that businesses will be permitted to use a Mass Balance Approach (MBA) when it comes to chemically recycled plastic content for the *Plastic Packaging Tax* (PPT)[6]. These details have been welcomed, however further clear guidance is needed for local authorities and waste management companies to feel confident committing to long-term investments, contracts, and changes to target materials.

POLICY & LEGISLATION

The significance of policy and legislation has been a recurring theme in discussions about recycling and circularity for plastic waste, especially given unique opportunities presented through the considerable changes to the UK's regulatory landscape in recent years. In the past five years, we've seen more new policies and substantial updates to legislation than in the previous 25 years combined – and we are getting ever closer to the first of these new and updated policies coming into effect.

In 2024 the conversation remained similar to 2023 in regards to UK waste policy, however there have been developments in each of the major policy areas, as well as regular updates, such as the annual increase to the UK PPT[6], which rose to **£217.85 per tonne** in April 2024. This is due to be £223.69 per tonne from April 2025.

Largely, 2024 has focused on preparing for EPR[3], which is now effectively UK law under a 'Negative Statutory Instrument'. It was welcome news in the 2024 Autumn Budget[5] to hear that local authorities are expected to receive around £1.1 billion in 2025/26 via EPR, and even more so that, for 2025/26 only, the Treasury has committed to an in-year 'top-up' in the event that EPR does not meet central estimates.

Efforts to harmonise the approaches of UK administrations regarding the *Deposit Return Schemes* (DRS)[7] [8] [9] had made progress, however in November 2024 Wales announced its withdrawal from the UK joint DRS process, stating challenges posed by the *Internal Markets Act* 2020[10]. Despite this, the UK Government confirmed they are still working towards an implementation date of **October 2027** for the England, Scotland and Northern Ireland Schemes[11]. Wales are yet to confirm whether they will do the same.

In May 2024 the UK Government published a consultation on reforms to the *Emissions Trading Scheme* (ETS)[12] to gather feedback on how waste incineration and Energy from Waste (EfW) can be included in the scheme. These changes could have a significant impact on the sector from 2028 and may be particularly challenging for local authorities and their collection frameworks.

Following April's Environment Agency-led consultations into charge proposals for materials facilities, new regulations came into force on 1 October 2024 introducing enhanced sampling and reporting requirements for MRFs[14]. These changes aim to improve the quality of objective data for recyclable materials and support the payment mechanisms for EPR for packaging[3].

The EU also updated the *Packaging and Packaging Waste Regulations* (PPWR)[15] in April this year with new rules to reduce, reuse and recycle packaging, with the guidance most notably committing to packaging reduction, rather than just recyclability, targets[16]. It remains to be seen whether the UK Government adopts these targets, or formulates targets of their own. However businesses will of course be incentivised to reduce unnecessary packaging volumes, despite recyclability, as producers will bear the full cost of managing their products at the end of their life, as set out in DEFRA's *Resources and Waste Strategy*[17].

Alongside this is the upcoming EU waste shipments regulation which will restrict the export of plastic waste to non-OECD (Organisation for Economic Cooperation and Development) countries from November 2026[13]. In 2023, a consultation was expected to be launched in the UK in much the same way, but this has yet to materialise.

THANK YOU

With the continued importance and focus on addressing the challenges of plastic waste, the *Survey* responses from local authorities and waste management providers each year are increasingly valuable.

RECOUP would like to thank all the local authority waste management and recycling scheme staff members and their service contractors who took the time to respond to this year's *Survey*. The continued support from across the plastics supply chain helps to make the research that forms the core data both comprehensive and worthwhile.

Despite the challenges faced in recent years, **70%** of UK collection authorities took the time to provide information that contributed to the outputs of the report this year.

Data and views in this report will feed directly into waste management and resource strategy development. This includes consultations, advisory groups, and discussions. It will also help to highlight opportunities and challenges to the wider industry, decision-makers, and the media on a global level.

The *RECOUP UK Household Plastic Packaging Collection Survey* is also supported by the Local Authority Recycling Advisory Committee (LARAC)[1] and the National Association of Waste Disposal Officers (NAWDO)[2].

To find out more about RECOUP and membership, visit the RECOUP website at www.recoup.org.

You can also follow us on the following social media channels:

@RECOUP_UK on X and LinkedIn. For those working with companies and organisations to increase plastics recycling, covering policy & infrastructure, packaging design & recyclability, and sustainability & circularity.

@Pledge2Recycle on Facebook, X and Instagram. For community & education; cutting the confusion around plastic recycling; and work with schools, clubs and community groups to answer plastic recycling questions. You can also visit the Pledge2Recycle Plastics website at www.pledge2recycle.co.uk.

Thank you to all of the following waste management companies, local authorities and waste partnerships for their continued support of RECOUP through membership.

Thalia Waste Management
Newcastle Under Lyme Borough Council
City of Bradford Metropolitan District Council
Huntingdonshire District Council
Cleaner Greener today tomorrow
Greater Cambridge Shared Waste
Recorra
SUEZ
Biffa Polymers
Lincolnshire County Council Working for a better future
West Sussex County Council
Southend-on-Sea City Council
North Yorkshire Council
Derbyshire County Council
Cambridgeshire County Council
Viridor
Durham County Council
greenredeem
Sherbourne Recycling
clean planet Energy
Veolia
Staffordshire Moorlands District Council Achieving Excellence
High Peak Borough Council
Norfolk recycles
news
Milton Keynes City Council
Bryson Recycling

DATA SUMMARY

361 UK Local Authorities

100% collect plastic bottles

89% collect plastic PTT

14% collect plastic film

HOUSEHOLD COLLECTION RATES

65% plastic bottles

40% plastic PTT

8% plastic film

1,186,000 tonnes of plastic packaging declared as recycled from all sectors in 2023

43% overall collection rate of all consumer plastic packaging in 2023

587kt of household plastic packaging collected for recycling in 2023

66% plastic bottles

plastic PTT **30%**

4% plastic film

ADVICE TO CITIZENS

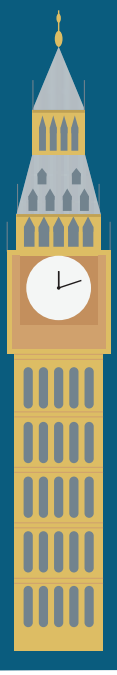
40% lids on bottles

85% empty / rinse

54% flatten / squash

53% loose

KEY POLICY AREAS



- Extended Producer Responsibility (EPR)
- Deposit Return Schemes (DRS)
- Emissions Trading Scheme (ETS)
- Simpler Recycling
- Plastic Packaging Tax

52% of UK waste plastic packaging declared as recycled is exported

NATION COLLECTION RATES

54% Wales

45% N Ireland

43% England

39% Scotland

Collection rate for all rigid plastic packaging (bottles and PTT) **55%**

60% have a continuous or ongoing communication campaign about recycling to residents

21kg of plastic packaging collected per household

14kg plastic bottles

6kg plastic PTT

1kg plastic film

PLASTIC COLLECTED FOR RECYCLING

55% source-separated

13 billion plastic bottles used each year in the UK

65% collected for recycling

35% NOT collected for recycling

REPORT SUMMARY

UK HOUSEHOLD PLASTICS COLLECTION DATA

- As of April 2024 there were **361** UK local authorities, all of which provide a kerbside recycling collection service for household plastics.
- **587,000 tonnes** of household plastic packaging was collected for recycling in 2023.
- The overall collection rate of household plastic packaging in 2023 was **43%**.
- The collection rate for all rigid plastic packaging (bottles, and pots, tubs and trays (PTT)) in 2023 was around **55%**.
- The overall collection rate for each individual UK nation in 2023 was **43%** for England, **54%** for Wales, **39%** for Scotland and **45%** for Northern Ireland.

PLASTIC PACKAGING PLACED ON THE MARKET FIGURES

- 2023 consumer plastic packaging Placed on the Market (POM) data was determined based on an amalgamation of available reported data as well as extensive discussions with industry experts including packaging producers. It accounts for a variety of factors including reductions in waste arising figures and consumer spending as well as variables such as lightweighting and material substitution.
- It is estimated that, in 2023, **1,350,000 tonnes** of household plastic packaging was POM in the UK.
- Of this, **594,000 tonnes** were plastic bottles, **432,000 tonnes** were plastic PTT and other rigid plastics, and **324,000 tonnes** were plastic films and flexibles.
- **1,186,000 tonnes** of plastic packaging was declared as recycled from all sectors in 2023.

PLASTIC BOTTLES

- **100%** of UK local authorities offered kerbside recycling collection for plastic bottles in April 2024, and this has been the case since 2019.
- **388,000 tonnes** of plastic bottles were collected for recycling in 2023.
- In 2023, the overall collection rate for all household plastic bottles was **65%**.
- **66%** of household plastic packaging collected at kerbside for recycling was plastic bottles.
- This breaks down as **14kg** of plastic bottles collected per household out of **21kg** consumed.
- Over **13 billion** plastic bottles are POM each year in the UK. That's almost **36 million** plastic bottles per day, and **1.3** bottles per household per day.
- Over **8.5 billion** plastic bottles were collected for recycling in 2023. That's over **23 million** bottles every day.
- **4.5 billion** household plastic bottles were not collected for recycling from UK households in 2023. That's more than **12 million** plastic bottles every day.
- The average UK household uses **459** plastic bottles a year and recycles **300** of them.
- **425 tonnes** of plastic bottles were collected for recycling in 1994. Since then, **127.5 billion** plastic bottles, **5.8 million tonnes** of plastic, have been collected for recycling.
- In 2023, Wales achieved a bottle collection rate of **80%.**

PLASTIC POTS, TUBS AND TRAYS (PTT)

- In April 2024, **322** (**89%**) local authorities offered kerbside recycling collection for plastic PTT.
- In 2023, there was a **40%** collection rate for plastic PTT.
- **30%** of plastic packaging collected was plastic PTT.
- **174,000 tonnes** of plastic PTT was collected for recycling in 2023.
- This breaks down as **6kg** of plastic PTT collected per household per year, out of a total of **15kg** per household POM.
- Around **11,000 tonnes** of plastic PTT was collected in 2007. This is now over **173,000 tonnes** annually. Since 2007, a total of **2.2 million** tonnes has been collected for recycling.

PLASTIC FILMS AND FLEXIBLES

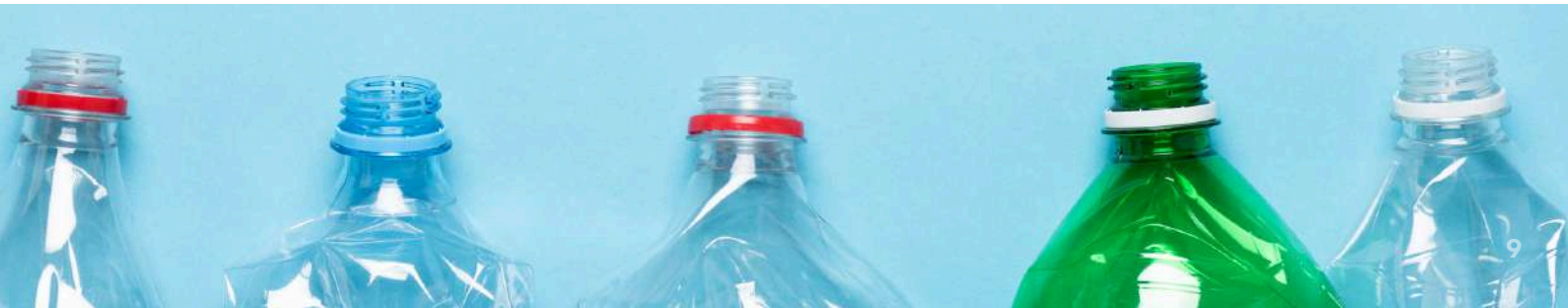
- In April 2024, **49** (**14%**) local authorities offered kerbside recycling collection for plastic films and flexibles.
- **25,000 tonnes** of plastic film was collected for recycling in 2023. This does not include tonnages from Front-of-Store schemes.
- In 2023, there was a **8%** collection rate for plastic films and flexibles.
- **4%** of plastic packaging collected at kerbside was plastic films and flexibles.
- This breaks down as **1kg** of plastic films and flexibles collected per household, out of **11kg** consumed.
- **29%** of the 49 local authorities who collect plastic films and flexibles **only accept carrier bags.**

COLLECTION METHODS

- **69%** of local authorities collect recyclables on a **fortnightly** basis, **21%** at least once a week, and **11%** 3-or-4 weekly.
- **76%** of local authorities use **wheelie bins** to collect plastics for recycling at kerbside, with **blue** being the most common bin colour. Other kerbside collection methods include bags or sacks (**14%**) and boxes (**10%**).
- **45%** of local authorities collect recyclable materials in **co-mingled streams**, whilst the other **55%** use some form of **source-separated collection** (e.g. separate glass or paper).
- **12%** of local authorities communicate that they collect plastic **plant pots** at the kerbside for recycling.

ACTUAL RECYCLING RATES

- Collection data does not reflect actual recycled material quantities with yield losses meaning Material Recovery Facility (MRF) input quantities are between **15 to 50%** higher than the reprocessing output quantities.
- Local authorities reported **material reject rates** of up to **37%,** with an average of **14%.**



TREATMENT OF RESIDUAL WASTE

- Residual waste treatment continues to be a key subject in recovering post-consumer plastic packaging, finding new sources of material to capture for recycling, and reducing spending on gate fee costs for energy recovery and landfill. This is particularly the case with the upcoming reforms to the *Emissions Trading Scheme* (ETS).
- **88%** of local authorities use **energy recovery** as a treatment solution for residual waste.
- **26%** of local authorities reported that they **recover recyclable plastics from their residual waste** stream.

WASTE CRIME: LITTER AND FLY-TIPPING

- **50%** saw **litter and fly-tipping as an equal concern**, but **31%** felt fly-tipping was a greater problem than litter, and only **19%** said litter was more problematic than fly-tipping.
- **64%** of local authorities who shared an opinion felt that their area was '**predominantly free of litter and refuse apart from small items**'.
- **38%** of local authorities reported an **increase in litter and/or fly-tipping** in 2023/24.
- **84%** of local authorities are undertaking **litter-picking activities**, **59%** enforcing **litter penalties**, and **57%** conducting **anti-litter communication campaigns.**
- **69%** of local authorities who gave a response said that **retail and commercial areas of the town centre** were a known 'hot spot' for litter in their area, with **46%** also noting **highways**, **30%** stating areas of the **nighttime economy**, and **24%** noting around **schools and educational facilities.**

EXPORT OF PLASTIC PACKAGING FOR RECYCLING

- **Turkey** remained the main destination for UK exports of plastic packaging from all sectors in 2023, as it was in 2022.
- In 2023, **22%** of all exported plastic packaging for recycling went to non-OECD countries.
- **52% (611,000 tonnes)** of the UK plastic packaging declared as recycled was exported for reprocessing in 2023, and **48% (575,000 tonnes)** stayed in the UK. This is the first year since 2020 where the tonnage exported has exceeded that recycled domestically.
- It remains a challenge to audit material market flows with continued examples of UK waste being found abroad.
- Precise information and transparency about end destinations of exported materials should be high on the agenda for the UK, as well as moving away from the reliance on export.

- In 2023, Packaging Recovery Note (PRN) prices averaged around **£273 per tonne** and ranged from **£115 to £575 per tonne.**
- These extremes highlight the complex and potentially volatile nature of markets and how any reform to the packaging producer responsibility system needs to control and stabilise any future version of PRNs.

COMMUNICATIONS

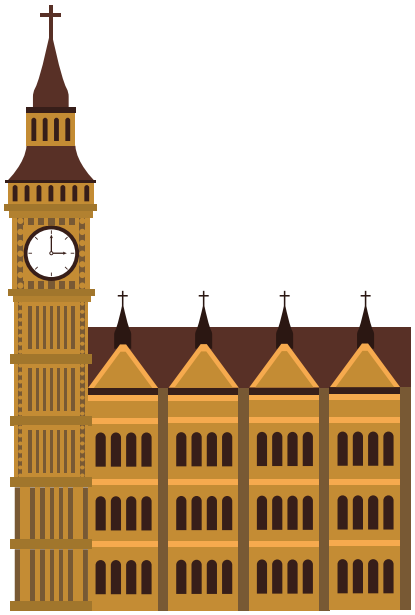
- **60%** of local authorities have a **continuous or ongoing communication campaign about recycling** to residents taking place, and a further **28%** have run a campaign in the last 12 months.
- **40%** of local authorities advise for **lids to be on bottles**, while **13%** ask for **lids off**. **12%** list plastic lids separately, but do not specify whether they should be attached to a bottle or not, and **5%** say they can be placed for recycling either on or off the bottle. The remaining **30%** do not provide any guidance.
- **85%** of local authorities ask their residents to **empty, rinse and/or wash** plastic packaging before disposal.
- **54%** of local authorities ask residents to **flatten and/or squash** bottles before disposal.
- **6%** of local authorities used **polymer codes** to communicate to residents what plastics can and cannot be collected for recycling at kerbside.

UK POLICY & LEGISLATION

- The policy and regulation of the UK's waste and recycling, particularly around plastic packaging, continued to develop in 2024 ahead of major changes in the coming years.

Extended Producer Responsibility (EPR)

- Reform of the UK Packaging Producer Responsibility System, otherwise known as EPR, continues to develop.
- EPR will fund the 'full net cost' of managing the collection, transport, sorting, reprocessing and disposal of packaging waste.
- As of October 2024, for all intents and purposes, **EPR is now UK law** under what is known as a 'Negative Statutory Instrument'.
- EPR will be calculated through recyclability modulation based on the recyclability performance of packaging POM. Illustrative base fees have been published to provide a picture of what fees may look like, but are yet to be finalised.
- Local Authorities are due to receive the first half of payments under EPR for the year 2025/26 between **October and December 2025**, with the third and fourth quarters being paid in January and March 2026 respectively.
- The 2024 Autumn Budget highlighted that local authorities can expect around **£1.1 billion** in funding from EPR in 2025/26, and the Treasury has promised an in-year top-up if local authorities do not receive this projected income, for 2025/26 only.
- **89%** of local authorities that gave a response said they were **supportive or strongly supportive** of the introduction of EPR. Only **1%** said they were **strongly against**; the remainder were neutral.



Deposit Return Schemes (DRS)

- The DRS due to be introduced in Scotland in 2023 experienced further delays due to issues with the Internal Markets Act (IMA) and the inclusion of glass in the scheme. This, along England and Northern Ireland, is now due to be introduced from **October 2027**.
- Wales is now the only administration still intending to include glass in their scheme. After announcing their exit from the Joint UK DRS process, the implementation date for a Welsh scheme is yet to be confirmed.
- **49%** of local authorities that gave a response said they were **supportive or strongly supportive** of the introduction of DRS. **13%** said they were **against or strongly against**, and **38%** were neutral.

Simpler Recycling in England

- *Simpler Recycling* aims to ensure a consistent set of materials are collected for recycling at kerbside across England, including plastic films and flexibles and food waste.
- By **31 March 2025**, non-household municipal premises (such as hospitals, schools, and businesses), except micro-firms (businesses with fewer than 10 FTE employees), will be required to collect recyclable waste streams, excluding garden waste and plastic film.
- By **31 March 2026**, local authorities will be required to collect recyclable waste streams, excluding plastic film, from all households in England, including a weekly food collection for every household, unless transitional arrangements are agreed.
- By **31 March 2027**, micro-firms will be required to collect recyclable waste streams, excluding garden waste. Plastic film collections from residential properties will also begin.
- **80%** of local authorities that gave a response said they were **supportive or strongly supportive** of the introduction of *Simpler Recycling*. **4%** said that they were **against**; and the remaining said that they were neutral.
- The Welsh Government introduced its own consistency legislation for businesses in April 2024 with its new *Workplace Recycling Regulations*. This requires businesses by law to separate their recyclable waste for collection.

Plastic Packaging Tax (PPT)

- HMRC's UK Plastic Packaging Tax (PPT), which was implemented in April 2022, increased to **£217.85 per tonne** from April 2024. The tax applies to packaging that is predominantly plastic by weight and contains less than 30% recycled content.
- In 2023/24, the PPT made **£268 million** – a **decrease of 6%** on its first year.
- In summer 2023, HMRC consulted on Chemical Recycling and the Adoption of the Mass Balance Approach (MBA) in respect of the PPT. The 2024 Autumn Budget has confirmed that businesses will be authorised to use the MBA to evidence the recycled content in chemically recycled plastics for PTT.

Single-Use Plastic (SUP) Legislation

- SUP bans have been introduced in England and Wales (from October 2023), and Scotland (from August 2022), restricting the distribution and sale of several single-use plastic items. Wales is due to begin a second phase of its ban in 2026.
- **90%** of local authorities that gave a response said they were **supportive or strongly supportive** of SUP legislation. Only **1%** said they were **against**; the remainder were neutral.

Emissions Trading Scheme (ETS) Reforms

- 2024 saw further discussion around the inclusion of emissions from waste incineration and Energy from Waste (EfW) as part of ETS.
- **32%** of local authority respondents were **not aware of the upcoming extension of ETS** and its impact on incineration and energy recovery of local authority waste.
- When asked how prepared they felt for the changes to ETS on a scale of 1 to 10 (with 1 being not prepared at all, and 10 being fully prepared), **37%** gave a score of **3 or below**, indicating they do not feel confident about how it will operate. Only **12%** gave a 7 or higher, with no local authorities giving a score of 10.
- The ETS scope expansion is due to come into effect from 2028 after a two-year transitional monitoring period starting in 2026.

RECOUP - OPINION

With packaging Extended Producer Responsibility (EPR) coming into force, progression towards consistent material collections and implementation of Deposit Return Schemes (DRS), we are in a period of huge transition for packaging collection and recycling.

Looking at EPR funding, base fees for packaging producers are being worked on and we now know local authorities should receive their first payments between October and December 2025, receiving half to start with and further 'quarter' payments in January and March 2026.

There will be a process to go through as to what this funding level will be, whether it is enough, and how it potentially can be increased through efficient and effective performance.

The RECOUP team would like to thank the local authorities who responded to this *Survey* and provided so much data, information and views. Of course, this report focusses on plastic packaging collected for recycling, but there is increasing interest and also concern from the information we've received about recycling outlets for the collected material.

Whereas the 'full net cost' of packaging EPR focusses on the collection and primary sorting of these materials, the reprocessing sector – those creating raw materials to be used in new products – needs commercial support to operate, and looking to the future, potential investors need reassurance about commercial viability.

In the *2023 Survey* report I questioned whether recycling end markets are the prickly thorn no one wanted to touch, and it's not news that the UK plastic packaging reprocessing markets are now experiencing a significant downturn.

Given longer term plans for net zero and a need for intelligent use of the world's resources, including the intended move away from traditional waste management destinations such as landfill and energy recovery, the reprocessing sector needs to be given the platform it deserves. However, the current market dynamics mean there is almost an ongoing dismantling of the UK infrastructure with some high-profile closures, and with surely more to follow, intervention is desperately needed.

Why is this happening? Huge increases in energy costs and operational challenges aside, UK recyclers are increasingly commercially unviable due to having to compete with cheap imports of virgin (new) packaging and unverified packaging with recycled content from countries with a significantly lower cost base to produce the material. The same is also happening in Europe with Plastics Recyclers Europe warning that the EU plastics recycling industry is at "a crossroads".

Domestically, there is so much potential and genuinely exciting technologies and developments, but how do we stop the downward trend and start to build again?

There are interventions that can change the current direction to provide genuine commercial support, reduce fraud in the system, and start to address the unlevel playing field UK recyclers are competing in, and there are two key areas to focus on.

One is an absolute focus on verification and enforcement of unverified material with recycled content, particularly from non-UK and EU markets. One of the reasons is the *Plastic Packaging Tax* (PPT), which provides a financial incentive to include a minimum of 30% recycled content. It was set up as an 'environmental tax' and it is a force for good as long as false claims of recycled content are not short circuiting the system at the expense of UK recyclers.

A second is an urgent review and overhaul of the Packaging Recovery Note (PRN) system; the sole commercial support for plastic reprocessors and exporters. Just over a year ago, the PRN price was at a relatively buoyant £300 and so 'price support' was in place to act as a commercial driver to pull materials through the system. However, the nature of the PRN means it is constantly fluctuating, and the current PRN is a fraction of that £300 figure. The PRN function needs be to a commercially supportive funding stream to give inherent value to the material and provide targeted funding where it is needed the most.

Some changes are happening though. There was an announcement in the 2024 Autumn Budget that businesses will be permitted to use a Mass Balance Approach (MBA) to provide evidence of recycled content in chemically recycled plastic for the purposes of the PPT. Allowing chemically recycled material to count as recycled content should be a positive step towards creating the 'investable conditions' in the UK regarding these range of technologies, but the whole reprocessing sector needs incentives and enablers to make the UK plastic recycling sector a commercially sound and maybe even attractive proposition for investment.

However, the many hundreds of millions raised from the PPT goes to the HM Treasury and none will go back into the reprocessing sector or towards enforcement and verification of recycled content. Imagine if this game-changing funding stream could be used to build on the platform local authorities provide to collect plastics for recycling, and be diverted into developing and supporting UK reprocessors? This is just one example to show that opportunities are always there to give recycling the platform it deserves – it's just whether a commercial environment can be created to enable that to happen.

Steve Morgan

Head of Policy & Infrastructure

RECOUP - OUR ROLE

RECOUP is a charity and leading authority built on a network of members that provides expertise and guidance across the plastics recycling value chain committed to securing circular solutions for plastic resources.

RECOUP is the UK's leading independent authority and trusted voice on plastics resource efficiency and recycling. As a registered charity, our work is supported by a network of 180 members who share our commitments.

RECOUP Commitments

- More sustainable use of plastics
- Increased plastics recycling
- Improved environmental performance
- Meeting legislative requirements

RECOUP achieves its commitments by leading, advising, challenging, educating and connecting the whole value chain to keep plastics in a circular system that protects the environment, underpinned by evidence and knowledge.

Members of RECOUP include retailers, brands, packaging producers, waste management companies, and local authorities, among other organisations. RECOUP receives no government funding, is independent, and aims to achieve the best environmental outcomes in respect to plastics and packaging.

RECOUP is the only truly independent organisation representing the whole plastics value chain and wider stakeholders, and its board of trustees meet regularly to contribute to the development of RECOUP's strategy and direction. Trustees are nominated and elected by RECOUP members, and each provide specific expertise in plastic resource management and recycling, including finance and legal issues. RECOUP therefore serves the shared interests of the plastics resource and recycling value chain and offers the best value for its members.

The annual RECOUP Conference is the not-to-be-missed event within the plastics recycling value chain. With hundreds of delegates in attendance, the RECOUP Conference is unique in its ability to draw together stakeholders, NGOs, local and national government bodies, and companies with business interests to network and share best practice. The next RECOUP conference will be held on the **25th September 2025.**

Together with members, the board, and communication channels, RECOUP can influence policy, strategic development, and change. RECOUP would like to acknowledge the support from all its valued members which has allowed the completion of this year's *UK Household Plastic Packaging Collection Survey.*

Our Work

METHODOLOGY & REPORTING

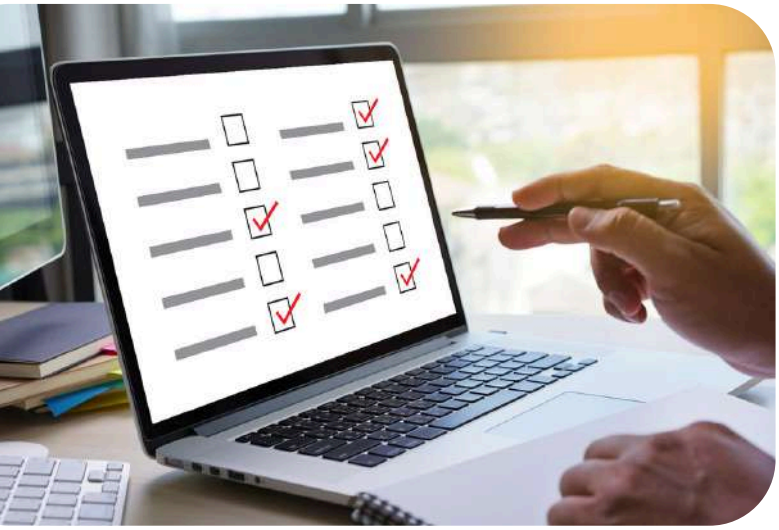
Every year, RECOUP's UK Household Plastic Packaging Collection Survey analyses responses and data collected from all UK local authorities, county councils and waste partnerships, in order to understand the quantities, challenges and opportunities associated with household plastic recycling. It also gives the Survey the unique opportunity to identify year-on-year trends.

To help understand the landscape for household plastics recycling, several different figures and sources are required. This includes how much plastic packaging is Placed on the UK Market (POM) each year, where it is used, how much is collected, associated plastic and Packaging Recovery Note (PRN) values, as well as other incentivising factors for the collection of these materials.

THE QUESTIONNAIRE

In May 2024, RECOUP sent out an online questionnaire to all 361 UK local authorities, as well as county councils and waste partnerships. The questions covered topics around the amounts of plastic collected at kerbside, how this is broken down by format, the destination of this material, as well as challenges, opportunities, and opinions of upcoming policy changes.

The response rate of collection authorities responding to the *2024 RECOUP Survey* was **70%**.



SERVICE PROVISION

The service provision of a local authority is defined as whether or not they communicate to their residents that a certain plastic format or product is accepted for collection at kerbside.

It may be that a plastic format or product is accepted by the waste management provider's sorting facility but is not communicated by the local authority as acceptable. This could be because of a variety of reasons, such as contractual obligations, logistics or economics. Where this is the case, local authorities are categorised as not providing a collection scheme for that format or product, as its collection is not communicated to residents.

Each year, every local authority website is explored to understand the messaging communicated to residents. This includes what items can be accepted for recycling at kerbside, receptacles used for recycling, frequency of collections, and instructions on how to present the packaging for recycling (replace or remove bottle lids, wash/rinse, flatten/squash etc.).

In some instances conflicting messaging was found, particularly where there is an inconsistency in the language used to describe the same plastic items and formats. For example, a local authority may communicate that they collect one type of 'film', but not another (e.g. targeting carrier bags but not cling film). Where this occurred, further research and investigation was carried out to clarify results.

PLASTIC PLACED ON THE MARKET (POM)

The quantity of plastic packaging that is POM is important for measuring the UK's collection rates. RECOUP has historically used Valpak's *PlasticFlow* and *PackFlow* reports[18 19 20] to obtain this number.

The *2024 Survey* has seen added complexities with calculating accurate POM figures due to a variety of factors. Global impacts over the last few years, including the widespread cost-of-living crisis, have influenced both operations and consumer habits, resulting in reduced waste arisings and consumer spending. Changes to packaging itself through modifications such as lightweighting and material substitution are also having an effect, as is the impending recyclability modulation for packaging *Extended Producer Responsibility* (EPR)[3].

The *2024 RECOUP Survey* has used a combination of sources to arrive at the most accurate POM figure possible, which included Valpak's most recent *Packflow Refresh 2023: Plastic* report[20] and the EPR 2023 reported packaging data available through the *National Packaging Waste Database* (NPWD)[21]. Extensive discussions with industry experts were also conducted to understand wider market observations and perspectives.

The *Survey* estimates **1,350,000 tonnes** of plastic packaging was POM in the UK in 2023. These figures will be further refined over the next 12 months to get a clearer understanding and breakdown of the plastic packaging on the UK market.

COLLECTION DATA CALCULATIONS

Although a high proportion of the data and analysis in the *Survey* is based on actual responses from local authorities, analysing and measuring performance indicators is not a straightforward process. There are a well-established number of performance indicators provided for plastic collections, but there are many factors that can influence a scheme's collection performance, operational efficiency and cost. These include the type and quantity of other material collected, the type of location it is collected from (urban or rural), housing types, socio-demographics, and how the scheme is communicated to residents. All data is analysed thoroughly, and data considered to be incorrectly reported is omitted or re-estimated using appropriate available data and averages.

Estimating the composition of household plastics collected at kerbside is challenging due to the inconsistencies in both the collection and reporting of data by local authorities. This may be due to reasons such as differences between reporting times, contractual arrangements, and the co-mingling or source-separation of different materials. There is often variation in how data is presented by local authorities, such as whether it is as one overall Dry Mixed Recycling (DMR) figure, plastics only, or by individual format. Due to these variables, collection quantities cannot be calculated by aggregating the provided collection data. Accurate and audited estimated collection data is reliant on the processes in place, and these vary by local authority.

In instances where there is no, or only partial, collection data reported, the dataset is completed based on the service provision, and then by applying collection quantities based on those services. The collection quantities are calculated by either using previous *Survey* responses with adjustments based on overall received data, or average performance data using the number of households against the average that can be expected to be collected for these households.

Household figures are taken from the *2021 Census* from the Office for National Statistics (ONS)[22] as well as *Northern Ireland Housing Statistics* from the Department of Communities[23].

Where a county council has provided collection data as a cumulative for all its authorities, any individual responses are taken into consideration, and the remaining figure is attributed to those who do not have a representative number.

MIXED PLASTICS

As local authorities often record and report their data differently to one another, plastic packaging can sometimes be reported as 'mixed plastics', and clarification is therefore needed on the different interpretations and composition of this fraction. Compositions can vary considerably between local authorities depending on the target outputs and the efficiency of the Material Recovery Facility (MRF). Some facilities only segregate certain plastic bottles, like clear PET and natural HDPE bottles, and leave others in with the plastic pots, tubs and trays (PTT) or 'mixed plastics' fraction. These then go for further sorting or export. Other facilities may leave all plastic packaging together to try to ensure a positive value for all outputs. It should be noted that where there are large quantities of material to process, or at the faster sorting facilities, more bottles can end up in a PTT or 'mixed plastic' fraction.

OTHER DATA CONSIDERATIONS

Dry Mixed Recycling (DMR)

Plastic packaging quantities are increasingly being reported as part of co-mingled totals for all DMR. Therefore, plastic packaging quantities are calculated by using percentage averages dependent on the variety of plastic formats collected in that individual scheme.

Plastic Packaging Only

Plastic packaging only quantities can be reported by local authorities operating source-separated collection schemes. A percentage is also sometimes estimated based on compositional analysis by the local authority or waste management provider, or through a specific percentage composition recommended to be used by WasteDataFlow (WDF)[24]. It is often not possible for local authorities to provide plastic collection quantities broken down by format.

Multiple Collection Schemes

Local authorities can report collection quantities from all services they provide, including kerbside collections and bring schemes, recycling 'On-the-Go' (OtG) schemes and Household Waste Recycling Centres (HWRC). In some cases, data and responsibility for these is held at a county level, rather than a district council level. Many of these schemes' bins are serviced as part of the kerbside collection route, and this is accounted for when calculating collection quantities.

Plastic Films and Flexibles

Local authorities are often unable to provide granular data down to the levels of plastic film and flexibles within mixed waste streams, however assumptions can be made based on the provision that is in place. For example, the quantities of plastic films and flexibles collected in an authority that does not target them will be low, but they are still likely to receive a fraction in combination with other packaging (e.g. film lids on PTT, collection bags, etc.), or through citizens incorrectly disposing of these items in their recycling bin. This has been considered in data estimations within the *Survey*.

EXPORT MARKETS

In order to understand plastic packaging tonnages exported and recycled domestically, as well as export destination countries, NPWD[21] produced by the Environment Agency (EA)[25] is consulted, as well as Freedom of Information (FOI) requests made to the EA, Natural Resources Wales (NRW)[26], Scottish Environment Protection Agency (SEPA)[27], Department of Agriculture, Environment and Rural Affairs (DAERA)[28] and Northern Ireland Environment Agency (NIEA)[29]. PRN and plastic prices are taken from letsrecycle.com[30] unless otherwise stated.

PLASTIC COLLECTION SERVICES

The recycling journey cannot begin without the collection of items disposed of by the public, therefore success at this stage is vital to ensure material is captured within circular economy models. The RECOUP Survey explores in depth the service provision provided by local authorities to gather household plastics from residents.

The *Household Waste Recycling Act 2003*[31] requires all local authorities in the UK to provide at least two types of kerbside collection. This established setup means that year-on-year changes to service provision are limited. However, various policies and legislation are due to be introduced in the coming years which will have an impact on the service provided by local authorities.

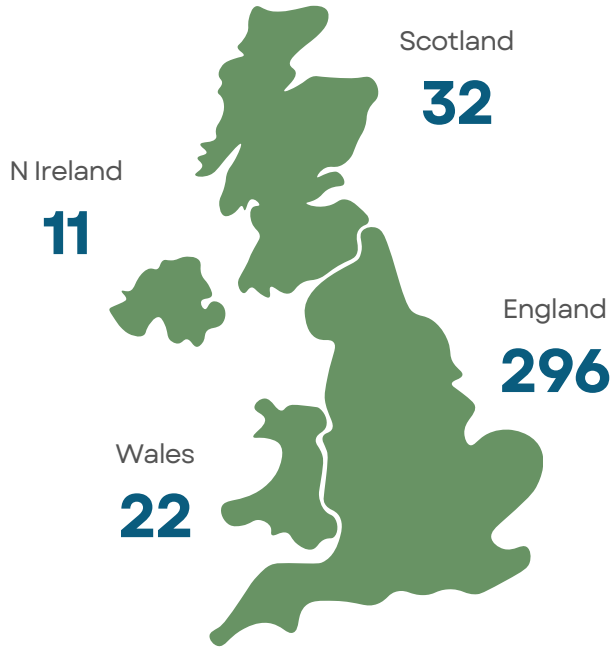
Examples of legislative reforms include *Deposit Return Schemes* (DRS)[9] [10] [11], *Extended Producer Responsibility* (EPR)[3], *Simpler Recycling*[32] and the upcoming extension of the *Emissions Trading Scheme* (ETS)[12] to include waste, or more specifically, emissions from Energy from Waste (EfW) plants. These reforms are likely to have a considerable effect upon the kerbside collection and recycling of plastics.

DRS is likely to remove large amounts of valuable PET drinks containers from kerbside recycling streams. EPR will reform how local authorities are funded with regards to waste management, collection, and communications to residents. The ETS expansion may also indirectly encourage more materials to be accepted for collection at kerbside by providing new reprocessing opportunities through a boost to the chemical recycling industry. However, this will likely be a lengthy process that requires further industry research, development, and investment.

Perhaps the most impactful to service provision itself will be *Simpler Recycling*[32], which will ensure a consistent set of materials is collected for recycling by all local authorities in England. Local authorities will be required to collect recyclable waste streams, excluding plastic film, from all households in England by 31 March 2026. Plastic film will be included by 31 March 2027.

As well as England's *Simpler Recycling* legislation, the devolved administrations each have their own guidance concerning kerbside recycling schemes. The Scottish Government and the Convention of Scottish Local Authorities (COSLA)[33] have a *Household Recycling Charter*[34], the Welsh Government has its *Collections Blueprint*[35], and the Department for Agriculture, Environment and Rural Affairs (DAERA) has its *Waste Management Plan*[36] for Northern Ireland.

As of April 2024, there were **361 local authorities** in the UK:



The total number of local authorities had reduced in recent years due to a trend of local authorities merging in England. This had been done as part of cost-saving measures and the streamlining of services. However, this year, the number stayed static.

KERBSIDE COLLECTION

In the UK, the majority of plastic packaging collected for recycling is from kerbside collections. The breakdown of these resources, by plastic format, currently shows the following provisions for collections across the UK:

Plastic Bottles

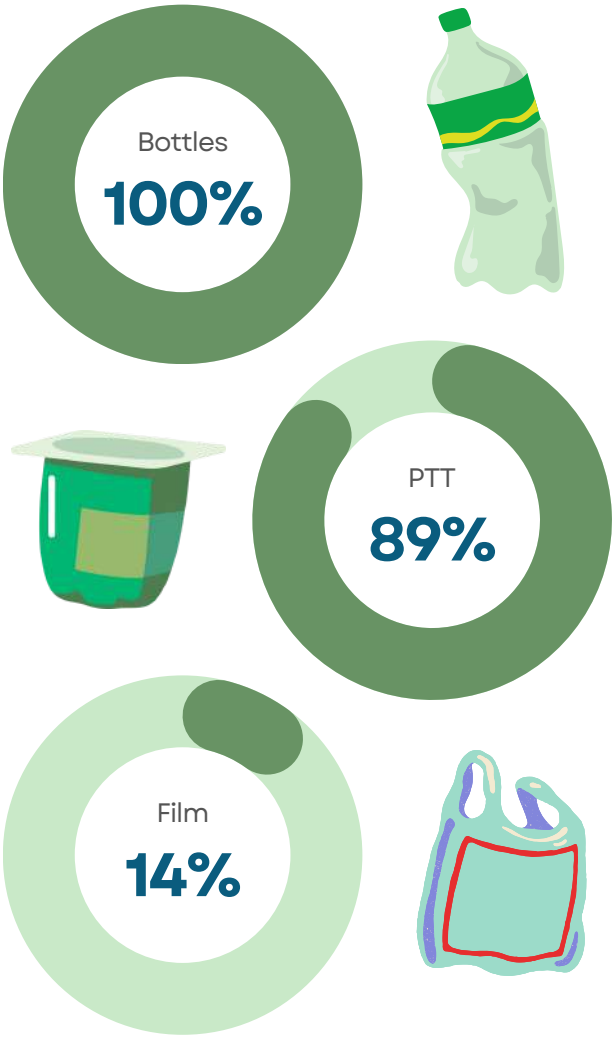
All 361 UK local authorities **collect plastic bottles at kerbside** and have done so since 2019.

Plastic Pots, Tubs & Trays (PTT)

89% of UK local authorities currently **accept PTT in their kerbside collection schemes**, which is a 1% increase on the *2023 RECOUP Survey*. Growth in the number of local authorities collecting PTT at kerbside has been slow, with the material often seen as low quality and value, hindering end market opportunities.

Plastic Films and Flexibles

After 6 consecutive years of decline, the number of local authorities **collecting plastic films and flexibles at kerbside** has increased slightly to **14%.**



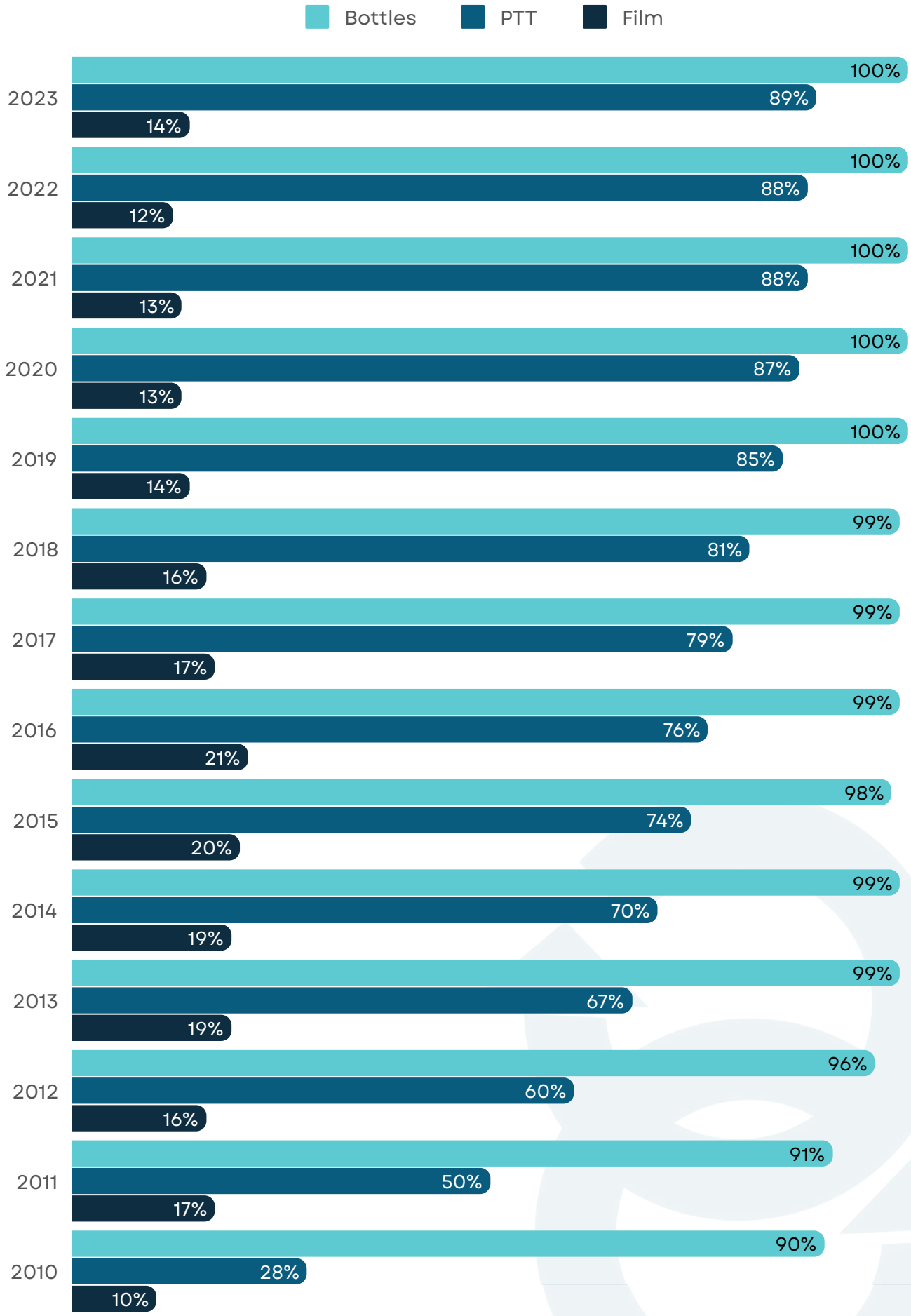
The majority of local authorities who are now accepting films at kerbside when they didn't last year are in England, and this may be due to councils being mindful of the upcoming *Simpler Recycling* legislation[32], which will see the collection of films and flexibles as mandatory from 2027. It is worth noting, however, the collection of these materials does not guarantee circularity, with end markets challenging for such a low value, and often highly contaminated, feedstock.

Correct, clear and concise communication with residents on how to dispose of films and flexibles is vital to ensure the material is presented in a way that gives it the best chance of being recycled and is free from contamination. However, RECOUP has found that local authority messaging at present can be confusing and inconsistent. Plastic film has a broad range of applications, including single-use carrier bags, bread and cereal bags, cling film, bubble wrap and shrink wrap. Of the local authorities collecting film, **29%** state that they **accept carrier bags only**. The remaining authorities collect more than one type of film. However, in many cases, there are still film types they will not accept, with multiple local authorities stating that they do not collect bubble wrap or cling film.

That being said, even if the films and flexibles collected at kerbside are of optimal quality, the nature of the material itself hinders its compatibility with many existing UK collection and sorting systems, introducing practical barriers as well as the risk of contaminating well established material streams (such as plastic bottles and paper lines). Availability of economically viable and sustainable end markets for the material is also a challenge. Currently, most collected household plastic film is baled and exported for reprocessing or used as feedstock in energy recovery.

SERVICE PROVISION HISTORY

History of local authority service provision for kerbside recycling of plastics



NON-PACKAGING ITEMS

As well as the established collected materials, some local authorities are offering additional collections of non-packaging items including small Waste Electrical and Electronic Equipment (sWEEE), batteries, textiles, and sometimes small plastic items such as toys. The *2024 RECOUP Survey* found that **39%** of local authorities are offering some level of **extended provision at kerbside for these types of items.**

Plant pots (or flower pots) are another example of non-packaging plastics that are sometimes accepted in kerbside collection schemes, with **12%** of local authorities currently communicating this to residents. Plant pots are mainly manufactured from PP, and if this fits in with the feedstock requirements of the MRF and reprocessor, they can be added to existing PTT collections. However, challenges arising from contamination through residual soil, garden waste, and other unwanted garden products (such as seed trays and ceramic pots) often leads to their exclusion from collection in the recycling stream.

CONSIDERATIONS

Collection provision across the UK varies from one area to another, even between authorities within the same county boundaries. This can be for several reasons, including differing population densities, socio-demographic factors, infrastructure, and legislative requirements. Whilst consistency is often cited as a challenge for achieving a positive recycling rate for the UK, this is further complicated across the different devolved nations.

Updated figures from the Office for National Statistics (ONS) and the *2021 Census*[22], as well as *Northern Ireland Housing Statistics* from the Department for Communities[23], has increased the estimate for the UK's total household number to around **28.5 million**. However, complexities relating to specific regions can mean that although a local authority is promoting a collection service, not all households in the area may be able to take part. Examples of this include high-density housing areas (such as flats and apartments), and rural or inaccessible locations. In some instances, households like this will receive a modified collection service. Trials of new collection schemes, such as the current FPF FlexCollect trials[37], can also cause variations in provision.

INCONSISTENCY AT KERBSIDE

The *2024 RECOUP Survey* explored several variables that highlight the differences in local authority approaches.

Kerbside Collection Container Types

There are three main types of kerbside collection containers used for dry recyclables in the UK: wheelie bins, bags and boxes.

In recent years, the increase in source-separated collection methods has also seen an increase in the use of more than one container or container type in order to allow for the separation of specific materials. This could be particularly important where glass is collected, for example, to meet input and contractual requirements from MRFs and reprocessors, or paper and cardboard, to avoid liquid contamination rendering the material unrecyclable. The separation of materials has also encouraged the adoption by some local authorities of alternative collection containers such as trolley boxes. Different container types may be adopted to better suit kerbside conditions, for example for flats or high-density housing where a wheelie bin cannot be utilised.

Just focusing on the containers used to collect plastic packaging at kerbside, in 2024, **76%** of UK local authorities used **wheelie bins**, **14% bags or sacks**, and **10% boxes or trolley boxes**. However, when considering the devolved administrations, only 9% of local authorities in Wales use wheelie bins to collect plastic at kerbside, instead favouring bags/sacks (59%).

Kerbside Collection Container Colours

The colour of the collection containers for recycling can vary widely across the UK, and therefore can cause confusion where citizens are not familiar with the scheme of an area. For example, the *2024 RECOUP Survey* found **3%** of local authorities who use wheelie bins to collect plastic for recycling were using a black bin to do so, where more commonly a black wheelie bin is used for residual waste. It is important to consider this when producing any consumer communications that are due to be nationwide.

Of the 76% of local authorities that use wheelie bins for collecting plastic, the most popular colour is **blue (30%)**. Other colours include green, brown, grey, purple, black and burgundy. **27%** use a wheelie bin where the body and lid are **two different colours.**

Co-mingled vs Source-separated Collections

The *2024 RECOUP Survey* found that **45%** of local authorities offer a **co-mingled collection** for recyclables, with all Dry Mixed Recycling (DMR) collected together in the same unit. The other **55%** offer a **source-separated collection** method, where one or more type or format is segregated from the other recyclable materials for collection, often in their own container.

It is worth noting that in Wales and Scotland, source-separated collections are much more common, with **86%** of local authorities in Wales, and **84%** in Scotland, offering this collection method.

Where a co-mingled collection scheme is offered by a local authority, **91%** opt for a wheelie bin container for their residents. If plastic is collected as part of a source-separated scheme, the wheelie bin is still the most common receptacle choice, however **37%** of local authorities offer a box, bag or trolley box instead.

Frequency of Kerbside Collections

The frequency at which recycling is collected at kerbside can range from multiple times a week, to fortnightly, or 3-4 weekly collections. The *2024 RECOUP Survey* found that **21%** of UK local authorities collect plastic recyclables **at least once a week, 69% fortnightly,** and **11% 3 or 4 weekly.**

None of the local authorities offering co-mingled schemes are collecting plastic less often than fortnightly, with **82%** collecting fortnightly. However, **1 in 5** (**19%**) of local authorities offering a source-separated collection are collecting plastic either 3-weekly or 4-weekly, often due to spreading recycling collections over multiple weeks to collect different materials.

68% of local authorities using boxes/bags to collect plastic do so at least once a week. However, only **6%** of local authorities collecting plastics in wheelie bins do the same, with **80%** favouring fortnightly collections.

OTHER COLLECTION SERVICES

Other plastic collection services provided by local authorities are focused on 'Away-from-Home' collections. These can be used effectively at specific sites where dedicated trips are made to dispose of waste and recycling, or at convenient points or areas of high footfall when citizens are out and about.

Additional collection services include:

- Bring and Front-of-Store (FoS) Schemes.
- Deposit Return Schemes (DRS).
- Household Waste Recycling Centres (HWRCs).
- On-the-Go (OtG) Recycling Bins.

Bring and Front-of-Store (FoS) Schemes

Bring schemes include traditional bring-back style facilities such as bottle banks and other receptacles in public places. The comprehensive coverage of kerbside recycling collections in the UK has seen the popularity of these types of bring schemes dwindle. However, bring schemes also include programs such as the popular retailer FoS collection of plastic films and flexibles; a material that is not currently widely collected at kerbside.

FoS collections have been introduced across the UK by major retailers as a way of capturing post-consumer plastic films, flexibles and other 'hard to recycle' packaging. This has helped to increase the capture rate of this type of material, however challenges still remain when it comes to further infrastructure for reprocessing, its value and available end markets.

69%

collect plastic recyclables **Fortnightly**

Blue wheelie bins

are the most common container for collecting plastic recyclables

55%

collect recyclables **source-separated**

Deposit Return Schemes (DRS)

There continues to be strong momentum for DRS to be used across the UK to collect a variety of drinks containers, most commonly PET bottles and aluminium cans. Trials of Reverse Vending Machines (RVMs) have, and continue to, take place, with some retailers using them in their stores.

The planned introduction of a DRS in Scotland[8] was cancelled in 2023 due to issues relating to the *Internal Markets Act* (IMA)[38] and the planned inclusion of glass containers being inconsistent with the rest of the UK[7]. It has now been confirmed that England, Scotland and Northern Ireland will be excluding glass from their schemes. Wales, however, are still intending to include glass.

In April 2024 a joint policy statement was released[9] outlining the intention for all devolved nations to work together in order to have interoperable schemes across the UK. However, in November 2024 Wales announced that they will be withdrawing from this joint approach, stating an inability to address issues caused by the IMA[10]. It is suggested this may be due to Wales's intention to include glass in their scheme.

It has been confirmed that the rest of the UK will continue to work towards an implementation date of **October 2027**[11], however it remains to be seen whether Wales will follow suit.

As well as traditional RVM-led DRS, a Digital Deposit Return Scheme (DDRS) is being explored as a way of utilising existing collection infrastructure. DDRS would allow citizens to continue to dispose of their beverage containers in their kerbside recycling bins but claim back the value of the deposit by verifying its disposal at home using innovative technological solutions. Research and trials of this continue to take place, particularly in Wales, with a widespread pilot having taken place in the town of Brecon[39].

Household Waste Recycling Centres (HWRCs)

HWRCs are sites available to the public for the disposal, recycling, or reuse of a wide range of household materials and items, including both packaging and non-packaging plastics.

These public sites are often under the responsibility of the waste disposal authority, which tends to be managed by the county council and not the district-level local authority.

68% of respondents to the *2024 RECOUP Survey* said their local authority **offers HWRCs as an option for the collection of household plastics.**

In 2023, RECOUP released its *Plastics Management and Recycling at Household Waste Recycling Centres in the UK* report[40] which estimated that of the circa **1,025** HWRCs across the UK, there is around **120,000 tonnes** of plastic (both packaging and non-packaging) that is largely disposed of as residual waste. This is due to challenges relating to the low value and high contamination of the material, its limited end markets, and the prioritising of other heavier materials at these sites that would make greater impacts on recycling rates.

On-the-Go (OtG) Recycling Bins

OtG recycling bins are designed to collect material from the general public when disposed of out and about. They are often twinned with residual waste bins and are usually local authority operated. **27%** of respondents to the *2024 RECOUP Survey* said their local authority **offers OtG recycling bins as an option for the collection of household plastics.**

Prior to 2020, it was widely communicated that OtG recycling was extremely challenging due to the variation in material types, the way in which it was presented, and the high levels of contamination. As such, it was believed that this material would often be disposed of along with residual waste. The COVID-19 pandemic hindered this further, with decreasing quantities of material consumed outside of the home, and logistical challenges for servicing, collecting and sorting material from these systems.

A well-designed and maintained OtG recycling scheme can potentially generate good quality material and reduce litter, as well as encourage and reinforce positive recycling behaviours, therefore continued discussion around how best to utilise these facilities is worthwhile.

FPF FlexCollect Trials

Plastic films and flexibles have been announced as a core material in the *Simpler Recycling* legislation[32] for England. However, at present, only **14%** of local authorities in the UK collect these materials as part of their kerbside recycling schemes.

In order to help lay the foundations to implement kerbside collection and recycling of plastic films and flexibles, the FPF FlexCollect Project[37] was launched; a £3 million pilot trialing a series of innovative flexible plastic household collection and recycling pilots across England. This innovative project hopes to provide insight to industry and government on how a flexible plastic packaging collection service can be implemented across a range of collection systems, population densities and socio-demographics.

The project was initiated and led by the Flexible Plastic Fund (FPF)[41], which was established in 2021 by five founding partners: Mars UK[42], Mondelēz International[43], Nestlé[44], PepsiCo[45] and Unilever[46]. The Fund has since been joined by a further 15 notable UK consumer goods' manufacturers.

It also benefits from the expertise of a cross-industry partnership, including RECOUP, alongside the Department for Environment Food and Rural Affairs (DEFRA)[47], Ecosurety[48], UK Research and Innovation (UKRI) Smart Sustainable Plastic Packaging Challenge[49], SUEZ Recycling and Recovery UK[50], Local Authority Recycling Advisory Committee (LARAC)[1], WRAP[51] and Zero Waste Scotland[52].

A summary of the local authorities involved and information about their demographics and schemes are as follows:

In January 2024 an interim report[53] was released providing insight into the key findings and learnings generated so far. Some of these findings were as follows:

- The quality of collected flexible plastic is generally very good, with **82%** being **target plastic bags and wrapping.**
- The service is popular with householders, with **60% participating regularly**.
- Across 4 pilots surveyed, over **89%** of householders said they are **'very satisfied' with the service.**
- On average, collection bags presented by participating households weigh **291g.**
- Coloured bags have been effective in encouraging participation and collection of quality material, as well as helping to separate the collected flexible plastics from other recyclables.
- Reprocessing trials have started with encouraging results but have been limited by the amount of material collected. These trials will increase as the project progresses.

For more information on the project, please visit: www.flexibleplasticfund.org.uk.

Launch date	Pilot Council	Area type	Initial pilot HHs	Expansion date	HHs after expansion	Service type	Material collected	Collection Method
Oct-22	Cheltenham Borough Council	Urban, Low deprivation	3,154	Sep-23	3,600	Fortnightly, source-separated	All flex	Clear/blue printed collection bags in with rigid plastic & cans / any container
Oct-22	South Gloucestershire Council	Suburban, Mix, Low deprivation	1,955	May-24	24,621	Weekly, source-separated	Dry flexibles only (PE & PP)	Clear/blue printed collection bags in with rigid plastic & cans
Jan-23	Maldon District Council	Rural, Low deprivation	7,719	Aug-24	12,100	Fortnightly, twin stream, glass separate	All flex	Purple printed collection bags, collected on separate vehicle
May-23	Somerset Council	Rural, Medium deprivation	3,641	Oct-24	26,393	Weekly, source-separated	PE & PP only	Blue printed collection bag and stored on vehicle along with cans & plastic
Jun-23	Newcastle City Council	Urban, High deprivation	7,232	Oct-24	34,806	Fortnightly, twin stream (240l wheelie bin with insert for glass)	PE & PP only	Blue printed bags collected alongside plastics, cans and fibre in blue wheelie bin via split back RCV
Sep-23	Reading Borough Council	Urban, Low deprivation	4,100	Aug-24	10,500	Fortnightly, co-mingled (240l wheelie bin). Bring bank glass.	PE & PP only	Blue printed bags collected alongside plastics, cans and fibre in red wheelie bin via single compartment RCV
Nov-23	North and East Hertfordshire Council	Suburban, Low deprivation	2,174	Sep-24	10,500	Fortnightly, twin stream with paper separate in a box	PE & PP only	Blue collection bags presented in, on top of, or next to their paper box
Mar-24	North West Leicestershire District Council	Rural, Medium deprivation	6,500	Sep-24	13,500	Fortnightly, source-separated (kerbsiders)	All flex	Purple bag, presented and collected with paper
Mar-24	Bracknell Forest Council	Suburban, Mix, Low deprivation	10,500	\	\	Fortnightly, co-mingled	PE & PP only	Blue bag, presented inside wheelie bin in single compartment RCV
Oct-24	Warwick District Council	Suburban, Mix, Low deprivation	14,000	\	\	Fortnightly, co-mingled	PE & PP only	Fully co-mingled inside wheelie bin in single compartment RCV

RESIDUAL WASTE TREATMENT

Residual waste treatment continues to be a key subject in recovering post-consumer plastic packaging. This is particularly important when seeking new sources of material to capture for recycling, and also helps in reducing the amount of recyclable plastic going for non-circular end destinations, as well as avoidable gate fee costs for energy recovery and landfill.

Energy Recovery

Energy recovery, otherwise known as Energy from Waste (EfW), generates energy (heat or electricity) from a residual feedstock. The UK's capacity for energy recovery has grown exponentially in recent years and is forecast to continue to do so, though this is something that has drawn attention and concern at a European level as a waste solution that takes material out of the circular economy. The *2024 RECOUP Survey* can report that of those local authorities who gave a response, **88%** use **energy recovery as a treatment solution for their residual waste**, with on average **82%** of residual waste being treated this way.

Landfill

Despite being at the bottom of the waste hierarchy, landfill is still the only viable option for many local authorities disposing of non-recyclable materials. Of those local authorities who gave a response, **55%** disclosed they **use landfill as a treatment solution for residual waste.** However, **53%** of these local authorities are sending **less than 5%** of their residual waste to landfill, instead favouring other options. Progress being made in the growth of alternative end-of-waste options, increased reliance on energy recovery, and higher landfill taxes and fees, are all contributing to a reduction in the use of landfill as a disposal option for residual waste.

Other Treatments

Other residual waste treatment options include Mechanical Biological Treatment (MBT) which can produce Refuse Derived Fuel (RDF), and Anaerobic Digestion (AD) which can produce biogas and digestate. Biogas can generate heat and power, and digestate can be used as fertiliser.

Plastic Recovery from Residual Waste

The *2024 RECOUP Survey* found that **26%** of local authorities who left a response stated that **plastics are recovered for recycling from residual waste streams** that might otherwise go to landfill or incineration.

The definition of recovery from residual waste streams raises questions as to whether recovered quantities are included in the household recycled quantities reported by local authorities. This material may still find its way into the recycling stream at a stage whereby it is eligible for, and recorded as, part of the Packaging Recovery Note (PRN) data and therefore counted as part of the overall quantity of plastic packaging that is reported as recycled each year.

Although financial and technological barriers limit what plastics can and cannot be recovered from the residual waste stream, it will be interesting to see how the development of technology, as well as financial and legislative drivers, impact this over time.

1 in 4

recover plastics for recycling from the residual waste stream.

BUDGET CUTS AND FINANCES

When focusing on local authorities' waste and recycling services, finances and budgets have been stretched for a number of years, and for several reasons. 2024 has seen energy prices, inflation rates and cost of living continue to remain high. This has impacted all businesses and organisations in respect of how they operate and their costs and expenses. Upcoming legislative changes are also expected to impact budgets available to local authorities for both non-essential and essential services.

42% of local authorities responding to the *Survey* this year said that their **budgets for the delivery and communications of waste and recycling had been cut for 2023/24**, with **40%** anticipating receiving cuts in 2024/25.

2 in 5

reported

budget cuts

for the delivery and communications of waste and recycling for 2023/24.

CASE STUDY

PERTH & KINROSS COUNCIL TWIN STREAM RECYCLING PROJECT

Written by

ZERO WASTE SCOTLAND

Perth and Kinross Council was awarded £2,720,775 from the Scottish Government's Recycling Improvement Fund to introduce a twin-stream kerbside recycling collection service and expand recycling services to properties in Perth City Centre.

BACKGROUND

Perth and Kinross Council first introduced kerbside recycling in 2008 with bins for:

- Non-recyclable waste.
- Dry mixed recycling (DMR) for paper, cardboard, cans, plastic bottles, pots, tubs and trays.
- Food and garden waste.

This service was subsequently refined to accept food and drink cartons in the DMR bin, and replace the 240 litre non-recyclable waste bin with a 140 litre version.

Over time contamination in the DMR bin steadily increased, peaking at 28% in 2020, which resulted in financial penalties from the Council's recycling reprocessor.

Meanwhile city centre properties were unable to receive a recycling collection service due to space constraints; communal bins hubs were used for the collection of non-recyclable waste only.

PROJECT ACTIVITY

Perth and Kinross Council used the funding to deliver two major service changes:

Twin Stream Recycling

A twin stream recycling service was introduced to approximately 73,000 properties (over 97% of households) which involved repurposing the existing blue-lidded recycling bin to collect only paper, card and cardboard, and providing a new grey-lidded bin for recycling plastics, metals and cartons, with additional materials, including soft plastics and foil, also accepted for recycling.

City Centre Recycling

Recycling collections were introduced to approximately 1,000 properties in Perth City Centre. Existing communal bin hubs were enhanced to provide a blue-lidded bin (for paper, card and cardboard), a grey-lidded bin (for plastics, metals and cartons), and a food waste recycling unit.

PROJECT TIMELINE

Aug 2022
Recycling Improvement Fund application approved

Nov 2022
First collections of new city centre service

Jun 2023
Launch of digital communications campaign

Oct 2023
Communications issued to residents

Jan 2024
Kerbside recycling service roll-out complete

Nov 2022
City centre bin hubs enhanced

May 2023
Kerbside recycling bins ordered

Jul 2023
Start of kerbside recycling bins distribution

Nov 2023
First collections of new kerbside service

COMMUNICATING THE CHANGES

Perth and Kinross Council promoted the service change using a mix of traditional communication methods, including sending a leaflet to every household, along with a digital-first approach which included the use of social media, online engagement sessions, TV and radio advertisements.

A new mascot called 'Wheelie' was also introduced to act as the face of the campaign; this received an excellent response from the public.

Using a digital-first approach achieved three times the engagement at around two thirds of the cost compared to more traditional communication methods.

Average reach per Facebook post was over 15,000, with nearly 9,000 interactions per post. Engagement on the Council's Facebook page increased by over 3000%.

The campaign also helped to relieve pressure on the customer service centre as the Facebook page was able to pre-empt many questions.

OUTCOMES

The project is on its way to achieving the three key objectives:

1. Increase Recycling

The introduction of recycling collections to city centre properties has the potential to increase the Council's recycling rate by 1%, with the introduction of the grey-lidded bin having the potential to increase this by a further 5%.

There has also been a 5.27% reduction in residual waste tonnages collected when comparing Q4 2022 data to Q4 2023, despite a population increase during this period.

2. Reduce Contamination

Initial results indicate that contamination levels have reduced from 18.7% in the DMR bin to 2.5% and 10% in the blue-lidded and grey-lidded bins respectively. The quality of materials collected has also increased due to keeping paper and cardboard separate from plastics, metals and cartons.

3. Increase Participation

As well as allowing more people to recycle in the city centre, the new service has increased the range of materials that can be recycled across the Council's area. Monthly cleaning of city centre bin hubs has also encouraged participation.

CHALLENGES

The distribution of kerbside recycling bins began in July 2023 and should have been completed by October 2023, however due to various issues this wasn't completed until January 2024. As the Council had already committed to and communicated the new service to residents, a delay was not an option; instead, a hybrid service was provided from November 2023. From January 2024 all bins had been distributed and the new service was up and running.

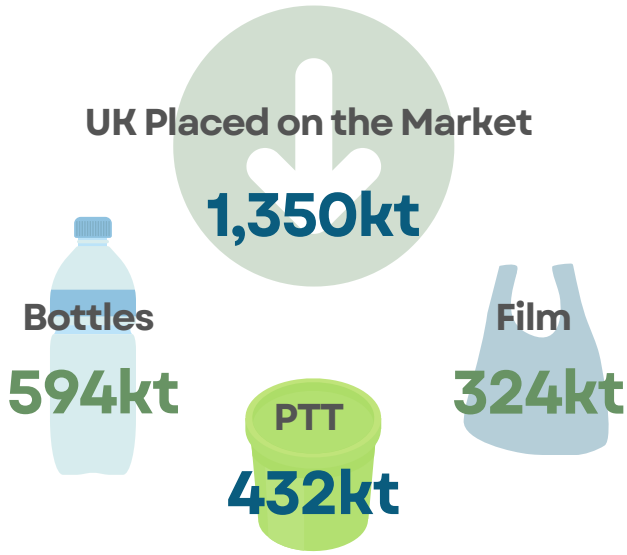
PLASTICS PLACED ON THE MARKET

With packaging being the main source of plastic consumed in the UK, understanding the quantity we use is essential, not only to calculate recycling collection rates, but also to highlight areas which require focus and investment within the UK's waste management system.

Every year the *RECOUP Survey* uses the best available data when it comes to plastic packaging quantities Placed on the Market (POM), and its breakdown by format and polymer. In recent years, this has come from Valpak's *PlasticFlow* and *PackFlow* reports[18] [19] [20].

2024 has seen added complexities with calculating accurate POM figures due to a variety of factors. Global impacts over the last few years, including the widespread cost-of-living crisis, have influenced both operations and consumer habits, resulting in reduced waste arisings and consumer spending. Changes to packaging itself through modifications such as lightweighting and material substitution are also having an effect, as is the impending recyclability modulation for packaging *Extended Producer Responsibility* (EPR)[3].

Producers have been obligated to collect packaging data POM under EPR from January 2023. This has meant that a full calendar year of data under the scheme is now available on the *National Packaging Waste Database* (NPWD)[21]. This data provides an added level of detail not previously available due to the reporting requirements necessary. However, it cannot be considered to be completely accurate at this time due to variety of factors.



There are many considerations that need to be accounted for when analysing the available 2023 EPR data, which include the following:

- It does not include data from large producers who are required to report their data but currently have not.
- It does not include data from large producers who reported their 2023 data after 14th October 2024.
- The requirement to report drinks containers suppled in Scotland was excluded for the calendar year 2023.
- Due to the changes in reporting requirements, it is likely there are teething issues as producers build up familiarity with what is needed, so some level of error/inaccuracy is expected.
- 2023 saw dual reporting requirements under both the EPR regulations and previous 2007 regulations.

In order to arrive at the most accurate POM figure possible, the *2024 RECOUP Survey* has used a combination of sources which include Valpak's most recent *Packflow Refresh 2023:Plastic* report[20] and the EPR 2023 reported packaging data[21]. Extensive discussions with industry experts, including packaging producers, were also conducted to understand wider market observations and perspectives.

RECOUP estimates that **1,350,000 tonnes** of plastic was POM in the UK in 2023.

These figures will be further refined over the next 12 months to get a clearer understanding and breakdown of the amount of plastic packaging on the UK market.

HOUSEHOLD COLLECTION PERFORMANCE

2023 saw the return to growth of tonnages of plastics collected for recycling after 2022 saw the first decline since data collation began back in 1994. This data is used extensively to represent both past successes and challenges for the future.

Data provided in the *2024 RECOUP Survey* has seen several changes and challenges that need to be considered. These include:

- Updating of the Placed on the Market (POM) figures to reflect the most recent estimates that take into account world events and market impacts.
- The composition of data reported as 'mixed plastics'.
- Changes to non-kerbside collection schemes and their impacts on the waste stream.
- Delays to both the implementation and details around upcoming policy and legislation. This has delayed local authority adjustments to provision and investment in infrastructure to sort and reprocess material.

These are all significant variables to integrate into collection data calculations and are especially important when estimating the composition of plastic packaging collected for recycling.

PLASTIC BOTTLES

When the first *RECOUP Survey* was released in 1994, only **425 tonnes** of plastic bottles were collected for recycling, the equivalent of **9.3 million bottles**. These were mostly collected from bring schemes.

By 2003 the quantity of plastic bottles collected for recycling had increased to **24,000 tonnes**; over **500 million bottles**. This was due to the widening of collection schemes and the collection of co-mingled dry recyclables from households, which at this stage was collecting over three times more bottles than through the traditional bring schemes (**18,000 tonnes** through kerbside schemes and **6,000 tonnes** through bring schemes).

The infrastructure for collecting plastic bottles from kerbside schemes started to see significant increases in the mid-2000s. This can be largely attributed to many new services being launched as well as existing schemes being expanded, becoming more efficient, and there being greater engagement from citizens.

Since 2019, the kerbside collection of plastic bottles for recycling has been offered by **all UK local authorities.**

In 2023, an estimated **388,000 tonnes** of plastic bottles were collected for recycling.

In total,

Over 127 billion

plastic bottles have been collected since 1994

6 million tonnes

PLASTIC POTS, TUBS AND TRAYS (PTT)

Since kerbside collection data for plastic PTT started to be reported in 2007, there has been a significant increase in the quantities collected annually. Around **10,000 tonnes** were collected in 2007, rising to an estimated **174,000 tonnes** in 2023.

Despite seeing increases over the last 15 years, around **11%** of local authorities still do not collect PTT for recycling. This provision rate has stagnated in recent years, with only small increases year-on-year.

At present, 88% of local authorities in England include PTT in their kerbside recycling collections. However, the introduction of *Simpler Recycling* legislation[32] will see all local authorities in England required to collect PTT from households from 2026. Therefore, we can expect the overall UK percentage of local authorities accepting PTT at kerbside to increase over the coming years.

Since 2007, it is estimated that

2 million tonnes

of plastic pots, tubs and trays have been collected for recycling

PLASTIC FILMS

The *2024 RECOUP Survey* is able to estimate that approximately **25,000 tonnes** of plastic film was collected at kerbside for recycling in 2023. However, this is just **8%** of the film that was POM in the same timescale.

Plastic film has been present in the household plastic packaging recycling stream ever since co-mingled collections were introduced. However, it is only in recent years that interest in the significant quantity of material potentially available has begun to draw focus, with retailers introducing bespoke Front-of-Store schemes for collecting it. This material will also be part of the consistent items collected for recycling in England as part of the *Simpler Recycling* legislation[32] from 2027.

Since 2016, the UK has seen a reduction in local authorities collecting a form of plastic films and flexibles at kerbside, with a peak of **21%** in 2016, compared to just **12%** in April 2023. However, the *2024 RECOUP Survey* saw a slight increase in the number of local authorities offering this service, rising to **14%**. The majority of additional local authorities are in England, potentially as a result of the upcoming *Simpler Recycling* legislation[32].

MIXED PLASTICS FRACTION

Estimating household plastic packaging collected for recycling relies on several measurement indicators as outlined in the Methodology & Reporting section of this report. Every local authority, waste management provider, Material Recovery Facility (MRF) and Plastics Recovery Facility (PRF) can have a different approach to this depending on operational decisions, economic factors, and the end market availability at that time.

A significant challenge to estimating accurate material quantities is that plastic packaging fractions are increasingly reported as 'mixed plastics'; a co-mingled total for all Dry Mixed Recycling (DMR). This mixed fraction can vary considerably between local authorities for a number of reasons such as the target output, as well as speed and efficiency of sorting at the MRF. It is likely that, where the material quantities are higher than average or where the sorting facilities are operating at higher speeds, more bottles end up in a PTT or 'mixed plastics' fraction. Also, some facilities only segregate certain plastic bottles like clear PET and natural HDPE bottles and leave others in the PTT or 'mixed plastics' mix for further sorting or export.

CONSIDERATIONS

The splits of the different plastic formats are never precise and there is not a uniform composition, with the total quantities of plastic bottles and PTT potentially containing other non-target plastic formats.

There was evidence from both the reported collection data and from confidential material composition analysis of kerbside schemes shared with RECOUP, that quantities of plastic bottles and film were going into the PTT stream. It is also widely acknowledged that PET trays are mixed with PET bottles to help find an outlet for this material.

To validate the composition of reported collection data from local authorities, RECOUP has worked with waste management company members, to provide the best and most realistic representation of the data.

COLLECTION QUANTITIES

After analysis of the reported quantities collected for recycling, the *2024 RECOUP Survey* estimates **587,000 tonnes** of plastic packaging was collected for recycling from UK households in 2023. This is an increase compared to 2022, however bottles tonnages have not recovered to 2021 levels.

RECOUP will continue to engage with local authorities and waste management companies to further understand and reflect on the composition of household plastic packaging.

It seems inevitable that figures will be nuanced due to the impact of fluctuating plastic and Packaging Recovery Note (PRN) prices, policy and legislation including *Simpler Recycling*[32] and *Deposit Return Schemes* (DRS)[9] [10] [11], as well as other current and future variables. Robust and accurate data is essential to understand the influence, success and impact of these factors.

ACTUAL RECYCLING RATES

Collection data does not reflect the actual quantity of material that is being recycled. The figures estimated in this *Survey* relate to what is collected for recycling. This is before the process of recycling takes place and therefore material sorting, reject rates and reprocessing yield losses need to be factored in.

MRF feedstock input quantities are typically anywhere between **15% to 50% higher** than the reprocessing outputs depending on the quality of the feedstock collected for recycling and presented to the facilities.

COLLECTION RATES

Collection rates are the percentages of plastic packaging POM that are subsequently collected for recycling and is an effective way of assessing overall performance.

To ensure these collection rates are as accurate as possible, RECOUP uses the best available plastic packaging POM data to compare against the reported collection quantities. This helps in understanding the performance of kerbside collections, quantities and composition of material collected at kerbside.

As well as the actual data received from respondents to the *2024 RECOUP Survey*, collection quantities (tonnes/number of units) and rates (%) for plastic bottles collected are calculated based on an estimated average of **22,000 bottles per tonne** and the circa **28.5 million households** in the UK.

Household Plastic Packaging Overall

The *2024 RECOUP Survey* can report that the overall collection rate for all household plastic packaging in 2023 was **43%**. The collection rate for rigid plastic packaging-only (bottles and PTT) was **55%.**

Plastic Bottles

Since 2019, **100%** of UK local authorities have collected plastic bottles for recycling at kerbside.

In 2023, **388,000 tonnes** of plastic bottles were collected for recycling, giving a collection rate of **65%**.

Whilst the UK has historically seen a steady increase in plastic bottle quantities collected through kerbside recycling schemes, 2022 was the first year in which overall tonnages declined. 2023 saw tonnages increase once again, however not recovering to the quantity seen in 2021.

Plastic Drinks Bottles

There is a significant difference in the collection and recycling rate of plastic bottles for drinks, and those of non-drinks. Whilst both types include the use of PET or HDPE, their purpose, contents and value vary significantly.

Using best available estimations of POM and collection quantities, it can be suggested that drinks bottles have a collection rate of **70-80%,** whereas non-drinks bottles would be considerably lower.

Plastic PTT

Despite variations in the POM data in recent years, collection rates for PTT have increased since 2013 when it was at 20%. The *2024 RECOUP Survey* estimated that, in 2023, around **174,000 tonnes** of PTT was collected, giving a collection rate of **40%.**

As of April 2024, **89%** of local authorities provide a kerbside collection scheme that includes PTT. With PTT becoming a mandatory material for recycling collection as part of *Simpler Recycling*[32] in England, it will be vital that those local authorities not currently collecting these formats begin the transition, which in turn will increase capture and recycling rates.

Plastic Films and Flexible Packaging

The *2024 RECOUP Survey* can report that the overall quantity of plastic film collected at around **25,000 tonnes**, giving a collection rate of **8%.**

Collection rates for plastic films are low due to several factors, including technological challenges in processing them, disproportionately high levels of contamination within the material, and limited value and end markets. Whilst the UK has seen infrastructure develop in the sorting and processing of post-consumer plastic film in recent years, the cost of doing so is understood to be higher than other plastic types.

Of the kerbside collection schemes that currently target plastic film, the majority only accept certain types or formats. Most commonly these are single-use carrier bags, but other items are sometimes accepted at kerbside include bread bags, toilet paper and kitchen roll packaging, fruit and vegetable bags, and multi-pack packaging or shrink wrap. Films that are generally considered difficult to recycle, or unrecyclable, include metallised packaging such as crisp packets and pet food pouches, PVC film including cling film, plastic netting and compostable and biodegradable bags.

The inclusion of plastic film and flexibles as a target material for recycling at kerbside within the *Simpler Recycling* legislation[32] creates a significant opportunity to capture a large amount of this plastic material. However, it is imperative that citizen communication is clear and accurate to ensure the feedstock is presented at disposal in a way that is acceptable to be processed for recycling.

Non-Packaging and Other Items

In the UK, a number of alternative schemes are in place to collect materials and formats that are not currently captured through the primary kerbside collection schemes. These 'away-from-home' schemes are where people make dedicated trips to bring their waste and recycling material to bespoke services (e.g. bring schemes). They are often serviced as part of the kerbside collection route, or directly from retailer FoS schemes. This generally means that specific weights of material collected from these services are not recorded separately by the local authority.

Non-packaging items include small Waste Electrical and Electronic Equipment (sWEEE), batteries, textiles, and sometimes small plastic items such as toys. Though citizens are most likely encouraged to dispose of these items at Household Waste Recycling Centres (HWRCs), an increasing number of local authorities are starting to offer extended provision for these types of items at kerbside.

Recycling rates for all UK plastic packaging 2012 - 2023

Year	Declared as recycled	Placed on the Market	Recycling Rate
2012	640	2,550	25%
2013	710	2,260	31%
2014	842	2,220	38%
2015	891	2,260	39%
2016	1,105	2,260	45%
2017	1,044	2,260	46%
2018	1,034	2,260	46%
2019	1,141	2,290	50%
2020	1,175	2,092	56%
2021	1,112	2,219	50%
2022	1,154	2,220	52%
2023	**1,186**	**2,017***	**59%**

**2023 POM figure taken from Valpak PackFlow Refresh 2023: Plastic report[20].*

TOTAL PER HOUSEHOLD

The kerbside collection rate of plastic bottles and PTT means a total average of **20kg** of rigid plastic packaging is collected per household. Including plastic films, which only **14%** of local authorities collect for recycling, this increases the total plastic packaging collected per household to **21kg**.

The average amount of rigid plastic packaging consumed by UK households each year amounts to **36kg**. For all plastic packaging, including films, this increases to **47kg**.

Plastic Bottles

2023 saw the estimated kerbside collection rate of plastic bottles at **14kg**. If all the plastic bottles POM were collected, the kerbside plastic bottle collection rate per household would be **21kg.** This shows that despite 100% of local authorities offering kerbside collection for recycling of plastic bottles, a sizeable quantity of this valuable stream is being missed.

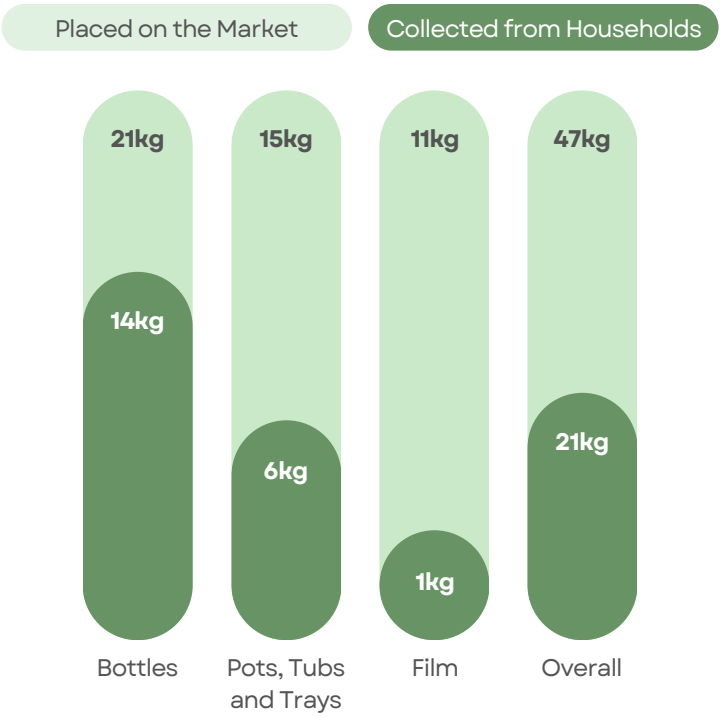
Plastic PTT

The average kerbside collection rate for PTT in 2023 was **6kg** per household. If all the PTT consumed in UK households was collected, the collection rate would be **15kg** per household.

Plastic Films and Flexible Packaging

The average kerbside collection rate for plastic films and flexibles in 2023 was under **1kg** per household. If all the plastic film consumed in UK households was collected, the collection rate would be over **11kg** per household.

Plastics Collected vs Placed on the Market per Household



REJECT RATES

Once again, as part of the *2024 RECOUP Survey*, local authorities shared their reject rates for recycling material collected at kerbside. Of the local authorities that gave a figure, the average reject rate was **14%** across all materials collected, which is the same as last year. It is important to note that the range of reject rates across local authorities is hugely variable, with a low of **0%**, and a high of **37%**. These examples are the extremes and are not considered to be commonplace, though the overall level of contamination leading to the material being rejected at MRFs is a serious concern.

COMPARISON BY NATION

The *RECOUP Survey* is completed by local authorities across the UK, therefore it is possible to look at relative performance for each nation. Collection rates for each country are estimated based on data from the survey itself, and estimations of plastic packaging POM split based on the number of households.

COLLECTION RATES

UK Total

65% Plastic Bottles
40% Plastic PTT
8% Plastic Film
Overall 43%

England

65% Plastic Bottles
40% Plastic PTT
8% Plastic Film
Overall 43%

Wales

80% Plastic Bottles
52% Plastic PTT
9% Plastic Film
Overall 54%

Scotland

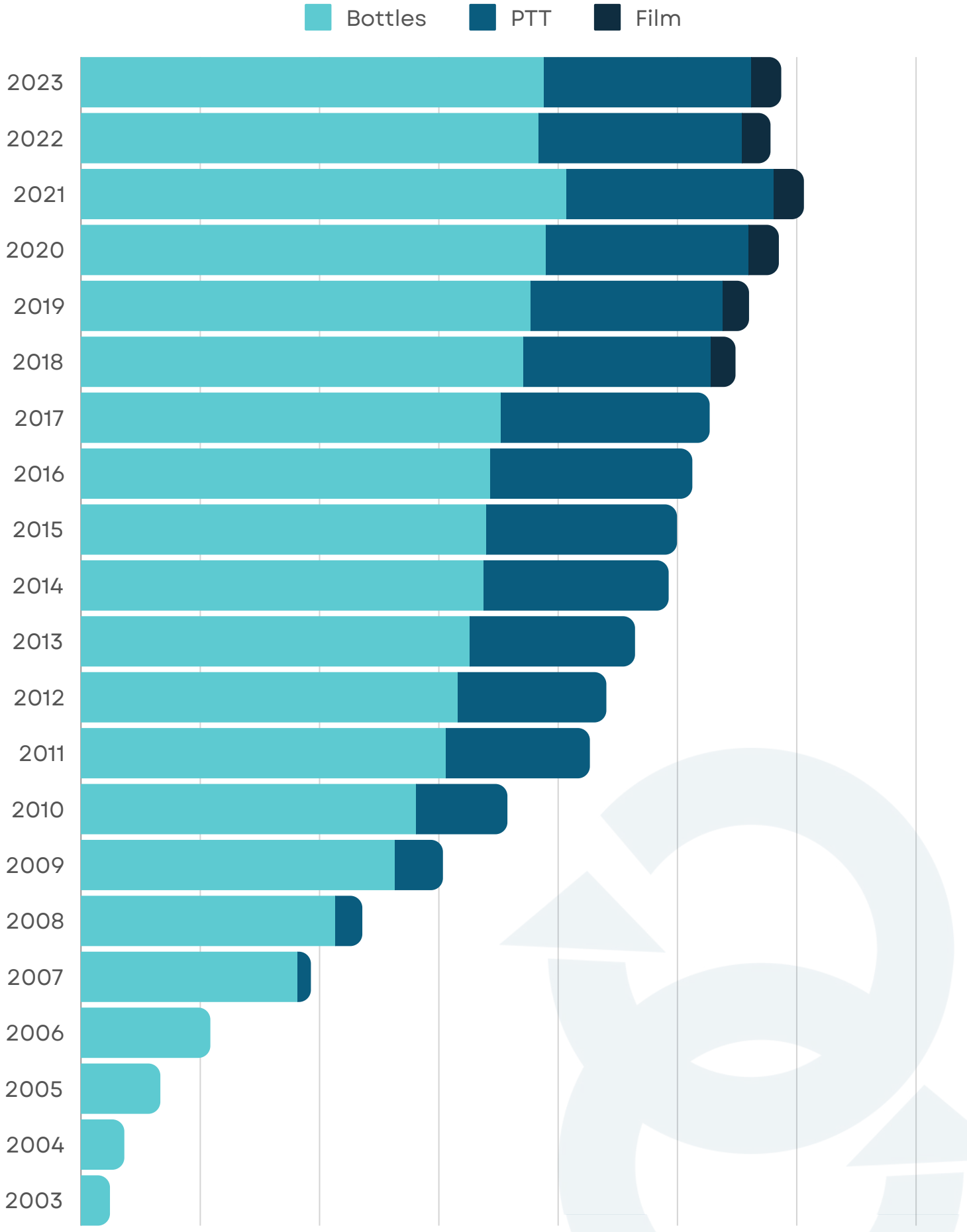
59% Plastic Bottles
39% Plastic PTT
3% Plastic Film
Overall 39%

Northern Ireland

69% Plastic Bottles
40% Plastic PTT
6% Plastic Film
Overall 45%

UK PLASTICS TONNES COLLECTED

Total tonnes of plastic bottles, pots, tubs and trays, and films collected each year from 2003 to 2023



HOUSEHOLD PLASTIC RECYCLING INFRASTRUCTURE

The UK's available infrastructure for the sorting & reprocessing of plastic packaging has gaps that need to be filled if sustainability goals are going to be met without an increased reliance on export.

Data published through the Environment Agency's (EA) *National Packaging Waste Database* (NPWD)[21] found that **1,186,000 tonnes** of plastic packaging was reported to have been recycled in 2023, **611,000 tonnes (52%)** of which was **exported for reprocessing**. This was the first time since 2020 that the tonnage exported has been larger than that recycled domestically. More worryingly, tonnages sent to **non-OECD** (Organisation for Economic Cooperation and Development)[54] destinations appear to be increasing year-on-year, rising to **22%** of all **export destinations in 2023**. In order to move away from this reliance on processing material overseas, the infrastructure in the UK to sort plastic packaging to the required quality and reprocess this material needs to increase to handle the additional quantities.

In 2022, RECOUP published its *UK Plastic Packaging Sorting & Reprocessing Infrastructure* report[55] which helps to inform and provide context around UK infrastructure, specifically in its ability to meet the various targets set in the multitude of current and upcoming UK policies, and the current reliance on export. Due to barriers in collating often commercially sensitive data and the lack of a 'go-to' list of facilities, the capture, analysis and updating of this data is an ongoing activity. RECOUP intends to release a refreshed version of this report in 2025.

Data from the report suggests that material sorting capacity at both Material Recovery Facilities (MRFs) and Plastic Recovery Facilities (PRFs), by quantity at least, is not considered to be a barrier to meeting current recycling targets domestically. However, reprocessing capacity is limited, particularly for more challenging formats and packaging types such as food contact packaging and films and flexibles.

MATERIAL SORTING

Material Recovery Facilities (MRFs)

MRFs are sites which receive and separate household Dry Mixed Recycling (DMR). The mixed material is fed into the system and separated into streams using magnetic, ballistic, and near-infrared (NIR) technology. Each fraction is baled and prepared for shipment to either a PRF, reprocessor, or for export.

In 2022, RECOUP estimated that there were **123 MRFs in the UK** that could sort mixed plastic packaging from other material streams. It should be noted that this does not differentiate between plastic packaging formats or colours, and it is assumed that the majority of these MRFs will be focused on sorting rigid polymers.

MRFs will accept and sort multiple material types, which means it is not possible to measure an exact and consistent quantity of plastics within the stream. However, by using an average plastic fraction based on various primary data sources, it can be estimated that the UK has an annual sorting capacity of around **1.7 million to 2.1 million tonnes** of plastic packaging from household and some non-household sources each year. After factoring in commercial drivers, actual throughput, and material yield losses, this amounts to between **0.9 million and 1.1 million tonnes** of plastic packaging being sorted in the UK annually.

Plastic Recovery Facilities (PRFs)

PRFs receive baled plastic from a MRF where it is subject to further sorting to increase the quality of the material. PRFs generally consist of many NIRs and colour sorters with paper and metal removal systems.

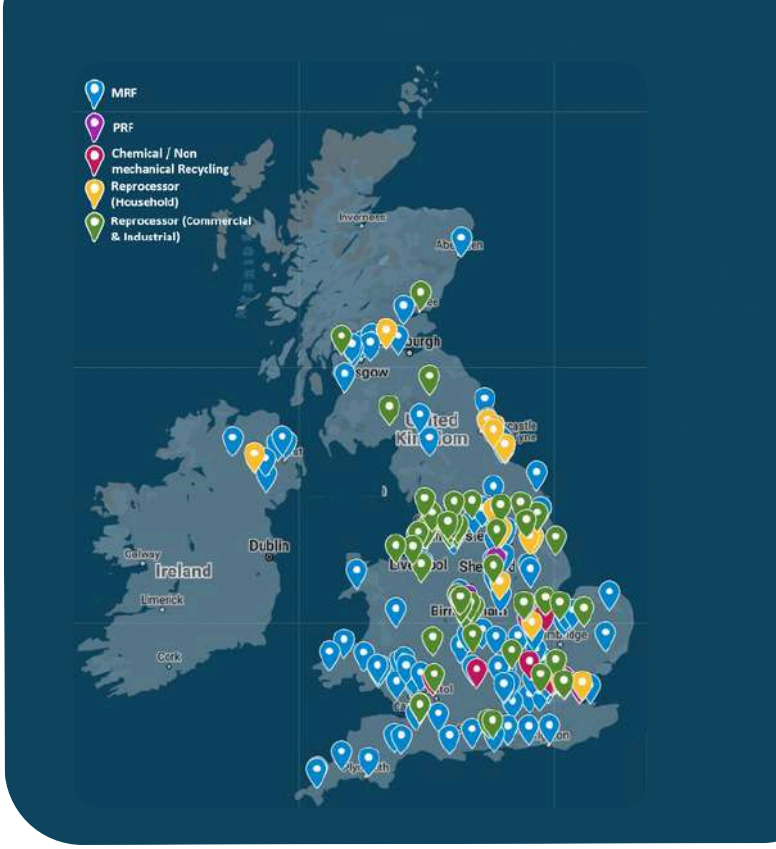
It is understood that several MRFs can achieve similar quality standards to that of a PRF and would therefore bypass this process. As such, whilst these PRFs may provide additional capacity for the sorting and quality improvement of recycled plastics, the UK's capacity to recycle is not dependent on these sites alone.

In 2022, there were **7 PRFs** in the UK that sorted plastic packaging. The estimated PRF operational sorting capacity is approximately **355,000 tonnes** each year.

PLASTIC REPROCESSING

Reprocessing is the point at which plastics (often pre-sorted to remove any final impurities) are shredded and washed to remove items including labels, adhesives, dirt, other contaminants and non-plastic fractions. Polymer types are separated accordingly. The resulting regrind or flake may then be sold at this point, or it may be melted and converted into a pellet. As with MRFs and PRFs, measuring the capacity to reprocess plastic packaging is never exact, so the difference between estimated operational output and reported capacity is an important distinction. In addition to this, there is a significant difference between these two figures due to the quality of input material (feedstock) and natural material yield losses through the washing and flaking processes. Other considerations include the differences between the nameplate (or advertised) capacity, and the actual operational throughput that a site sees. This may be due to external reasons such as market factors at any given time, contamination and yield losses varying, or a desire to attract feedstock.

In 2022 it was estimated that the UK had more than **400 accredited reprocessors** that handle plastic packaging in some form or another and at various quantities. **78** of these facilities handle commercial and industrial household plastic packaging, and **16** handle household plastic packaging with an annual capacity of around **455,000 tonnes** and an actual throughput of **288,000 tonnes.**



FOOD-GRADE PACKAGING

A significant variable in infrastructure is what can be handled or produced. The UK's ability to recycle certain grades and formats of plastic packaging which are hard to recycle, of lower value, or have additional restrictions and requirements, is lacking. This is particularly true of the ability to recycle plastic films and flexibles, non-bottle PET, and food-grade plastic packaging.

Recycled content for food-grade packaging is especially sought after and of higher value due to the additional steps required in its collection and production to ensure that it meets criteria set by the Food Standards Agency (FSA)[56] in the UK, and European Food Safety Authority (EFSA)[57] in Europe. As of 2022 the UK had around **102,000 tonnes** of capacity to produce food-grade packaging made up of **70,000 tonnes** for recycled PET and **32,000 tonnes** for recycled HDPE.

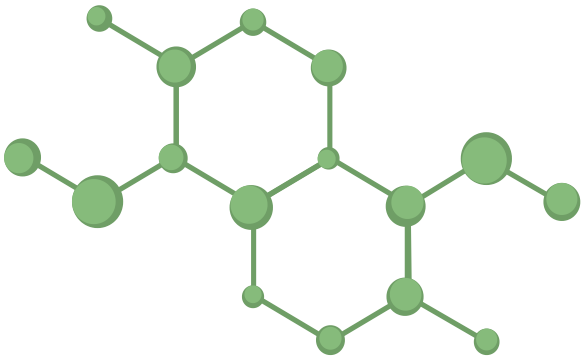
CHEMICAL (NON-MECHANICAL) RECYCLING

Over the last number of years there has been rapid development in plans for growing chemical (non-mechanical) recycling infrastructure, both in the UK and internationally.

Chemical, or 'non-mechanical' recycling, is an umbrella term to describe several different recycling processes. These technologies process plastic waste by changing its chemical structure to produce substances that can be used as secondary raw material ingredients in the manufacture of new products. The name 'chemical recycling' comes from the process of returning these plastics into their base feedstock chemicals, so that they might be used again. This helps to divert the materials that would likely otherwise go to landfill or incineration, and instead achieving circularity[58].

There are several key technology types that fall under the definition of chemical recycling. These include:

- **Depolymerisation.** The breaking of pre-sorted polymer material down into smaller chain polymers, oligomers and/or monomers. Several methods can achieve this, but most commonly a solvent is used. Enzymatic Recycling, which processes polyethylene terephthalate (PET) waste, is a type of Depolymerisation[59].
- **Purification.** The use of a highly selective solvent to clarify a pre-sorted material to a pure polymer participate.
- **Pyrolysis.** The use of very high heat and pressure to melt polyolefins to oil which can be subsequently separated through cracking.
- **Gasification.** The use of very high heat to gasify mixed plastic waste, which can be subsequently separated through cracking.
- **Hydrothermal Treatment.** The use of water at high pressure and heat (steam) to dissolve mixed plastic waste into a light oil which can be subsequently separated through cracking.



Chemical recycling is often touted as an enabler for plastic feedstock deemed 'hard to recycle' (those with limited mechanical recycling solutions) to be recycled. This includes post-consumer plastic films and flexibles. It is sometimes referred to as a 'complementary technology' to mechanical recycling infrastructure, and has the potential to support a number of pillars of the circular economy, such as:

- Reducing reliance on the use of virgin material through the re-production of materials from plastic waste.
- Providing new, previously unrecycled material streams to recyclers.
- Diverting waste from non-circular end destinations including landfill, incineration and energy recovery, allowing these 'hard to recycle' materials to join the circular economy.
- Offering upcycling or more high value solutions in-place of existing downcycling solutions for some plastics.

CHAIN OF CUSTODY (COC) MODELS

One challenge facing chemical recycling infrastructure is how it can integrate with developing environmental policy. Examples have been seen in discussions around the *Plastic Packaging Tax* (PPT)[6] specifically, with commercial scale chemical recycling unable to provide physically traceable evidence of recycled content in the same way as mechanical recycling.

There are several CoC models that have been proposed to help overcome this:

- **Segregation.** This keeps material and products separate from virgin stock, and recycled content can be blended with virgin material, allowing recycled content to be accurately determined.

- **Mass balance.** This is a method involving reconciliation of recycled content based on the assumption that all input plastic waste can be reattributed at the point of sale (minus losses and co-products). There are several forms of mass balance:
  - **Free Allocation (FA).** Units of recycled content credits brought can be freely attributed among products, regardless of product type.
  - **FA Fuel Exempt / Fuel Excluded.** A form of free allocation, but any credits generated for use in fuels cannot be freely allocated.
  - **FA Polymer Only.** A form of free allocation, but only credits generated for use in polymer production can be freely allocated among polymer products.
  - **Proportional Allocation.** The recycled content in products is of the same proportion as the ratios which were blended for product generation.

HM Treasury confirmed in their 2024 Autumn Budget[5] that businesses will be permitted to use a Mass Balance Approach (MBA) to evidence recycling content in chemically recycled plastic for PPT, a statement intended to support the use and investment in advanced chemical recycling technologies.

FUTURE DEVELOPMENT

The UK requires significant investment in its current infrastructure to ensure that it can manage the revised waste streams in the coming years, and to a sufficient quality.

At present, there is a big discrepancy between the collection and recycling of high-value and high-quality plastics and formats, such as food-grade PET and HDPE, and low value and 'hard to recycle' household plastics, such as films and flexibles.

There are challenging commercial conditions and fine profit margins in the reprocessing sector, indeed if profits are delivered at all. Financial investment is needed to build technological solutions and operational business cases for this sector to make them commercially viable.

In terms of the development of infrastructure, several factors and considerations are likely to impact upcoming facilities. Most notably, the current increase in energy costs is affecting all businesses in the UK, and internationally, particularly those that are energy intensive such as sorting, reprocessing and chemical recycling facilities.

Reasons such as these, in conjunction with delays in implementing upcoming legislation, reduced demand and prices for recycled plastics, and an increase in imported recycled plastics had lead to site closures, including the most recent announcement that Viridor are closing their Avonmouth recycling facility[60]; a significant blow to the UKs efforts to increase domestic recycling capabilities.

For the UK to progress its recycling rates, there needs to be a focus on a number of areas to transform its capability to recycle its plastic packaging. These include: investments in infrastructure, particularly for films and flexibles, non-bottle PET, and food-grade plastic packaging; reviewing the current export system; and reviewing the current Packaging Recovery Note (PRN) and Packaging Export Recovery Note (PERN) system.

CITIZEN COMMUNICATIONS

Plastic packaging enters the recycling system through citizen disposal, and as such, clear and accurate communication is crucial in ensuring citizens know what to do with their waste packaging, and how to present it correctly for recycling.

Due to political and business incentives, there is an increasing need to recycle more plastics in the UK, as well as increase the quantity of recycled content in plastic packaging. How the consumer behaves is the important first building block to producing a high-performing recycling sector in the UK. Increasing the quantity of plastic packaging captured at kerbside and reducing contamination not only increases the volume of recyclable material available for reprocessing, but also increases the quality of all recyclate through the absence of non-target materials.

In the efforts to drive up collection quantities and reduce contamination, the way in which messaging is communicated to residents can play a vital role. Policy developments are also due to assist with this. *Simpler Recycling*[32] will ensure consistency of what can be recycled across England, reducing confusion on what can be included in kerbside collections, and therefore reduce instances of incorrect items and 'wish-cycling' (placing an item for recycling in the hopes it will be recycled, without confirmation it is accepted). Reform of the UK's Packaging Producer Responsibility System (*Extended Producer Responsibility* or EPR)[3] should also increase funding for strategic citizen communications and behaviour change activities.

The *2024 RECOUP Survey* found that **60%** of local authorities have a **continuous or ongoing communication campaign about recycling to residents**, and a further **28%** have **run a campaign in the last 12 months**. **95%** of local authorities who are aware of next years plans are **planning a communication campaign between now and April 2025.** The most common focus for these campaigns is **reducing contamination**, and the '**reduce, reuse, recycle' message.**

3 in 5

have

continuous or ongoing communication campaigns about recycling

MATERIAL PRESENTATION

Whilst *Simpler Recycling* legislation[32] will ensure that the accepted materials for recycling will be consistent from one local authority to another in England, further information should also be communicated to residents in order to ensure items are correctly presented for recycling.

This is particularly evident when it comes to how local authorities communicate whether to leave lids on plastic bottles or to remove them. The introduction of tethered caps to many bottles over the last few years is designed to encourage citizens to leave lids on plastic bottles for recycling, but this is not necessarily the guidance given by the local authority to its residents. Research carried out for the *2024 RECOUP Survey* found that **40%** of local authorities advised for **lids to be on bottles**, while **13%** asked for **lids off**. **12%** of local authorities **listed plastic lids separately** but did not specify whether they should be attached to a bottle or not, and **5%** said they can be placed for recycling **either on or off the bottle**. The remaining **30%** of local authorities **did not provide any guidance** to their residents on how to present bottle lids.

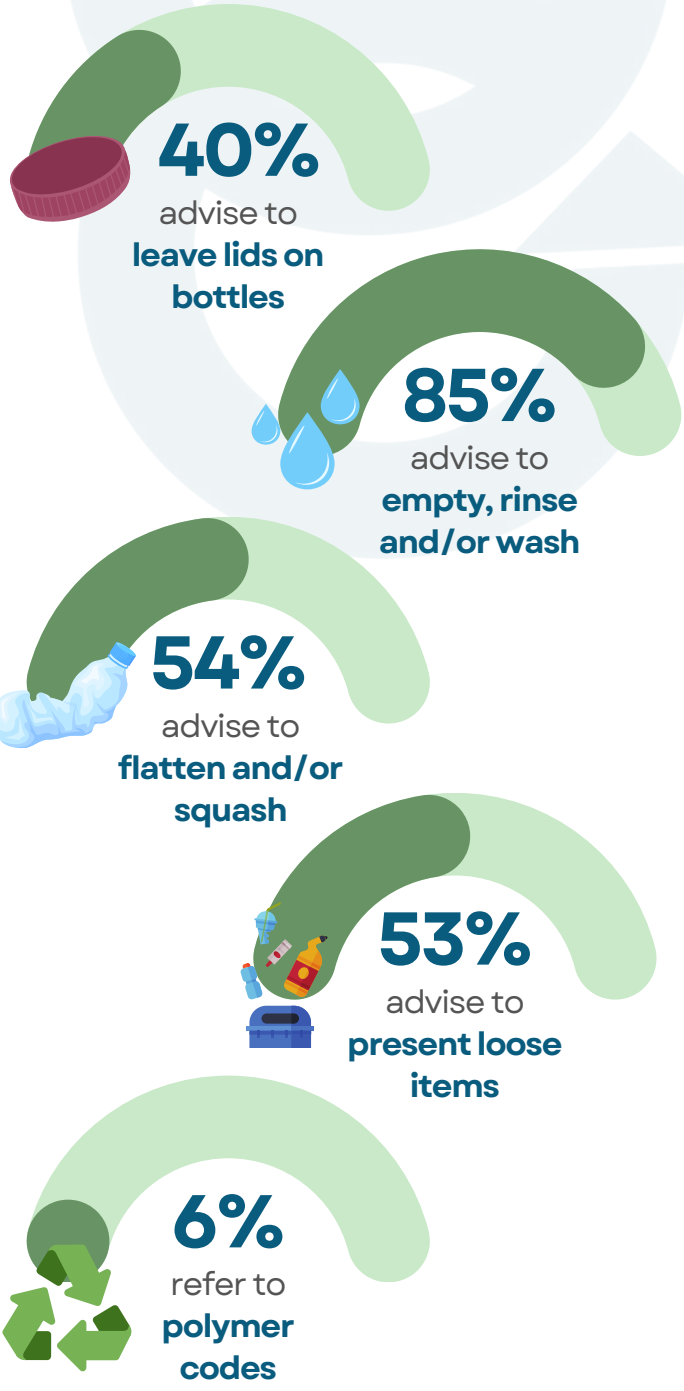
Although there may be operational issues at Material Recovery Facilities (MRFs) around the equipment being able to pierce bottles before they are compacted and baled, there are benefits to collecting bottles with their lids attached.

If citizens squash a bottle and re-attach the lid, it gives the lid a chance of being recycled with the bottle, and not lost through the sorting process due to its size. Despite the bottle and the lid often being made from different polymers, they are able to be separated by sink/float density processes at a MRF, and therefore can be sorted into the correct fractions. Re-attaching the lid to a bottle also reduces the volume of the item, and helps to prevent possible liquid contamination from the bottle leaking onto other recyclables. With the widespread adoption of clear bottle lids for milk bottles, there is also a greater chance of this plastic fraction being captured and being recycled into food contact applications, which is a valuable resource.

Other messaging communicated by local authorities to their residents include: **85%** asking for items to be **empty, rinsed and/or washed**, and **54%** asking for items to be **flattened and/or squashed.**

53% of local authorities ask for residents to place their recycling in the container **loose** and not bagged. This increases to **64%** when only considering local authorities who use wheelie bins to collect plastics, whereas only **20%** of those who use another container type (such as boxes or bags) include this messaging to residents.

While most local authorities have moved away from describing their target and non-target recycling materials by polymer codes, **6%** still use them in communications to residents. Considering the range of polymers that can be used for packaging formats, including mixes of multiple plastics and other materials, RECOUP recommends that polymer codes are not used as a method of communicating recyclability to residents.



PLEDGE2RECYCLE PLASTICS

Pledge2Recycle Plastics is a national plastics recycling initiative with the aim of reducing confusion around plastic recycling though education and communication.

There are three strands to Pledge2Recycle Plastics work: schools, communities and local authorities.
In 2024, work has continued with the recycling message but the educational focus has also broadened out to other elements of plastic circularity such as reuse. Below are examples of activations that have been completed this year.

SCHOOLS

Pledge2Recycle Plastics has delivered assemblies and workshops for schools across England, from Essex to Preston and as far north as Durham. The focus has been equally varied covering recycling, microplastics, design competitions, designing for recyclability and life cycle assessments. In 2024, teacher training has also begun to be delivered around the topics of recycling and life cycle assessments.

In addition, two new school toolkits have been developed to support waste minimisation and better recycling. It is the aim to test these over the coming months, with a view to publishing them in the new year along with various other updates to the school resources.

COMMUNITIES

In 2024, work has continued with local authorities to deliver activities which promote recycling within their communities. Messaging has been evolved to set the educational message in the context of climate change to raise awareness of the impact of the missed capture of plastics for recycling.

FURTHER WORK

At all of these events, aside from promoting key messages and information about plastics recycling and reuse, it has been interesting to listen to community members thoughts, feelings and questions about what goes in their bin and the connection between this, circularity, and broader environmental challenges like climate change. A sense of concern was recognised for the environment and a keenness to do more.

These findings led to two exploratory pieces of work: The Christmas Jumper Swap and the Coat Exchange.

Both projects are born out of a recognition that, whilst plastic brings with it some challenges, it also plays a vital role in our lives, and as such, where it is used, it must be managed both responsibly and prudently.

Around 60% of clothing fibres are now synthetic, and the aim of both projects is to keep plastic in use for as long as possible before it is recycled.

The toolkits provide guidance, posters and social media assets to make it easy for communities to take small steps which collectively make a world of difference to the environment and our relationship with plastic.

LOCAL AUTHORITY CAMPAIGN

Funded by Beyondly, Pledge2Recycle Plastics is partnering with Preston City Council (PCC) to run a campaign to increase recycling and reduce contamination of plastic recycling in the local authority area. This includes:

- A **leaflet** to all domestic households (approximately 70,000) providing a comprehensive list regarding what can be collected and how to present it.
- A **social media toolkit** tailored to the local authority's target and non-target lists, as well as contamination issues.
- 3 **community engagement events.**
- Use of **street hubs** and **billboards** in key locations in Preston City.
- A **radio** campaign.

Findings from the campaign will be published in a report in the new year.

Preston City Council

NEW LOOK

Pledge2Recycle Plastics is 10 years old. A lot has happened over these years, and it is now time for a change. Over the summer RECOUP staff and members have been engaged regarding the focus and messaging for Pledge2Recycle Plastics going forward. New brand ideas have also been tested with local authority partners, members and staff, with an aim to start the new year with a brand new focus for Pledge2Recycle Plastics.

ENGAGEMENT

The Pledge2Recycle Plastics team are always keen to engage with local authorities to provide independent support and information.

RECOUP would encourage all local authorities to link with Pledge2Recycle Plastics on their website. This can be done by linking both the website www.pledge2recycle.co.uk and connecting on social media by searching @pledge2recycle.

CASE STUDY

CHANNEL ISLANDS

As the UK strives to increase packaging recycling provision and rates, it is important to consider learnings from schemes outside of the UK border.

In recent years, the *RECOUP Survey* has provided a deep dive into plastics recycling in different nations across the UK. For 2024, this has expanded to look at the kerbside waste and recycling services for households in the Channel Islands, Jersey and Guernsey, in order to understand the differences in their provision and how they compare to the UK.

JERSEY

Jersey, with a **population of 103,200** in 2022[61], is split into 12 Parishes which act in a similar way to local authorities in the UK, with each managing their own local amenities[62]. In 2021, 66% of the total resident population were of working age (women and men aged 16 to 64 years)[63]. In 2019, Jersey saw just over 700,000 visitors to the island, and tourists tend to spend around £363 per visit[64]. Tourism in general provides Jersey with more than 7,000 jobs or 12.6% of all headcount[65]. As of 2024, the top three popular work types are financial and legal activities (21%), public sector (14%), and education and health (13.9%)[66].

Kerbside Service Provision

All 12 Parishes currently offer a weekly household refuse (residual waste) collection, and a kerbside glass collection service either once a week or once a month, depending on location[67]. 8 out of 12 Parishes also offer a monthly collection of other recyclable materials such as paper, cardboard, plastic bottles, and metal packaging. Jersey is currently not able to collect cartons, plastic pots, tubs and trays (PTT), black plastic and plastic film for recycling[68].

Jersey residents are required to have 2 wheelie bins/containers as standard to store refuse and glass for recycling[69].

Where kerbside provision extends to other materials, further containers are necessary and vary across the Parishes. For example, in the Parish of St Helier, residents are provided with clear bags for plastic bottles and metal, and blue bags for card and paper[70]. On the other hand, in the Parish of St Brelade, households should be further separating their recycling and placing them in a relevant coloured box or labelled bin provided by the Parish. These are: black for metal, red for plastic bottles, and blue for paper and card[71].

Communication to residents regarding how items need to be presented for recycling is similar to that of the average UK local authority – clean, dry and squashed with plastic lids on the bottles. Residents are also asked for items to be placed for recycling loose (not in plastic bags).

Away-from-Home Recycling

Jersey offers additional recycling facilities across the island, to account for households that currently only have kerbside provision for glass or need to dispose of recycling more regularly than the monthly offering at kerbside. These mini recycling centres, also known as 'bring banks', are spread out across the Parishes and are in local shops, parks, precincts and car parks, which can accept different materials depending on the centre. Some will accept only batteries, whilst others accept all recyclable materials such as paper and card, plastic bottles, metal packaging, batteries and textiles.

Similarly to the UK, Jersey also has a Household Waste Recycling Centre (HWRC) at La Collette[72], accepting household waste including garden waste and recyclable materials, as well as larger items such as appliances, vehicles and building materials.

Recycling Rate

Jersey saw a recycling rate of **34.8% in 2023**; a significant improvement on the 27% achieved in 2020. Although the reasons for the increase are not confirmed, one of the contributing factors could be Jersey's introduction to a new method of analysing and reporting recycling in 2022. This method is not simply based on recycling, but rather on the entire waste process.

The process follows the 'Waste Hierarchy' including steps to avoid recycling and disposal in the first place, through prevention, reduction and reuse[73]; a similar message that the authorities across the UK are relaying to their residents.

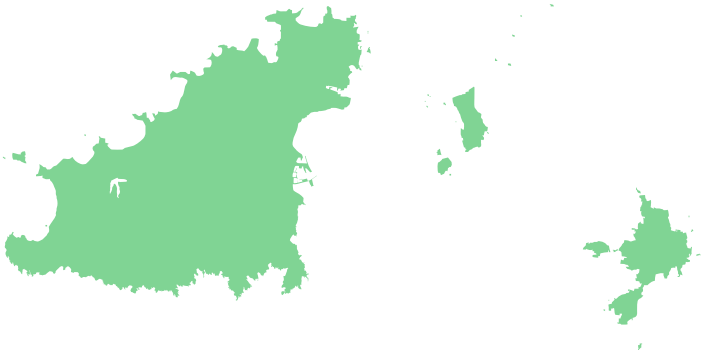
Infrastructure

Jersey generates around **100,000 tonnes of waste a year.** However, it does not have the infrastructure to manage all its waste locally[74].

Jersey **recycles domestically around a third of its household and bulky waste**, and the rest is either shipped to the UK (on the same boats that carry the imports to the island) or incinerated for energy recovery. The incinerator is already 10 years into its 30 years life span and Jersey has not yet decided whether it will remain beyond that, with many questioning the process and its sustainability[75].

35%
Recycling Rate in 2023

GUERNSEY



As of 2023, Guernsey had a **population of just under 65,000**[76] and is made up of 10 Parishes. In June 2024, 32,000 people were employed or self-employed in Guernsey. Similarly to Jersey, the top employment roles are in finance, legal and accounting (22.9%) followed by the construction sector (14.9%). The total number of (resident and visiting) passengers (including any cruise and yacht passengers) departing Guernsey was 564,000 during 2023. The average spending in Guernsey per visitor was £511 for those that departed by airplane or ferry during the twelve months from April 2019 to March 2020[77].

Kerbside Service Provision

Unlike the UK and Jersey, Guernsey has a consistent kerbside provision for the majority of households across the island. This consists of:

- A blue single-use bag to recycle: plastic bottles; plastic PTT; tins; cans and cartons.
- A clear single-use bag to recycle paper and cardboard.
- A sealable kerbside caddy for food waste.
- A reusable bag for glass.
- Black bags for residual waste.

The blue and clear bags have alternating weekly collections, as does glass and residual waste. Food waste is collected weekly.

The items that Guernsey can accept for recycling follow many similarities to that of the UK and mirror many of the same constraints, such as complications around plastic film and black plastic. Similarly, there are mentions on their website of the "Love Food, Hate Waste" and "Reduce, Reuse, Recycle" campaigns[78].

Guernsey Waste Strategy

In 2019 Guernsey introduced a new scheme that saw the need for residents to purchase "pay-as-you-throw" (PAYT) bin bag stickers to dispose of residual waste bags at kerbside. There are currently two options for stickers depending on the size of the bag: orange 50-litre stickers costing £7.16 for 4, and green 90-litre stickers costing £12.88 for 4[79]. This cost is in addition to an annual standing charge payable by households, which in 2024 stood at £107.97[80].

The European Commission stated the aim of the scheme is to enact the 'polluter pays' principle, with the hope of increasing the quantity of material collected for recycling and reducing residual waste[81]. However, the scheme has been more successful than was initially anticipated, with many householders pushing to recycle as much as possible rather than having to pay to dispose of their residual waste, leading to a deficit in the budget. This is because Guernsey Waste had budgeted on the basis that each household would put out the same number of residual waste bags as previous years, therefore anticipated a surplus of £97,000 for 2019. But, in reality, local households were quick to accept the new system and only put out an average of 0.43 residual waste bags each week (down from 1.47 bags)[82].

Away-from-Home Recycling

Guernsey offers a purpose-built HWRC at Longue Hougue[83], where residents can take their household items to reuse, recycle or dispose of. There is a charge for disposing of items such as residual waste, beds, mattresses, furniture and large appliances. WEEE and other recyclables are free of charge. Longue Hougue further offers a reuse facility run by a non-profit charity where residents can bring any unwanted items that are suitable to be re-homed.

Guernsey also offers an additional site for garden waste recycling at Mont Cuet[84].

Recycling Rates

Guernsey saw an impressive **68% recycling rate in 2022.** Out of 24,000 tonnes of waste generated by the island, 16,500 tonnes were reused, recycled or composted. However, this has dropped from 71% in 2021, 72% in 2020 and 73% in 2019. This is largely attributed to a reduction in garden waste and increased recycling at the HWRC[85]. Despite this, Guernsey is still outperforming the UK and Jersey. Guernsey has a target of recycling 70% of household waste by 2030[86].

Infrastructure

Guernsey's *Waste Management Plan*[87] outlines that in 2018 the island had **17 existing waste sorting facilities**, including MRFs, incinerators, landfills and storage facilities for exports and recovery. There are also a number of additional smaller facilities managing waste material before recycling or reuse. The Plan, however, recognises the need for further facilities in the future in order to align with the *Solid Waste Strategy*[88] and enable the minimisation of waste, increased recycling and export of residual waste for recovery.

Historically, Guernsey's residual waste has been shipped to Sweden (via the UK) and the government is now looking for another destination to export its non-recyclable waste to[89].

68%
Recycling
Rate in 2022

UK LEARNINGS

Although Jersey and Guernsey are neighbours, they have very different strategies and approaches to waste and recycling collections, as well as differing from the UK.

Probably the most significantly different is Guernsey with its PAYT system, which has been highly successful when it comes to encouraging residents to reduce waste in the first instance, reuse materials, and recycle more. However, implementing this type of scheme in the UK could prove challenging due to the scale, with the UK having a significantly larger population than Guernsey. Refusal to purchase stickers could lead to an increase in waste crime such as fly-tipping.

Jersey has a more similar approach to the UK, aiming to expand kerbside collections, and the materials collected, to all of its Parishes. The UK is moving in the same direction with the implementation of *Simpler Recycling*[32] in England, which, similar to Jersey, will see more standardisation when it comes to materials collected at kerbside.

The Channel Islands have their own legislative assemblies, and it is not clear how policy reforms in the UK, such as *Extended Producer Responsibility* (EPR)[3], will align with these. However, given the UK Government has a responsibility to engage directly with the Crown Dependencies on their policy areas, it would be advisable to monitor changing legislation in coherence with the UK closely.

RECYCLED PLASTIC MARKETS

Despite an increased focus on the need for the UK to process more of its waste material (especially plastic packaging) domestically, political, logistical and financial hurdles have challenged its viability. In 2024, RECOUP released a report delving into export markets and why they are important for the UK recycling industry.

DOMESTIC VS EXPORT RECYCLING

The Environment Agency's (EA) *National Packaging Waste Database* (NPWD)[21] reports the quantities of plastic packaging recycled within the UK and what is exported for recycling.

For 2023, NPWD reported that **1,186,000 tonnes** of plastic packaging was declared as recycled from all sectors. Plastic packaging collected from households accounts for around half of this. **52%** (**611,000 tonnes**) of the total recycled was exported and **48%** (**575,000 tonnes**) was recycled domestically. This is in contrast to 2022 which saw 54% recycled domestically, and 2021 which saw 53%.

In recent years domestic recycling has had to overcome a variety of obstacles including political changes such as the UK leaving the EU (introducing new hurdles and restrictions on the movement of material), drop in oil prices (making the use of virgin plastic packaging more attractive), high operating costs and low demand and value for recycled content. This is because of the competition with cheap imports of virgin (new) packaging and unverified packaging with recycled content from countries with a significantly lower cost base to produce the material. These challenges have all impacted on the feasibility of domestic recycling compared to the option of export.

The *Basel Convention*[90] coding and controls for the export of waste plastics mean that only plastics which are destined for recycling operations can be exported under Green List controls if they consist of one type of plastic that is almost entirely free from contamination, or mixtures of PP, PE and PET on the condition that they are destined for sortation and recycling. All other plastic exports must be notified and receive specific consent for export prior to any shipment.

The RECOUP *Exporting our Resources – Developing a UK Plastic Packaging Circular Economy* report[91] recognised that there is an increased focus on seeking to reduce, or even eliminate, the export of plastic waste.

Despite the UK having a relatively developed recycling infrastructure, there are significant gaps in both capacities and technologies that would need to be filled in order for specific formats and polymers to be recycled domestically, or to a standard that would not be considered 'downcycling'. Other countries, particularly those in the EU, have a significant head start when it comes to recycling infrastructure for packaging types such as plastic films and flexibles, as well as more established capacities in areas such as chemical recycling.

Global and domestic hurdles are also increasingly putting strain on the commercial viability of domestic recycling, so much so that this year has seen some high profile site closures that will have a huge impact on the UKs capacity for plastic recycling. Plastic packaging recycling continues to provide important income generation, employment and business opportunities for local authorities, waste management, and reprocessing providers, and urgent intervention is needed to protect this sector.

Therefore, at present, export of plastic packaging for recycling is essential for the UK, not only to meet its increasingly ambitious recycling targets, but also to ensure that material can achieve the best environmental outcome through facilities that are able to process volumes and formats that the UK is less equipped to handle.

PACKAGING RECOVERY NOTE (PRN), PLASTIC AND PROCESSING PRICES

The PRN is the existing mechanism through which packaging producers pay to recycle their packaging Placed on the Market (POM), and is the sole commercial support for plastic packaging reprocessors and exporters.

It is a market based system, and in 2023, PRN prices averaged **£273 per tonne**, compared to £228 per tonne the year before. These ranged from highs of £575, to as low as £115. The range in 2022 was £420 to £60.

Plastic values also change due to market conditions. The UK has gate fees in place for both landfill and Energy from Waste (EfW), showing the business case to recycle plastics can be viable with the right financial support. *Extended Producer Responsibility* (EPR)[3] can play a pivotal role to collect and sort the material.

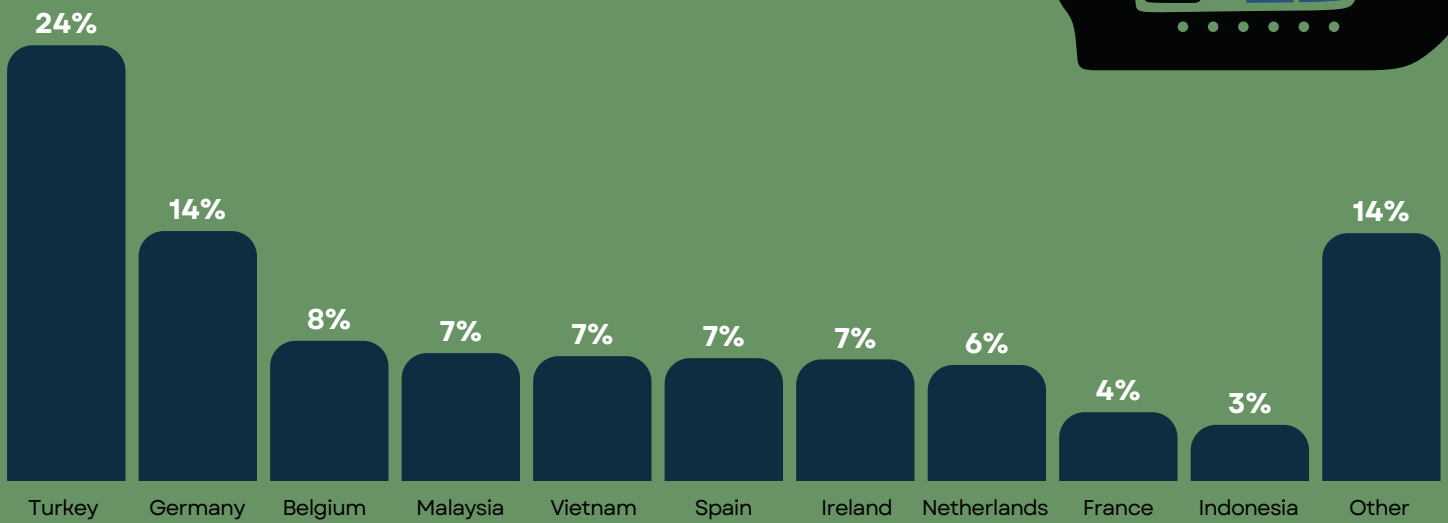
EXPORT MARKETS

With **52%** (**611,000 tonnes**) of UK material exported for recycling in 2023, it is important to understand the variety of end destinations. Export of material is often legitimately done to find the most viable recycling avenues, especially when it comes to material types and formats that the UK does not have suitable infrastructure or capacity to handle. However, It is possible that export markets can be exploited purely for commercial gains, particularly in respect of cheap labour in non-OECD (Organisation for Economic Cooperation and Development)[54] countries.

Since the widespread restrictions on exports going to Asian markets a number of years ago, **Turkey** has been the main receiving destination for UK plastic recycling. This remained the same in 2023. The *RECOUP Exporting our Resources* report[91] found that Turkey has received over **980,000 tonnes** of plastic for recycling from the UK **between 2017 and 2024**, receiving almost a quarter (**24%**) of all exported plastic waste for recycling from the UK in the calendar year 2023.

Quantities sent to non-OECD countries also saw an increase in 2023, rising to **22%** of the total exported for recycling. This is a significant increase on the low of 6% going to these markets in 2021 and is largely due to growth in material being sent to Asian countries. The RECOUP *Exporting our Resources* report[91] highlighted that concerns have been raised as to the UK's position as an OECD country for material exports out of the EU. In light of the EU's ban on export to non-OECD countries[13], this could provide a loophole for the movement of material from EU Member States, via the UK, to these markets.

EXPORT DESTINATIONS OF PLASTIC PACKAGING FROM THE UK 2023



CASE STUDY

LOCAL AUTHORITY DEBT

Local authority finances have been stretched to breaking point over the last few years, with little respite on the horizon.

Recent years have seen many stories in the media surrounding local authority debt, especially in 2023 where Birmingham City Council, Nottingham City Council and Woking Borough Council were all reported as 'bankrupt'.

While a local authority cannot actually go bankrupt, they can issue a section 114 notice, which indicates their forecasted income is not enough to meet their forecasted spending for the next year. In this case, the local authority cannot commit to any new spending and must take action to address the shortfall[92].

Section 114 notices: 2018 - 2023	
Nottingham City Council	29 November 2023
Birmingham City Council	5 September 2023
Woking Borough Council	7 June 2023
Thurrock Borough Council	18 December 2022
Croydon Borough Council	22 November 2022
Croydon Borough Council	2 December 2021
Nottingham City Council	15 December 2021
Slough Borough Council	11 November 2020
Croydon Borough Council	11 November 2020
Northamptonshire County Council	24 July 2018
Northamptonshire County Council	2 February 2018

It is expected that over the coming years further section 114 notices will be issued. A survey that informed the Local Government Information Unit (LGIU) *State of Local Government Finance in England 2024* report[93] found that **51% of local authorities are likely to issue a 114 in the next 5 years**, and 9% said it could be as soon as the next financial year.

Core spending power (a government measure of the money a local authority has available, including grants from central government and council tax) is reported to have fallen by 31% between 2009/10 and 2021/22 (not including COVID grants), with local authority spending power dropping 27% since 2010[94].

COSTS AND DEMANDS ARE RISING

There can be a variety of reasons why a local authority may be experiencing pressures on their finances. Demand on resources through increased populations and all-time high claims for adult and social care, combined with the impacts of the cost-of-living crisis, inflation, energy costs and the lasting effect of the pandemic, have all taken a toll on the funds available.

Other more local authority-specific factors may have also played a part, including poor financial management, errors in accounting processes, depletion of reserve funds, and commercial property or other investments that have failed to be profitable[92].

Revenue generation options are restricted for local authorities, with council tax being the main source of locally raised funds, making up around a quarter of all income. Due to this, it is unsurprising that as much as 91% of local authorities have made the decision to increase council tax, with 83% saying they were increasing it by the maximum legal amount in their authority[93]. Some local authorities that have issued section 114 notices have significantly raised their council tax in an attempt to raise funds. In 2023, Croydon Borough Council increased their council tax by 15%, while Thurrock Borough Council and Slough Borough Council both raised theirs by 10%. Birmingham City Council is planning to raise their council tax by 21% between 2024 and 2026, while at the same time making service cuts worth £300million[94].

Other local sources of income generation include business rates and charges for services such as parking. However, influencing factors such as the COVID-19 pandemic can cause these to fluctuate, making it difficult for local authorities to rely on, and plan around, these figures[92]. Despite this, 90% of local authorities have raised fees and charges to supplement their income[93].

It is important to note that much of the funding received by local authorities is available to allocate wherever they deem appropriate, and local authorities are responsible for managing their own finances[95].

IMPACT ON RECYCLE RATES

In order to attempt to meet their legal requirement to have a budget that balances at the end of each financial year, plans to claw back funds often come at the expense of frontline services, despite local authorities being obligated to provide 'best value' to residents[94]. In recent years, local authorities have been forced to make the difficult decision to not only make cuts to funding for discretionary services, but also statutory services that they are legally bound to provide[93].

The *2024 RECOUP Survey* found that, of those local authorities who shared a response, **42%** said they have **received budget cuts** for providing waste and recycling collections or delivery of communications to householders about waste and recycling in **2023/24**. Furthermore, **40%** said they are due to receive budget cuts in 2024/25.

Due to this, it is possible to assume that the local authorities with the highest level of debt could potentially have the lowest recycling rates, as they are unable to dedicate funding and resources to maintain or boost resident participation. Using the most comparable data available[96 97 98 99 100 101], RECOUP is able to show that there is a broad correlation.

However, it is important to note that not all local authorities fit this pattern. For example, Liverpool City Council and Tower Hamlets Council both have a recycling rate of 18%[96], however Liverpool City Council has a total amassed debt of £632million, almost 10 times higher than Tower Hamlets Councils £69million[100].

Debt Range		Number of Local Authorities	Average Recycle Rate
	£0	39	46%
£1	£100,000,000	112	41%
£100,000,001	£200,000,000	67	47%
£200,000,001	£300,000,000	47	46%
£300,000,001	£400,000,000	26	42%
£400,000,001	£500,000,000	19	40%
£500,000,001	£750,000,000	25	38%
£750,000,001	£1,000,000,000	14	39%
£1,000,000,001	£2,000,000,000	10	39%
£2,000,000,001	£3,000,000,000	2	29%

LEGISLATIVE INFLUENCE

Delays and uncertainty around legislative reforms in the sector over the last few years has made it difficult for local authorities to plan for, or make any changes to, their recycling services. Perhaps the most directly impactful on the horizon to local authority funds are the introduction of *Extended Producer Responsibility* (EPR)[3] and reforms to the *Emissions Trading Scheme* (ETS)[12].

Extended Producer Responsibility (EPR)

Packaging EPR[3] is the reforming of the current producer responsibility system, shifting the burden of managing packaging waste from local authorities onto the packaging producer. Payments made through EPR will increase funding available to local authorities for recycling services, helping them make any necessary changes to their current provision (such as requirements for *Simpler Recycling*[32] in England), as well as provide an efficient and effective service to residents. It will also help generate investment in jobs and infrastructure in the sector. As a result, it is expected that recycling rates will increase.

The 2024 Autumn Budget[5] provided some welcome clarity in regards to EPR, outlining how local authorities are expected to receive around **£1.1 billion** in 2025/26 via the scheme. The Treasury also committed to an in-year 'top-up' in the event that EPR does not meet central estimates, albeit for 2025/26 only. More information about this will be outlined through the Local Government Finance Settlement (LGFS) process, however it is hoped that these statements will provide local authorities a level of financial security that will help to plan budgets and deliver waste and recycling services over the next few years.

The *2024 RECOUP Survey* found that **89%** of local authorities were **supportive of EPR for packaging.**

Local authorities are due to receive the first funds under the scheme between October and December 2025 covering the first 2 quarters of the financial year. The second and third payments will be made between January and March 2026[102].

Emissions Trading Scheme (ETS)

ETS[12] is a market-driven mechanism that limits the amount of emissions an involved industry is allowed to produce, with the aim to encourage a reduction in greenhouse gas (GHG) emissions. The UK launched its own ETS in January 2021 and accounts for around 25% of the country's emissions, playing a significant role in the aim of achieving Net Zero targets by 2050[103].

In July 2023 it was confirmed that the UK ETS will expand to include Energy from Waste (EfW) and waste incineration facilities. Energy recovery plants and other forms of energy supply are responsible for around 11.5% of the total GHG emissions generated in the UK, so it was recognised that they provided a significant opportunity to help meet emissions targets. This change could potentially have a sector wide impact, influencing the composition of the waste stream as well as operational and economic dynamics. The full implementation of the changes is not due until 2028, following a two-year transitional period of emissions monitoring, reporting and verification from 2026 to 2028[103].

The *2024 RECOUP Survey* found that a third of local authorities (**32%**) were **not aware of the upcoming extension of the ETS and its impact on incineration and energy recovery of local authority waste.** When asked how prepared local authorities felt for the changes to ETS on a scale of 1 to 10 (with 1 being not prepared at all, and 10 being fully prepared), 37% gave a score of 3 or below, indicating they do not feel confident about how it will operate. Only 12% gave a 7 or higher, with no local authorities giving a score of 10.

A significant concern for local authorities is the economic impact of the change due to their heavy usage of EfW plants, with a likely sizeable increase in gate fees. The volatile nature of the carbon market hinders the ability to successfully make financial plans, something that is especially important for local authorities who work on such tight budgets. There is a fear that the increased financial demand from UK ETS will put further pressure on already strained funding pots, likely resulting in cuts to other services[103].

Plastic is a large contributor to the carbon emissions at EfW facilities, and therefore the ETS changes provide further incentive for local authorities to attempt to recover as much plastic as possible from their residual waste and divert to recycling streams. The *2024 RECOUP Survey* found that only a quarter (**26%**) of local authorities currently **recover plastics from waste streams heading for landfill or incineration**, but it is likely this will increase.

The changes to ETS may also challenge views on the introduction of *Deposit Return Schemes* (DRS)[9] [10] [11]. The removal of bottles from kerbside collections eliminates a valuable PET stream, but it may also reduce the amount of bottles entering residual waste by incentivising residents to dispose of bottles correctly.

FURTHER SUPPORT ON THE WAY?

The Governments 2024 Autumn Budget[5] highlighted its recognition that pressures facing local authorities are causing many to experience financial difficulties and has therefore stated its commitment to a framework of support. Whilst the details of this framework were not disclosed, the upcoming LGFS should hopefully provide more clarity regarding this, as well as reforms to the funding allocation process, which aims to ensure a fairer distribution of funds to reflect up-to-date needs and local revenue assessments.

The 2024 Autumn Budget also stated how the proposed changes, supported by £1.3 billion in new grant funding, will see a 3.2% real-terms increase in core spending power for local authorities in 2025/26. Whilst this, and the significant funding from EPR, are positive steps, careful consideration should be made around the long-term impacts of developments such as funding allocation reforms. It is also imperative that local authorities receive clarification that funds generated through EPR are dedicated to waste and recycling services, and not otherwise allocated to try and offset cuts to funding in other areas[104].

PLASTIC WASTE CRIME

Waste crime can come in many forms, ranging from criminal organisations, rogue traders, and illegal waste sites, down to fly-tipping and littering. Material wrongly declared as recycled when exported (often in developing countries) is also considered waste crime. The emotive nature of waste crime means it is often reported by the media showing the negative impact of plastics and other materials in the environment.

Litter and fly-tipping pose the most immediate challenges for local authorities regarding waste crime. These can take place on a small scale, such as domestic litter, or on a commercial scale, through material dumping. Local authorities are largely responsible for the removal of litter and fly-tipping due to the *Duty of Care Code of Practice*[105] for the safe management of waste, so tackling waste crime is always a priority.

It has been estimated that keeping the country's streets clean of litter costs local authorities approximately **£660 million** annually[106]. An additional consideration is the value of the littered material itself which is not being captured for recycling.

38% of local authorities who provided a response to the *2024 RECOUP Survey* stated that they had seen an **increase in litter and fly-tipping over the last 12 months.**

LITTER

The *Litter Strategy for England 2017* report[107] stated that living in a littered environment can have negative consequences on people's mental and physical health, creating further strain on local services. This is otherwise known as litter disamenity. Poor local environmental quality can also discourage inward investment and may suppress property prices, damaging local economic growth. The report estimated that the impact was valued at £986 million, and although this was considered by some to be subjective and high, it does indicate the wider impacts of litter, which are both seen and unseen.

Local authority views on litter are largely perceptive and not an exact science. Furthermore, local areas vary significantly, and clean-up of litter and refuse can depend on local authority priorities and geographical characteristics, such as population densities and rurality.

The *2024 RECOUP Survey* can report that, out of those local authorities that shared an opinion, **64%** felt that their area was **predominantly free of litter and refuse apart from small items**, but **34%** felt that their area had a **widespread distribution of litter and/or refuse with minor accumulations. 2%** said they had **no litter or refuse.**

69% of local authorities who gave a response said that **retail and commercial areas of the town centre** were known 'hot spots' for litter in their area, with **46%** also noting **highways**, **30%** stating **areas of the nighttime economy**, and **24%** noting around **schools and educational facilities**.

84% of local authorities who responded said that their area undertakes **litter-picking activities**, **59%** enforce **litter penalties**, and **57%** conduct **anti-litter communications and education campaigns**.

FLY-TIPPING

The *2024 RECOUP Survey* found that **50%** of local authorities see both **litter and fly-tipping as an equal concern**, however **31%** felt **fly-tipping was a greater problem** than litter, and only **19%** said litter was more problematic than fly-tipping.

Historically, while exact figures are not possible to ascertain, local authorities have reported that they believe fly-tipped material is more prevalent from domestic sources, but that commercial and industrial waste is in greater quantities. Commercial waste could be waste that is illegally disposed of by businesses, offices, or small traders placing their waste in sacks without a waste contract and leaving it in streets or parking areas.

POLICY & LEGISLATION

Policy and legislation continues to dominate and influence the entire plastic supply chain ahead of major changes in the years to come, and 2024 has seen the UK make some considerable strides in readying itself for these reforms to be implemented.

Since 2018 and the release of the *25-Year Environmental Plan*[108], the UK has seen more new policies and substantial updates to legislation than in the previous 25 years combined - especially given the unique opportunities presented through the considerable changes to the UK's regulatory landscape in recent years.

We are on the verge of the first of these new and updated policies coming into effect. *Extended Producer Responsibility* (EPR)[3] is set to pass through parliament in January 2025, and 2026 is set to see *Simpler Recycling*[32] come into force, which will be the biggest piece of household waste and recycling legislation since the Environmental Protection Act 1990, as well as gearing up for further stages of EPR and a rolling out of *Deposit Return Schemes* (DRS)[9] [10] [11] across the UK.

This is to be followed by the hard launch of DRS, restrictions on waste exports, and finally the scope expansion of the *Emissions Trading Scheme* (ETS)[12] to include waste incineration, which will have a significant impact on local authorities, the plastics industry, and the waste and recycling industry as a whole. The next four years are some of the most crucial of this century for our industry and our environment.

THE ENVIRONMENT BILL

In 2021, the Environment Bill was passed in parliament making the Environment Act legislation[109] UK law, allowing ministers to introduce a variety of waste reforms, such as EPR[3], DRS[9] [10] [11] and Consistency in Household and Business Recycling in England (now known as *Simpler Recycling*[32]).

The independent Office for Environmental Protection (OEP)[110] will enforce the changes and hold the UK Government and public bodies to account, with any changes being driven by new legally binding environmental targets.

EPR[3], and other upcoming reforms, should help to significantly increase the recyclability of plastic packaging Placed on the Market (POM), and the UK's recycling rates.

It's set to be a very challenging but potentially effective few years for the industry, and the scale of the challenge is matched only by the opportunity.

EXTENDED PRODUCER RESPONSIBILITY (EPR)

Packaging EPR (or pEPR)[3] is the reform of the packaging producer responsibility system. EPR operates on the principle that the 'polluter pays', which means that producers of packaging will now be accountable for covering the 'full net costs' that local authorities have previously faced in collecting and disposing of packaging waste. Through recyclability modulation and what producers POM, this is anticipated to reduce the quantity of packaging entering the waste stream and increase packaging recyclability through more environmentally conscious design and material choices[111].

As of October 2024, for all intents and purposes, EPR is now UK law under what is known as a 'Negative Statutory Instrument'. This means that, whilst technically possible, it is very unlikely the legislation will be revoked. The EPR legislation is available to view under its official name *The Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024*[112].

EPR will be calculated through recyclability modulation based on the recyclability performance of packaging POM. However, in order to provide a picture on what fees may look like, the government has published illustrative base fees[4], calculated through dividing local authority packaging waste management costs (for household packaging waste) by the total amount of household packaging POM.

The data and methodology for calculating illustrative base fees for EPR will be updated as necessary until the final fees are released in summer 2025.

Illustrative packaging Extended Producer Responsibility base fees for 2025 to 2026

Material	Lower (£ per tonne)	Intermediate (£ per tonne)	Higher (£ per tonne)
Aluminium	320	405	605
Fibre-based composite	355	450	565
Glass	110	175	215
Paper and card	135	190	250
Plastic	360	425	520
Steel	220	265	330
Wood	145	240	340
Other	180	205	240

Local authorities are now set to receive the first half of payments based on the EPR fees for the year 2025/26 between October and December 2025 and will be allocated the final two quarters in January and March 2026 respectively[102].

The 2024 Autumn Budget[5] highlighted that local authorities can expect approximately **£1.1 billion** in funding from the implementation of EPR in 2025/26. Crucially, for 2025/26 only, the Treasury have also promised an in-year top-up if local authorities do not receive the projected income from EPR, providing greater financial certainty to local authorities.

The *2024 RECOUP Survey* found that **89%** of local authorities that gave a response said they were **supportive or strongly supportive** of the introduction of EPR. Only **1%** said they were **strongly against**; the remainder were neutral.

EPR[3] payments will fund local authority collections, and the consistent approach to recycling as set out in the *Simpler Recycling* legislation[32]. This includes a standard list of materials collected for recycling and separate food waste collections. EPR will also support the delivery of similar measures in the devolved administrations.

The EPR scheme will be reviewed after two years of its operation. This review will consider the proposals of the task force on commercial waste and the progress in reducing the quantities of packaging in street bins and littered on the ground.

England and Northern Ireland have indicated they will not introduce payments for packaging waste that is littered, whilst Scotland and Wales intend to obligate producers for these costs, and these will come forward in due course. DEFRA has begun exploring the data around litter and littering but is doing so through analyses of material disposed of in litter bins, rather than ground litter.

Mandatory labelling of packaging for recyclability with a single labelling format will be introduced with the use of the 'Recycle Now' recycle mark and relevant wording (recycle/do not recycle). This will enable a single, binary approach to recyclability labelling across the UK. The Government will publish guidance to help producers understand the requirements. However, DEFRA have confirmed that mandatory labelling will not be required through the first stages of EPR due to costs to businesses and trade frictions due to similar measures being adopted in the EU[113]. Businesses will need to enter into full compliance with labelling requirements as part of pEPR from April 2027[114].

Additionally, the digital waste tracking service is due to go live in April 2025[115]. However, with a lack of other information surrounding its launch and operation, it is unsure as to how this will work in practice.

A mandatory takeback scheme for the collection and recycling of fibre-based composite cups (e.g. disposable coffee cups) will be also be introduced[116].

SIMPLER RECYCLING

Simpler Recycling[32] is the next major UK waste reform after EPR and will mean that every household and business across England will be obligated to collect the same standard set of materials at the kerbside for recycling. This includes the recyclable waste streams of plastics, metals, glass, paper and card and food waste.

The timeline for its introduction is as follows:

- **By 31 March 2025**, non-household municipal premises (such as hospitals, schools, and businesses), except micro-firms (businesses with fewer than 10 FTE employees), will be required to collect recyclable waste streams, excluding garden waste and plastic film.
- **By 31 March 2026,** local authorities will be required to collect recyclable waste streams, excluding plastic film, from all households in England, including a weekly food collection for every household, unless transitional arrangements are agreed.
- **By 31 March 2027,** micro-firms will be required to collect recyclable waste streams, excluding garden waste. Plastic film collections from residential properties will also begin.

80% of local authorities that gave a response to the *2024 RECOUP Survey* said they were **supportive or strongly supportive** of the introduction of *Simpler Recycling*. **4%** said that they were **against**, and the remaining said that they were neutral.

Whilst this policy is only due to impact local authorities in England, each devolved administration has its own policies and guidance for introducing similar policies going forward. This includes the Scottish Government and the Convention of Scottish Local Authorities (COSLA)[33] which have a *Household Recycling Charter*[34], Wales with its overarching waste strategy document, *Towards Zero Waste*, and its established *Collections Blueprint* as part of its *Municipal Sector Plan*[35], and Northern Ireland with its waste management strategy, *Delivering Resource Efficiency*[36].

The Welsh Government introduced its own consistency legislation for businesses from 6 April 2024, with its new *Workplace Recycling Regulations*[117]. This policy, regulated by Natural Resources Wales (NRW), requires, by law, the separation of: food waste (for premises producing more than 5kg per week); paper and card; glass; metals, plastics and cartons; small Waste Electrical and Electronic Equipment (sWEEE); and textiles.

DEPOSIT RETURN SCHEMES (DRS)

Legislative plans are in place to introduce a DRS scheme across the UK, something that is seen in many European countries, and globally. Such a scheme aims to apply a deposit to drinks containers that are paid for by the consumer at the point of purchase. This deposit can then be reclaimed when returned to a designated return point, such as a reverse vending machine (RVM).

The introduction of a scheme has seen delays over the last few years, complicated by Scotland's plans to introduce its own independent scheme[8]. Deposits in Scotland are set at 20p per container, with the rest of the UK still to be confirmed. In 2023, following disputes around the inclusion of glass as part of its scheme, the UK Government forced changes to Scotland's scheme under the *Internal Markets Act* (IMA)[38].

After the scheme administrator (SA) went into administration, Zero Waste Scotland announced that the scheme's go-live date would be pushed back to October 2025 "at the earliest".

The release of the DRS joint policy statement in April 2024[9] confirmed that all four administrations would have an aligned implementation date, which was set to **October 2027**. However, in November 2024 Wales announced its exit from the join UK DRS process, stating an inability to address issues to the operation of devolution caused by the IMA[10]. Whilst it has been confirmed that the rest of the UK will continue to work towards the October 2027 implementation date[11], it remains to be seen whether Wales will follow suit.

The postponed start date may also stem from concerns raised by public bodies, which argued that, as DRS was a form of EPR in itself, both EPR and *Simpler Recycling*[32] would need to be operating and providing usable data to obtain a clearer understanding of the environmental and business need for DRS. From this outlook, starting both EPR and DRS in tandem was seen as unnecessary[118].

Single-use drink containers holding between 50 ml and 3 litres of liquid will be in scope of all UK DRS schemes, incorporating containers sold both individually and as part of a multipack. It has been confirmed that DRS schemes in England, Scotland and Northern Ireland will not include glass. Wales are standing with their decision to include glass in their scheme and are now the only administration in the UK to include it. It is suggested that this may be the reason for Wales not continuing with development of the joint UK DRS, alongside a focus on reuse for this material.

The use of a Digital DRS (DDRS) is still being assessed. A DDRS is where consumers can claim their deposit at home by scanning their drink containers on their smartphones when placing them for recycling. This would be in addition to using RVMs when away from home, as is used in a traditional return to retail DRS scheme.

The *2024 RECOUP Survey* found that **49%** of local authorities that gave a response said they were **supportive or strongly supportive** of the introduction of DRS. **13%** said they were **against or strongly against**, and **38%** were neutral.

UK PLASTIC PACKAGING TAX

In April 2022, HMRC introduced the *UK Plastic Packaging Tax* (PPT)[6]. This is a tax on packaging manufactured in, or imported into, the UK, to be sold on the UK market, which is mostly plastic by weight and contains less than 30% recycled content. The tax applies to predominantly plastic packaging. The cost of tax increased to **£217.85 per tonne from April 2024** and is due to rise to £223.69 per tonne from April 2025 in line with CPI inflation.

The UK Government stated that the key aim of the tax was to provide an economic incentive to use recycled material in plastic packaging, generating a greater demand for this material and thus stimulating increased levels of recycling of plastic packaging waste. It is also likely that tax or legislative interventions to incentivise recycled content will migrate to other packaging materials and non-packaging items over time, other than just single-use plastic packaging.

In 2023/24, the PPT made **£268 million** – a decrease of 6% on its first year[119]. HMRC has claimed the tax to be a success in driving the use of recycled content in plastic packaging, but there has been unintended consequences around false claims of recycled content, particularly from non-UK and non-EU markets.

In 2023, a consultation took place on chemical recycling and the adoption of the Mass Balance Approach (MBA)[120]. This sought to gather opinions and evidence on allowing a chain of custody (CoC) model for the reporting of recycled content through a MBA, enabling redistribution of allocated claims based on inputs. In the 2024 Autumn Budget[5] the government confirmed that businesses will be permitted to use the MBA to evidence the recycled content in chemically recycled plastics for PPT.

Additionally, the government is considering removing pre-consumer waste as a source of recyclate for PPT. This marks a significant advancement in promoting demand for post-consumer materials.

UK PLASTIC RECYCLING TARGETS

As part of the *Packaging waste: producer responsibilities* guidance[121], 'business' packaging waste recycling targets were published for businesses for 2023 and 2024.

For plastics, the target is **61%** for both years.

Moving forward, the impacts of upcoming legislation reforms need to be taken into consideration when setting out targets for recycling rates. As such, DEFRA has published modelled UK packaging waste recycling rates for 2025 and 2030[122]. This includes a target based on if there is no change to policy, and a target based on what is likely achievable if DRS[9] [10] [11], EPR[3] and *Simpler Recycling*[32] in England are introduced. It is important to note, these figures do not include the contribution from Scottish DRS material, only England, Wales and Northern Ireland.

Modelled UK packaging waste recycling rates in 2025 and 2030

	2025			2030			
Material	No change	DRS + Consistency + EPR	% increase	No change	DRS + Consistency + EPR	% increase	2030 PPWD Targets
Plastic	42%	51%	+9%	42%	62%	+20%	55%
Wood	38%	39%	+1%	38%	39%	+1%	30%
Aluminium	57%	69%	+12%	57%	69%	+12%	60%
Steel	83%	88%	+5%	83%	92%	+9%	80%
Paper/ card	70%	81%	+11%	70%	86%	+15%	85%
Glass	69%	92%	+23%	69%	93%	+25%	75%
Total	61%	73%	+11%	61%	78%	+16%	70%

SINGLE-USE PLASTIC (SUP)

In line with Article 5 of the *EU Single-Use Plastics Directive (EU) 2019/904*[123], there are long-running efforts to reduce marine litter coming from the most common SUP items. This covers a broad range of products, including plastic cotton buds, cutlery, plates, beverage stirrers, straws, balloon sticks, EPS food containers, and EPS cups. Exemptions will be enforced where products are deemed necessary, but any measures taken to restrict certain items should take fully into account the environmental and socio-economic impacts of doing so.

In October 2023, England and Wales introduced SUP bans and restrictions[124], with Scotland having already introduced its own in 2022. Wales is due to implement a second phase of its legislation, with carrier bags, PS lids, and oxo-degradable products due to be banned by spring 2026. Questions remain over the introduction of the ban in Northern Ireland, which was due to introduce rules relating to the EU's *Single-Use Plastic Directive*[131], as agreed in the *Northern Ireland Protocol*[125], but there is no update at the time of writing this report. Of course, along with the *EU Single-Use Plastic Directive* and the upcoming *Packaging and Packaging Waste Regulations* (PPWR)[15], Northern Ireland will have legislation already in place to tackle unnecessary packaging and single-use plastic.

In October 2024, DEFRA updated the guidance on SUP bans and restrictions to clarify their definition of single-use, stating that a single-use product is one that is not designed or intended for reuse, and to re-label a product for reuse without the product undergoing a change in design for its reuse would be insufficient[124].

The *2024 RECOUP Survey* found that **90%** of local authorities that gave a response said they were **supportive or strongly supportive** of SUP legislation. Only **1%** said they were **against**; the remainder were neutral.

BAN ON EXPORT TO NON-OECD COUNTRIES

There is a constantly changing dynamic around the export and import of waste, particularly plastics, both in terms of policy and positions that the EU and independent countries are taking. The UK has long relied on export markets, but the emphasis for the UK and indeed many other countries is to manage more material on their shores. This both reduces the reliance on changing policy and restrictions from other countries that accept this material, and promotes the development of domestic recycling infrastructure to handle waste from where it originated.

The new *EU Waste Shipments Regulation*[13] came into effect in May 2024 and requires destination countries outside of the OECD (Organisation for Economic Cooperation and Development)[54] to demonstrate their ability to manage waste they import sustainably. The requirements are set to apply from 21 May 2027.

In addition to the above, the export of plastic waste to non-OECD countries will be banned for two and a half years from 21 November 2026. After this period, these countries may begin receiving plastic waste again under the strict standards laid out in the regulation.

In 2023, a consultation was expected to be launched in the UK looking at banning waste exports to non-OECD countries[126] in much the same way, but this has yet to materialise.

As of 2023, **22%** of all plastic packaging exported from the UK for recycling was **sent to non-OECD countries.**

EMISSIONS TRADING SCHEME (ETS)

The ETS[12] is a market-driven mechanism that limits the amount of emissions an involved industry is allowed to produce, with the aim to encourage a reduction in greenhouse gas (GHG) emissions. 2024 saw further discussion around the inclusion of emissions from waste incineration and Energy from Waste (EfW) as part of the reforms to the ETS.

Incinerating waste carries high costs, including the emissions trading allowances that local authorities must acquire under the ETS. This could impose hefty costs on local authorities, with higher charges if there is more plastic in the material stream. Plastic will be seen as an emission as soon as it is placed in a refuse stream, or indeed collected, therefore when the legislation is implemented, local authorities will be required to purchase emissions trading allowances for any kerbside recyclable material which may end up in refuse streams.

The *2024 RECOUP Survey* found that a third of local authorities (**32%**) said they were **not aware of the upcoming extension of the ETS** and its impact on incineration and energy recovery of local authority waste.

When asked how prepared they felt for the changes to ETS on a scale of 1 to 10 (with 1 being not prepared at all, and 10 being fully prepared), **37% gave a score of 3 or below**, indicating they do not feel confident about how it will operate. Only **12%** gave a 7 or higher, with no local authorities giving a score of 10.

There have been some strong responses to the proposals, particularly from local authorities, with research indicating that local government could incur gross costs of £367m and £747m in the first year, which could rise to an annual gross cost of over £1bn by 2036.

Successful implementation of *Simpler Recycling* legislation[32] and EPR[3] should help to remove some plastics from refuse streams to kerbside dry recycling channels. The importance of consumer communication and behaviour change programmes should be elevated to divert plastic packaging away from the residual stream.

The ETS scope expansion is due to come into effect from 2028, after a two-year transitional period from 2026 where EfW emissions will be monitored, reported and verified; however there will not be an obligation for any obligated parties to purchase allowances from 2026 until the scheme begins in 2028.

EUROPEAN & INTERNATIONAL POLICY

Since leaving the EU, the UK has been able to make its own policy decisions around how it manages waste and recycling. The UK is now treated in the same way as any other OECD country with respect to importing and exporting waste to and from EU member states. This also has a knock-on effect in respect of some policy changes. All policy that is in place in the EU will have a significant influence on the UK due to the large amounts of products, packaging and waste imported and exported to and from the bloc.

Current EU regulation that is particularly relevant includes:

Circular Economy Package[127]: Addressing the high dependency on virgin fossil feedstock, low rate of recycling and reuse of plastics, and the leakage of plastics into the environment.

Waste Framework Directive[128]: The legislative structure for the management of waste in EU countries, which includes setting recycling and reuse targets.

Plastic Packaging Waste Regulations (PPWR)[15]: PPWR is proposed legislation in the final stages of negotiation and agreement which revises the current packaging and packaging waste rules applicable in the EU. The key objectives are to prevent the generation of packaging waste, boost high-quality recycling, and adopt harmonised EU rules. Key measures proposed include a focus on waste reduction, labelling, reuse & refill, bans on certain packaging formats, recyclable packaging, recycled content, packaging minimisation, and compostable packaging.

Deposit Return Schemes (DRS): EU Member States continue to introduce DRS schemes to help meet the targets set. The Republic of Ireland launched its own 'Re-turn' DRS scheme in February 2024[129], with a variable fee of 15-25¢ on PET bottles and aluminium cans between 150ml and 3l. EU countries due to introduce new DRS schemes include Austria (2025), Poland (2025) and Portugal (2026)[130].

Single-Use Plastics Directive[131]**:** Aiming to tackle litter coming from identified single-use plastic products and targets to collect drinks containers.

European Green Deal[132]: A set of policy initiatives from the European Commission with the overall objective to make Europe carbon neutral by 2050.

Plastic Packaging Levy[133]**:** An 80¢ per kilogram (€800 per tonne) levy on unrecycled plastic waste. Proceeds from the levy go directly to the EU, but it will be down to individual countries to decide how to fulfil the requirement.

Recycled Plastic in Food-Contact Materials[134]: Updated requirements for recycled plastic used in food-contact packaging being sold on the EU market including Northern Ireland. Older policy remains in place for England, Wales and Scotland[135].

Waste Shipping Regulations[136]: New regulation passed through EU parliament in May 2024, with requirements for non-OECD countries to demonstrate their capacity for sustainable waste management before accepting imports.

Plastic Packaging Tax(es): Proposed taxes in Italy[137] and Spain[138] for plastic packaging that does not contain a set level of recycled content. The tax was introduced in Spain on 1 January 2023, whilst Italy's has been subject to multiple postponements and is now planned to be implemented from 1 July 2026.

ACRONYMS & ABBREVIATIONS

AD	Anaerobic Digestion
CoC	Chain of Custody
COSLA	Convention of Scottish Local Authorities
COVID-19	Coronavirus Disease
DAERA	Department of Agriculture, Environment and Rural Affairs
DDRS	Digital Deposit Return Scheme
DEFRA	Department for Environment, Food and Rural Affairs
DIY	Do It Yourself
DMR	Dry Mixed Recycling
DRS	Deposit Return Scheme
DRSI	Deposit Return Scheme Ireland
EA	Environment Agency
EFSA	European Food Safety Authority
EfW	Energy from Waste
EPR	Extended Producer Responsibility
EPS	Expanded Polystyrene
ETS	Emissions Trading Scheme
EU	European Union
FA	Free Allocation
FOI	Freedom of Information
FoS	Front-of-Store
FPF	Flexible Plastic Fund
FSA	Food Standards Agency
FTE	Full Time Equivalent
GHG	Greenhouse Gas
HDPE	High Density Polyethylene
HMRC	His Majesty's Revenue & Customs
IMA	Internal Markets Act
LARAC	Local Authority Recycling Advisory Committee
LGFS	Local Government Finance Settlement
LGIU	Local Government Information Unit
MBA	Mass Balance Approach
MBT	Mechanical Biological Treatment
MRF	Material Recovery Facility
NAWDO	National Association of Waste Disposal Officers
NGO	Non-Governmental Organisation
NIEA	Northern Ireland Environment Agency
NIR	Near-Infrared
NPWD	National Packaging Waste Database
NRW	Natural Resources Wales
OECD	Organisation for Economic Cooperation and Development
OEP	Office for Environmental Protection
ONS	Office for National Statistics
OtG	On-the-Go
PAYT	Pay-As-You-Throw
PE	Polyethylene
pEPR	Packaging Extended Producer Responsibility
PERN	Packaging Export Recovery Note
PET	Polyethylene Terephthalate
POM	Placed on the Market
PP	Polypropylene
PPT	Plastic Packaging Tax
PPWR	Packaging and Packaging Waste Regulation
PRF	Plastic Recovery Facility
PRN	Packaging Recovery Note
PS	Polystyrene
PTT	Pots, Tubs and Trays
PVC	Polyvinyl Chloride
RAM	Recyclability Assessment Methodology
RDF	Refuse Derived Fuel
ROI	Republic of Ireland
RVM	Reverse Vending Machine
SA	Scheme Administrator
SEPA	Scottish Environment Protection Agency
SUP	Single-Use Plastic
UKRI	UK Research and Innovation
UK	United Kingdom
WDF	WasteDataFlow
MBA	Mass Balance Approach
WEEE	Waste Electrical and Electronic Equipment
sWEEE	small Waste Electrical and Electronic Equipment

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