

EPS Group Briefing

Key issues affecting the UK's EPS industry

The UK EPS industry collects and compacts EPS material that is mainly exported for recycling to registered mechanical recyclers within the EU, including countries such as Germany, the Netherlands, Belgium and Spain.

EPS is 100% recyclable and thousands of tonnes are recycled every year from the UK. Industry experts have drawn upon existing data to estimate that 66% of EPS packaging disposed of in the UK was recycled in 2023.¹ Alongside this, EPS is currently recycled in at least 38 countries across four continents. Recent reports by [Conversio](#)² and the [European Commission's Joint Research Centre](#) (JRC)³ highlight the remarkable progress achieved. The United Nations Environment Programme (UNEP) also acknowledges this progress in their recent report, [Plastic Pollution Science](#)⁴, stating that EPS transport packaging—the largest application of EPS packaging—is one of the packaging types being widely recycled on a global scale.

To increase the UK's EPS recycling rate, reduce the UK's reliance on exporting waste and to achieve net zero carbon by 2050, it is vital that there is significant investment in domestic recycling infrastructure.

¹ BPF EPS Group Data, 2024 – this figure was calculated by collecting raw data from UK converters alongside UK and EU recyclers of EPS. Raw data and estimates have been used by industry experts to calculate the total recycling rate.

² Conversio, EUMEPS, 2021 – *The EPS industry's journey towards circularity: Progress report*. European Manufacturers of Expanded Polystyrene (EUMEPS). <https://eumeps.eu/images/newsroom/publications/the-eps-industry-s-journey-towards-circularity-progress-report-final.pdf>

³ Joint Research Centre, European Commission, 2022. Scoping possible further EU-wide end-of-waste and by-product criteria. <https://op.europa.eu/en/publication-detail/-/publication/b02130d2-a022-11ec-83e1-01aa75ed71a1/language->

⁴ United Nations Environment Programme, 2024 – Plastic pollution science (updated for the fourth session of the intergovernmental negotiating committee) [Microsoft Word - UNEP PP INC.4 INF 1 FINAL](#)

Key Message:

The British Plastics Federation (BPF) EPS Group urges the government to recognise the significant progress that the EPS industry has made in helping to achieve a circular economy for plastics.

It would like the government to acknowledge that EPS is widely collected and recycled and to use environmental legislation such as the Plastic Packaging Tax (PPT) and Extended Producer Responsibility to help drive circular solutions in the UK by using funds raised to invest in recycling infrastructure, for example.

Extended Producer Responsibility (EPR) for Packaging

EPR for packaging reforms in the UK is a regulatory approach that extends packaging regulations, ultimately aiming to make producers responsible for the full net cost of the collection, managing and recycling of packaging. The goal is to incentivise packaging producers to make their products recyclable by modulating fees based on the recyclability of products. The reforms also intend to reduce unnecessary packaging, increase quality and reduce litter.

Key message:

The BPF EPS Group is supportive of EPR for packaging proposals and believes that measures should ensure there is continued improvement in the collection of EPS packaging for recycling, as well as developing and increasing efficient domestic collection and recycling infrastructure.

EPS packaging protects products, which helps to reduce waste, and as the material is inherently lightweight, it helps to reduce fuel consumption. It has good thermal insulation, high impact resistance, low water absorption and thermal conductivity. These properties are vital in protecting a wide range of products, which is why it is a material widely used to package food and pharmaceuticals. Therefore modulated fees should be based upon recyclability as well as resource efficiency and be applied to the entire packaging items entering the waste stream. This will avoid the unintended consequence of businesses potentially switching to materials that have a higher environmental footprint.

Fees related to litter should be aligned with activities that can reduce littering and include a contribution to behavioural change and education programs, as well as the development of infrastructure to encourage correct disposal and recycling. Educational programs should include information of the location of household waste recycling centres (HWRCs) and takeback schemes run by local businesses that collect and recycle EPS to make it easier for consumers to recycle.

EPS is used in household and 'household-like' packaging. 'Household-like' packaging is secondary or tertiary packaging and examples of EPS packaging that may fall into this category include fish boxes and pharmaceutical packaging for items like vaccines which do

not enter the consumer recycling stream but used to transport essential items. 'Household-like' packaging is not within the scope of EPR. Many businesses would like clarity and arguably household and 'household-like' waste should be treated the same when it comes to EPR. If implemented after appropriate industry consultation, this approach could reduce confusion, simplify communication, avoid 'grey areas', level the playing field and raise more money to invest in much-needed infrastructure.

Local councils should have an obligation to collect waste for recycling in the most efficient way, ensuring high consumer participation with the lowest level of contamination. They should be rewarded and incentivised based on achieving best practice in relation to consumer engagement with recycling initiatives — and the efficient collection of segregated EPS for recycling from funds collected from used EPS packaging.

The majority of EPS is sent for recycling in Europe, so typically EPS producers support the government's proposal that requires exporters of plastic waste to ensure that the material is, in fact, recycled. EPR modifications and reforms need to encompass necessary oversight and the monitoring of compliance.

Key message:

The BPF EPS Group believes with the right incentives and drivers in place EPR could further increase the circularity of EPS packaging. Reforms could direct funds to expand the collection of EPS while further developing domestic recycling infrastructure to decrease the UK's reliance on exporting plastic waste for recycling.

To understand the full impacts of EPR on the plastics industry please refer to the BPF's [EPR Position Statement](#).

Plastic Packaging Tax (PPT)

In 2022, the UK government implemented a tax of £200 on all plastic packaging components that do not contain at least 30% recycled material. The BPF EPS Group supports the UK government's overall objective of increasing the use of recycled content in packaging.

Over 50% of EPS packaging goes into essential food and pharmaceutical applications that cannot incorporate recycled content using traditional (mechanical) recycling methods due to food contact regulations. Therefore, there needs to be exemptions when recycled content cannot be incorporated due to food safety legislation or other vital regulations. These applications require other methods of recycling to incorporate 30% recycled content, such as chemical recycling technologies. Unfortunately, the current lack of acceptance of mass balance methodology within the Plastic Packaging Tax is preventing companies from being able to use chemically recycled material to reduce their tax obligations and increase the sustainability of vital products.

There is currently not enough recycled material available in the UK and Europe to meet demand. This demand could further increase due to regulations that enforce thresholds for recycled content in packaging, such as the Packaging and Packaging Waste Regulations (PPWR). In addition, not all EPS packaging is presently collected for recycling by all household waste recycling centres (HWRC). This places a further constraint on the availability of material. To ensure the supply issues can be addressed and appropriate recycling infrastructure created, money raised by the Plastic Packaging Tax needs to be hypothecated and reinvested to address the insufficient collection systems within the UK, improve the sorting and recycling infrastructure and reduce the reliance on EU markets for recycling.

The amount of recycled content cannot be measured at packaging item level, making it difficult to evaluate compliance. Packaging manufacturers therefore require a transparent recycled content verification system (RCVS) to prevent fraud and create a level playing field for UK companies. Fraud could create market distortion and lead to the closure of UK businesses and subsequently job losses. There are various systems that can verify recycled content, including independent third-party auditing, using third party certification schemes, as well as using a scientific laboratory-based approach to testing. These issues are relevant for both mechanically and chemically recycled material and there are RCVSs that address both.

Increasing the threshold of the tax would not overcome any of the barriers to increasing the use of recycled content, could encourage fraud and increase imports, rather than leading to investment in UK infrastructure.

Key message:

The EPS Group wants the government to address the critical issues within the Plastic Packaging Tax that can increase the circularity of EPS packaging. This includes investing proceeds from the tax in relevant UK infrastructure and accepting mass balance as a calculation method so that chemical recycling technologies and facilities can grow.

Updating food contact regulations to enable recycled plastic to be used in a wider range of food contact applications would increase the effectiveness of the tax, as would implementing industry-agreed certification or verification methods to identify the amount of recycled content in applicable products.

To understand the full impacts of the PPT on the plastics industry please refer to the following BPF Position Statements:

[Taxing Plastic Packaging Based Upon the Amount of Recycled Content](#)

[UK Plastic Packaging Tax Escalator](#)

Packaging and Packaging Waste Regulations (PPWR)

The European Packaging and Packaging Waste Directive (94/62/EC) was amended in 2018 to become the Packaging and Packaging Waste Regulation (2018/852). The aim was to harmonise national measures regarding the management of packaging and packaging waste, to protect the environment, and to ensure the internal market functions well. By updating the existing 'directive' to a 'regulation', the legislation gives less leeway for member states to interpret the measures and should result in a more harmonised approach to managing packaging waste across Europe. This is in line with the aims of the European Green Deal, which aims to set the EU on the path to a green transition, with the ultimate goal of reaching climate neutrality by 2050.

For British companies this is important because under the terms of the Windsor Framework, PPWR will be brought into Northern Irish law eventually, so any goods sold there will need to comply. In addition to this, the EU remains the UK's major trade partner and therefore all UK packaging used to protect UK goods that are exported to the EU will have to conform to these new requirements.

What are the Main Provisions Within the PPWR?

As well as providing for Extended Producer Responsibility (EPR) and Deposit Return Schemes (DRS) to be implemented in member states, it also sets targets and limits in a number of areas, including:

- Packaging waste reduction targets at member state level.
- Mandatory reuse targets for selected packaging groups.
- Restricting over-packaging and certain forms of unnecessary packaging and supporting reuse and refill systems.
- Establishing criteria for design for recycling to be applied to all packaging.
- Setting minimum inclusion rates for recycled content in plastic packaging.
- Harmonised labelling of packaging and waste bins to facilitate correct consumer disposal of packaging waste.

These targets will initially be set for 2030 but will increase up to 2050.

Recycled Content Targets

Incorporating recycled content is vital to achieve a circular economy for plastics. However, there is a current lack of available recycled material to meet these targets due to a lack of sorting and recycling infrastructure, particularly when it comes to contact-sensitive packaging. EPS packaging products rely on chemical recycling technologies in these instances. Achieving the proposed targets requires significant investment in new sorting and recycling infrastructure, chemical recycling technologies and facilities (and accepting mass balance accounting methodology) and the early approval of novel technologies by the EFSA.

Reuse Targets

EPS contact-sensitive packaging such as fish boxes and packaging for home appliances will fall in scope of the PPWR reuse targets, which has ambitious targets for transport packaging.

Reusing EPS fish boxes requires thorough sanitisation between uses, consuming significant amounts of water and energy. In the fishing and fish farming industry, maintaining the integrity and freshness of the fish and of the harvest in the case of fish farming is paramount. They are designed to provide superior insulation and protection, ensuring that fish remains at optimal temperatures during transport. The unique properties of EPS make it highly effective in preserving the quality and safety of seafood, which is critical for consumer health and satisfaction. Deviation from these standards by the adoption of alternative materials could jeopardise the freshness and safety of the fish, leading to potential food safety risks, economic losses and adverse environmental impacts by increasing food waste and overall carbon emissions.

EPS packaging for home appliances is often moulded to highly specific requirements of the product it is protecting during transportation. Standardised design to meet reuse targets could have undesired impacts implications of increased weight, resulting in higher resource consumption and increasing associated emissions.

Reverse logistics and the cleaning and maintenance of reusable containers can sometimes outweigh their perceived advantages in terms of sustainability. Even when cleaned, questions remain about the hygiene of certain reuse systems. Striking a balance between sustainability goals while maintaining essential hygiene and food safety standards is crucial.

Takeback systems for other reusable packaging may also have significant climate impacts due to the extensive reverse logistics required. Any viable reuse system needs to demonstrate the environmental benefits of its adoption over the single use system it intends to replace.

Reduction Targets

Reduction targets can lead to a reduction in shelf life and product spoilage. Packaging reduction targets could very easily lead to unintended consequences, either by increasing product waste or encouraging a shift to other materials that have an increased environmental impact.

Key message:

The EPS Group agrees with the general aims of PPWR legislation but some of the targets and provisions could have unintended consequences that negatively impact the environment, despite good intentions. To avoid this, decisions need to be based on science-led, full lifecycle assessments.

To understand the full impacts of the PPWR on the plastics industry please refer to the [BPF PPWR Position Statement](#).

Further information

[Certification & Verification of Recycled Content](#)

[Chemical Recycling](#)

[Extended Producer Responsibility](#)

[Food Contact](#)

[Packaging and Packaging Waste Regulations \(PPWR\)](#)

[Safety of Chemicals in Plastic Packaging](#)

[Taxing Plastic Packaging Based Upon the Amount of Recycled Content](#)

[The Global Plastics Treaty on Plastic Pollution](#)

[UK Plastic Packaging Tax Escalator](#)

[Reuse](#)