

Policy recommendations for efficient and economically viable reuse packaging systems

POLICY RECOMMENDATIONS
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**Serious
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Credits

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We welcome constructive dialogue on our results, new insights or other relevant data.

Contributing organisations



Searious Business is an impact-driven company based in the Netherlands, working towards the goal of zero plastics entering our ocean. They help businesses in the plastic value chain to keep plastics in the economy and out of the environment. Searious Business regularly performs in-depth Cost Benefit Analyses for individual companies or case-by-case examples. For this study, Searious Business has made a high-level overview of the costs and benefits of three plastic packaging cases, comparing reusable plastics with single-use plastics options. www.seariousbusiness.com



Zero Waste Europe is a European network of communities, local leaders, experts, and change agents working towards the elimination of waste in our society. Advocating for sustainable systems and the redesign of mankind's relationship with resources, they accelerate a just transition towards zero waste for the benefit of people and the planet. www.zerowasteurope.eu

These recommendations are building on the study [The economics of reuse systems](#) which is based on a knowledge partnership between Zero Waste Europe and Searious Business.



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Policy recommendations

The study “The Economics of Reuse” shows that reusable packaging can be a viable and a more economically favourable alternative to single-use packaging even when dropped into systems originally designed for single-use.

The study illustrates how the more the costs of single-use are internalised and the bigger the volumes of reusable packaging, the more economically viable reuse will be. Hence, the economics of reuse can only get better over time.

However, for reuse to work, it is important that it is designed for high performance, and the PPWR can help ensure that reuse delivers on its promises.

The conditions for effective reuse systems have already been identified across several studies¹. They include:

- **System infrastructure:** drop-off networks, return logistics, washing facilities, redistribution, item tracking, customer refunds - and employee training;
- **Good governance:** clearly defined rules concerning its functioning, requirements and standards for packaging design, usage, collection, washing, storage, handling, filling, and elements that can control proper operation and performance of the system;
- **Packaging design:** durability, interoperability and safety need to be ensured from the design phase, which can guarantee that packaging can be used as many times as possible for the same purpose. The interoperability can be enhanced by ‘universal’ designs that enable acceptance of packaging across different reuse schemes;
- **Systems at scale:** economies of scale are essential to ensure efficiency and avoid any burden-shifting;
- **Minimum viable population density:** reuse packaging systems perform at their best within a minimum viable population density, within urban areas rather than more dispersed communities.

All the above are parameters to take into account to ensure the system operates efficiently, provides economic benefits for operators and is convenient and easy to use for the end users.

¹ [Reusable Solutions, how governments can help stop single-use plastic pollution, Rethink Plastic Alliance, 2019](#)
[Reusable VS single-use packaging – A review of environmental impact, Zero Waste Europe, ReLoop, 2020](#)
[The need to set essential criteria for setting up managed pool systems, Zero Waste Europe, Deutsche Umwelthilfe, 2022](#)

The [proposal for the revision of the Packaging and Packaging Waste Regulation \(PPWR\)](#) has already put forward a base of measures for reuse systems for packaging, including sector-specific targets (Art. 26) and guidance when it comes to the minimum requirements for its implementation (Annex VI), including a central governance structure. Although relevant, those measures and requirements are insufficient to ensure optimal system performance, including the economic viability critical for success.

1. Performance parameters for systems for reuse

Since reusable packaging should be thought of as systems and not as isolated products (as the single-use counterparts), **the PPWR should also set minimum performance objectives** to ensure the overall achievement of the system capacity, including return rate and average reuse (cycles) before packaging reaches its end-of-life. Performance requirements are also vital to ensure it makes environmental sense to counterbalance the increased impact of producing longer-life products and to ensure users provide the sufficient operational commitment to make it work as efficiently as possible.

In this regard, the study has shown that these parameters greatly influence a given reuse system, setting it up for economic failure or success.

Based on the above and on the results of the study, we recommend to:

- **Include the following performance requirements for systems for reuse within the PPWR:**
 - **Return rate:** of at least 60% return rate 3 years after start of operation and 90% after max 5 years in operation
 - **Minimum rotations:** an average of 10 rotations before EOL by the fifth year of operation. Those minimum return rates and rotations determine reuse performance, taking into account a transition phase of 3 to 5 years. More specific minimum number of rotations for reusable packaging in different material and packaging categories could also be set via a delegated act.

2. Economic incentives

Even with essential criteria and performance requirements in place, there is always a limit to what reuse systems can achieve if there is no level playing field with regulatory incentives to make reuse economically viable. This lack of a level playing field between single-use and reusable packaging is one of the biggest barriers to reuse systems achieving economies of scale. The current costs borne by packaging producers within Extended Producer Responsibility (EPR) schemes do not incorporate the externalities of a given packaging, including littering and/or packaging which ends up in the wrong bin. Since current EPR schemes do not cover the full costs of managing single-use packaging waste, reuse systems appear to be comparatively more expensive due to their higher cost internalisation. Therefore, creating a 'Fund for Change' paid by EPR systems can be a good way to provide financial support for reusable systems to overcome barriers to entry - such as capital investments for the pool of reusable

packaging items, IT infrastructure, collection vehicles or washing facilities. Municipalities and communities can also use EPR systems to invest in waste prevention and local reuse systems. For instance, CITEO (the French Producer Responsibility Organisation) dedicates a proportional part of its budget to deliver the 5% target of reusable packaging per the French Circular Economy Law.

Therefore, we recommend the following requirements to be included in the PPWR:

- **Set an obligation to dedicate a minimum of 20% of Extended Producer Responsibility schemes budget** to promote refillables and finance reuse infrastructure.
- **Place a levy (visible on payment) on single-use packaging**, which should not be less than 10 cents per unit and dedicate the revenues raised to finance reuse infrastructure.
- **Include externalised costs of single-use packaging**, within EPR eco modulation of fees for packaging, including implications to littering, health care and biodiversity loss.

3) Legal certainty that allow for economies of scale

Legal certainty is needed to establish successful reuse systems. This would secure investments in the right solutions, creating the economies of scale required for these systems to operate at their optimum level. The establishment of binding reuse targets is a vital step to ensure legal certainty and drive investments forward. Still, **the targets must be sufficiently high to achieve economies of scale.**

In addition, legal certainty is needed to clarify what is an optimal system and how it should be set. In the current Commission's proposal, article 26 mixes reuse and refill targets for most sectors (excluding transport and e-commerce packaging). Nevertheless, as recognised in Article 3 on definitions, reuse and refill are different approaches to packaging²: The action of refill, as defined in the proposal, means an operation by which an end-user fills its own container. In this sense, the container is, in fact, not a packaging but a consumer-owned product. **Therefore, the action of refill by a consumer should be considered as a waste prevention measure and should be counted within the overall waste prevention targets. On the other hand, as laid down in the proposal, 'reuse' means an operation by which a reusable packaging, which is an asset owned by the system operator, is used again for the same purpose for which it was conceived and must be part of a 'system for reuse'.**

These two different measures should not be confused or combined to prevent risks in implementation and enforcement. The calculation methods and metrics for reuse and refill are not the same. Reusable packaging within a system for reuse is easily traceable by units using a serial number (tracking how many were placed on the market, how many were returned, how many times it was refilled, etc.). However, it is very difficult to measure refills through consumer-owned products (how many kilos/litres of a certain product the consumer is refilling and how many times, etc.), especially in public/farmers markets. **Therefore, mixing prevention and reuse will lead to a huge margin of error,**

² <https://zerowasteurope.eu/wp-content/uploads/2022/06/Packaging-Reuse-vs-Packaging-Prevention.docx-1.pdf>

and less robust data. Furthermore, the targets should not include single-use packaging provided at refill stations.

Due to their clear differences and distinct levels of maturity of data collection, the targets for achieving one or the other should not be combined in order to avoid the risk of vast margins of error and unreliable data and eventually leading to little impact on reduced packaging waste.

Therefore, we recommend the following:

- **Sector-specific reuse targets are to be achieved through 'systems for reuse'.** The 'refill' solutions are part of the waste prevention targets, and under different sections as such.
- **Waste prevention targets should be set at a minimum of 15% by 2030; 20% by 2035; and 25% by 2040.**
- Sectoral reuse targets should be set at least:
 - **Transport packaging:** 50% by 2030 and 90% by 2040
 - **Takeaway beverages:** 30% by 2030 and 95% 2040
 - **Takeaway food:** 20% by 2030 and 75% by 2040
 - **Beverage packaging:** alcoholic and non-alcoholic: 20% by 2030 and 75% by 2040
 - **Wine and Spirits:** 10% by 2030 and 30% by 2040
 - **E-commerce packaging:** 20% by 2030 and 80% by 2040
 - **Food packaging in retail:** 20% by 2030 and 75% by 2040