

# Realising Reuse

THE POTENTIAL FOR SCALING UP REUSABLE  
PACKAGING, AND POLICY RECOMMENDATIONS



RETH!NK PLASTIC

#breakfreefromplastic

# Summary

This briefing is based on a study realised by Circular Economy Portugal, which makes the case for scaling up reusable packaging in Europe. The study shows that under the right conditions including a supporting policy framework, reuse can thrive in the EU, and more importantly it can reduce the environmental impacts of packaging and save companies as well as consumers money.

**THIS STUDY LOOKS AT 3 SECTORS GROUPS:**



**TAKE-AWAY FOOD  
CONTAINERS AND CUPS**



**MAILING PACKAGING  
FOR E-COMMERCE  
CLOTHING AND  
ACCESSORIES**



**HOUSEHOLD CARE  
PRODUCT CONTAINERS  
USED IN LARGE RETAIL**

**It highlights key social, economic and environmental benefits of scaling-up reuse in these sectors, waste savings, energy savings, waste consumption, material footprint and GHG emissions.**

The study estimates the potential savings if the share of reusable packaging in the market or the three sectors covered increases in low (10% and 20%), medium (20% and 50%) and high (50% and 75%) scenarios relative to single use packaging in 2027 and 2030 respectively. All reuse scenarios suggest significant savings compared to a business as usual scenario where single-use packaging is predominant. Summarising the results for 2027 and 2030 using the 'medium' scenario targets of 20% and 50%, reusable packaging for the three sectors covered would drive the following environmental savings:



\*Annual savings for the years 2027 and 2030. The results are not cumulative.

**The study and this briefing also looks at the role of standardised packaging formats and systems in scaling-up reusable packaging, and potential benefits:**

- Reduce the investment and operating costs of reusable packaging systems through increased interoperability,
- Maximise environmental benefits and economic viability by setting durability requirements,
- Ensure safety from health and environmental risks thanks to standardised minimum requirements for washing processes,
- Foster economies of scale and market penetration of reusable packaging systems via shared systems,
- Increase the return rate of used packaging by defining appropriate incentives,,
- While preserving product information and innovation (label, digital solutions etc.).

# Introduction



**Today in almost all sectors we are dependent on single - use packaging. The most recent data shows that Europe reached the record level of 174kg of packaging waste per person in 2018.<sup>1</sup>**

In the context of these record levels of packaging waste, and heightened public awareness around the harmful environmental impacts of plastics - one of the main packaging materials for all the sectors covered - more than ever citizens are looking for alternatives to single use packaging.

At the European level the revision of the Packaging and Packaging Waste Directive in 2021 represents an opportunity to transform how Europe packages and distributes its products. Europe has also set itself the target to make all packaging reusable or recyclable by 2030 in the 2020 Circular Economy Action Plan. While policy makers, the packaging producers, and major actors in consumer goods sectors have mostly so far focused their efforts on incremental improvements in recycling rates, this study takes the perspective of implementing ambitious increases in the use of reusable packaging.

Why reuse? Presently reusable packaging is at its lowest level in history. Even in sectors where reuse once thrived such as beverages, it has been in gradual decline for the last decades.<sup>2</sup> However, there are signs of change. In some areas of retail reuse and refill is growing<sup>3</sup> and many major brands are implementing pilots. Furthermore, there is a growing body of research to show the potential environmental benefits of reuse, for example reducing waste and emissions<sup>4</sup>.

However, the absence of incentives, a clear legal framework and standards for reusable packaging means that the few existing systems do not operate at their full potential to compete economically with single-use packaging. Consequently, the environmental benefits of reuse systems, including resource efficiency and emissions reductions, are not realised.. Reusable packaging standards providing harmonised packaging formats and reuse system requirements could reduce business uncertainty by limiting packaging and infrastructure diversity, thus providing clear framework conditions for investors and operators to develop interoperable reusable packaging systems, without stifling innovation and product differentiation.

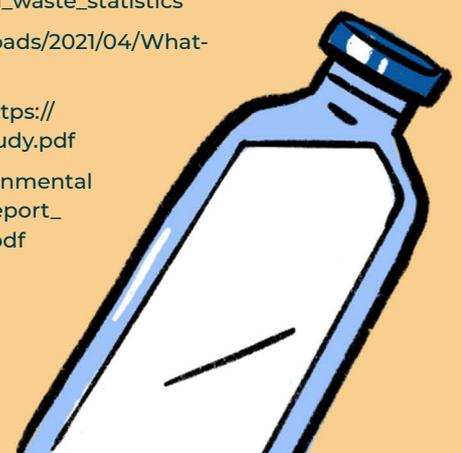


<sup>1</sup> Eurostat, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Packaging\\_waste\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Packaging_waste_statistics)

<sup>2</sup> Reloop, What We Waste, April 2021 - <https://www.reloopplatform.org/wp-content/uploads/2021/04/What-We-Waste-Reloop-Report-April-2021-1.pdf>

<sup>3</sup> Eunomia, Reseau Vrac & Zero Waste Europe, Packaging Free Shops in Europe, 2020 [https://zerowasteurope.eu/wp-content/uploads/2020/06/2020\\_06\\_30\\_zwe\\_pfs\\_executive\\_study.pdf](https://zerowasteurope.eu/wp-content/uploads/2020/06/2020_06_30_zwe_pfs_executive_study.pdf)

<sup>4</sup> Reloop and Zero Waste Europe, Single-use vs Reusable packaging : a review of environmental impacts, 2020, [https://zerowasteurope.eu/wp-content/uploads/2020/12/zwe\\_reloop\\_report\\_reusable-vs-single-use-packaging-a-review-of-environmental-impact\\_en.pdf.pdf\\_v2.pdf](https://zerowasteurope.eu/wp-content/uploads/2020/12/zwe_reloop_report_reusable-vs-single-use-packaging-a-review-of-environmental-impact_en.pdf.pdf_v2.pdf)



# Methodology

This study relies on both qualitative and quantitative analysis to assess the environmental and business case of scaling up reusable packaging in three sectors.

Firstly a combination of literature review, targeted interviews and multicriteria analysis were used to prioritise three sectors where reuse was seen to have the most potential based on key factors including the levels of packaging waste, user acceptance and their specific sales avenues. The outcome of the prioritisation process identified the following products and sales avenues: take-away food containers and cups ; mailing packaging for clothing and accessories bought online ; and household care products (detergents) bought in supermarkets. Secondly, more thorough analysis of these three prioritised sectors was carried out. This included identifying successful case studies on which to draw data for the scale up exercise.

Lastly, quantitative analysis was used to assess the potential savings if the share of reusable packaging in the market increases in low (10% and 20%), medium (20% and 50%) and high (50% and 75%) scenarios relative to single-use packaging in 2027 and 2030 respectively.

For the environmental assessment, the Product Environmental Footprint method covering 16 impact categories was applied<sup>5</sup>. The results of the scale up presented here focuses on emissions reductions, water and material savings.

It should be stressed that the scale up exercise relies on a number of assumptions including the price of reusable and single-use packaging, and the necessary infrastructure, investment and operating costs. Environmental data was drawn from the Ecoinvent database. Wherever possible estimates applied aimed to be conservative. For instance, the study used the worst-case scenario for the reuse system and the best case for the single-use system, in order to ensure that where positive results arose, it meant that with a higher level of certainty it could be affirmed that reuse systems are a promising solution.

A major challenge in the project was in accessing multiple data points for the economic assessment. The data could however be obtained from a few companies. Full details of the studies methodology and its limitations are given in the technical study available on our website.

<sup>5</sup> JRC (2019) Product Environmental Footprint (PEF) method - [https://eplca.jrc.ec.europa.eu/permalink/PEF\\_method.pdf](https://eplca.jrc.ec.europa.eu/permalink/PEF_method.pdf)



# Quantitative analysis and scale up potential for reuse



## Sector 1 HoReCa Food & Beverages

### 1. Overview of the sector

Take-away food and beverages are a rapidly growing sector. In the EU, annual use of take-away containers was estimated to exceed 19 billion and 33 billion units for food and beverage containers respectively in 2019.<sup>6</sup> Both food and beverages containers feature on the top ten list of single use plastics most commonly found on European beaches.<sup>7</sup> The COVID-19 pandemic drove a surge in demand for single-use plastic, especially packaging, a category that observed a 40%<sup>8</sup> increase.<sup>9</sup>

A range of materials are used for single-use take-away packaging including PET, PP, aluminium, paper lids, waxed papers, and bio based plastics. Due to their contact with food there are particular toxicity, health and safety concerns for take-away containers. This said, well designed pooling and washing systems for reuse systems can ensure health and safety. Recently, some novel materials for take-away packaging have been criticised for their inclusion of PFAS chemicals.<sup>10</sup>

### 2. Barriers and opportunities for reuse

The analysis suggests that the key factors to enable reuse in the take-away sector are:

- standardised packaging that is easy to stack,
- strict hygienic washing processes,
- deposits to incentivise return, and
- using an external service to manage the packaging for restaurants.

### 3. Results and scale up

A comparative analysis was carried out for a reusable take-away box and cup, compared to typical single use ones. The reuse systems modelled were reusable polypropylene boxes and cups managed by a company serving multiple restaurants, this included 100 cycles for the box and 132 cycles for the cup, as well as a 10% loss rate. The LCA analysis showed that the **reusable containers and cups have 13 times and 4 times lower environmental footprint** compared to the single use alternative. Additionally, both product groups had favourable results across all 16 impact categories. The scale up analysis for take-aways focused on urban areas in Europe (representing around 75% of the market) to reflect the need for short distances to reduce travel emissions for take-aways.

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**Scaling up reuse in this sector by 20% by 2027 delivered combined savings for beverages and food containers of:**

**9.9 MILLION** tonnes less resources used

**2.6 BILLION** cubic meters of water saved

**940,000** tonnes CO<sub>2</sub> eq

**3.7 BILLION** EUR in savings



.....  
**Scaling up reuse in this sector by 50% by 2030 delivered combined savings for beverages and food containers of:**

**27.1 MILLION** tonnes less resources used

**7.4 BILLION** cubic meters of water saved

**2.6 MILLION** tonnes CO<sub>2</sub> eq

**10.4 BILLION** EUR in savings



#### 4. Case study

Reusable systems for the Horeca sector are already being implemented in various regions across the EU. The study has analysed a couple of them, which has great potential to be scaled up. The case study below describes a reusable system for food and beverage containers in France.

### UZAJE

#### Centralised Cleaning system for reusable food and beverage containers (France)

- Uzaje washes dirty packaging in their cleaning centre (near Paris)
- They collect dirty packaging from 50 restaurants, catering services and 100 food retail and non-food distributors and deliver them clean using pool logistic flows and within a 50km to 200km radius for efficiency and carbon footprint reduction.
- Clients have the option to either hire Uzaje's cleaning and logistic service while keeping container ownership and loss or damage costs, or a full 'rent per service' costing around €0.40/container
- The current overall return rate is between 30-90% depending on the client's marketing strategy (The return rate could be optimised by the implementation of deposit-return schemes).
- According to an LCA assessment, a 90% return rate system with Uzaje's reusable glass containers being reused at least 8.5 times represents a reduction of 59% less carbon emissions and 30% less overall costs compared to single-use glasses.
- Likewise, by reusing 50% of Uzaje's reusable containers, clients could save up to 25% water and 75% of energy compared to recycling them.
- Uzaje's new industrial cleaning facility in Neuilly-sur-Marne for Île de France region is powered by solar panels, and can wash up to 40 million containers per year, avoiding 3.300 tons of packaging waste and saving €900.000 in waste management costs.
- Uzaje supports packaging standardisation to overcome the containers' standardisation barrier as well as outsourced transportation (cyclo-logistics and electric vehicles) to further reduce the environmental impacts.



<sup>6</sup> [https://www.nabu.de/imperia/md/content/nabude/abfallpolitik/2018\\_nabu\\_disposables\\_summary.pdf](https://www.nabu.de/imperia/md/content/nabude/abfallpolitik/2018_nabu_disposables_summary.pdf)

<sup>7</sup> Addamo, A., Laroche, P. and Hanke, G., Top Marine Beach Litter Items in Europe, EUR 29249 EN, Publications Office of the European Union, Luxembourg, <https://publications.jrc.ec.europa.eu/repository/handle/JRC108181>

<sup>8</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7183989/>

<sup>9</sup> This figure was also due to the increase of plastic use in the medical sector

<sup>10</sup> <https://www.beuc.eu/publications/toxic-chemicals-non-plastic-disposable-tableware-consumer-test-reveals/html>

## Sector 2 E-commerce

### 1. Overview of the sector

E-commerce has been growing in recent years, indications show that the sector grew by 31% from 2019 to 2020. COVID-19 accelerated the adoption of online retail across European countries, tripling the annual ecommerce growth rate and in line with long-term trends. In 2020, the 10 billion B2C parcel volume was reached.<sup>11</sup> The study has focused on fashion and accessories as it is one of the most sold goods through e-commerce.

The primary function of packaging in e-commerce is to protect goods in transport and prevent damage<sup>12</sup>. This often leads to overpackaging and use of packaging accessories (such as bubble wrap, air pillows, polystyrene chips). The importance of packaging varies significantly by product category in this channel as some goods are more damageable in transport than others. The most common packaging types used in e-commerce for fashion are self-sealing plastic envelopes (polybags), and cardboard boxes.

### 2. Barriers and opportunities for reuse

The analysis suggests that the key factors to enable reuse in the e-commerce sector are:

- Standardised packaging optimized for logistics. Protective, lightweight and flexible packaging materials and a few standard sizes to minimize shipments and transport space and environmental impact and costs. E-commerce packaging has the biggest potential for standardisation as it does not require a lot of differentiation.
- Using a centralised service for the cleaning and for the implementation of multiple return points. Stakeholders using the system could share the operational costs. Also, reusable packaging can help reduce overall packaging costs, as usually in online sales, there is a high return rate.
- Deposit return scheme, subscription or a reward system to stimulate users to return packaging.

### 3. Results and scale up

A comparative analysis was carried out for a reusable e-commerce packaging, compared to a typical single-use one. The reuse system modelled was a reusable polybag returned by the customer using the prepaid postal service, this included 30 cycles and a 10% loss rate. The LCA analysis showed that the reusable packaging system has **nearly 3 times less impact** than a single-use system in the e-commerce fashion category.

The scale up analysis for e-commerce focused on intra-EU orders of fashion items (representing 34% of the market) to reflect the difficulty in implementing reuse for items shipped from outside the EU.

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**Scaling up reuse for e-commerce to 20% by 2027 delivered savings of:**

**60,000** tonnes less resources used

**238 MILLION** cubic meters of water saved

**102,000** tonnes CO<sub>2</sub> eq

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**Scaling up reuse for e-commerce to v50% by 2030 delivered savings of:**

**250,000** tonnes less resources used

**1 BILLION** cubic meters of water saved

**429,000** tonnes CO<sub>2</sub> eq

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E-commerce was the only sector where reuse was not economically competitive with single use alternatives. Using reusable packaging was expected to cost retailers 2.43 EUR extra per unit, attributed to the high cost of postage, so implementing reuse could result in additional costs for consumers. Yet, consumer data from pilot projects in Germany showed high willingness to pay for reusable packaging in e-commerce<sup>13</sup>. It should be noted the externalised environmental costs of single use systems were also not considered when examining the business case for reuse.



#### 4. Case study

Reusable systems for E-commerce have great potential to be scaled up. These systems can become more competitive if economic incentives and reuse targets are put in place to make reuse more cost-competitive than single-use. Below there are some main findings of a reusable system for e-commerce that is growing in Europe and North America.

### REPACK

#### Reusable mailing packaging system (Europe and North America)

- Repack operates a reusable packaging system to deliver goods by mail (mostly clothing and accessories) across Europe and North America.
- RePack's waterproof packaging is made in China in three different colours and sizes (up to 6, 21 and 45 litres), designed to fold and close into letter size when empty, so it can be returned by posting it into a mailbox, anywhere in the world, for free.
- The reusable packaging is made to last at least 20 cycles and is currently working with up to 80% return rate.
- RePack's partner stores can either send the package back to a centralised facility or close the loop through a rental based scheme by which they ensure its in-house cleaning and reuse.
- The return on the go system is a voluntary scheme for brands (costing around €3,50 per cycle to retailers) for the packaging's delivery and return to the cleaning and resupply hub in Estonia, that can be reverted into vouchers (even on returned purchases) or charity donations
- According to the company's LCA report, by using their reusable packaging system there is a carbon footprint reduction by up to 80% compared to disposable packaging and 96% reduction on e-commerce packaging waste.



<sup>11</sup> Last Mille Experts, "Out-of-home delivery in Europe 2021 PUDO and parcel lockers", 2021. [Online]. Available: [https://shipinroom.upidoag.ch/wp-content/uploads/2021/04/LME\\_UPIDO\\_OOH\\_Europe\\_2021.pdf](https://shipinroom.upidoag.ch/wp-content/uploads/2021/04/LME_UPIDO_OOH_Europe_2021.pdf)

<sup>12</sup> Regattieri, A., Santarelli, G., Gamberi, M., Mora, Cristina, "A New Paradigm for Packaging Design in Web-Based Commerce", International Journal of Engineering Business Management. [Online]. Available: <https://journals.sagepub.com/doi/full/10.5772/5882>

<sup>13</sup> Tchibo (2020) RePack – Mehrwegversandtasch: [https://www.praxpack.de/fileadmin/user\\_upload/materialien/praxpack\\_Ergebnisse\\_Pilottest\\_Tchibo\\_2020\\_webversion.pdf](https://www.praxpack.de/fileadmin/user_upload/materialien/praxpack_Ergebnisse_Pilottest_Tchibo_2020_webversion.pdf)

## Sector 3 Large retail - Household care

### 1. Overview of the sector

The household care product category is composed of different product types: laundry care, surface care, dishwashing, maintenance products and bleaches<sup>14</sup>. The market for household care represented 19.5 billion packaging units in Europe in 2019. These products are sold mostly in plastic bottles of varying sizes. The most common types are HDPE and PET<sup>15</sup>.

### 2. Barriers and opportunities for reuse

The analysis suggests that the key factors to enable reuse in the large retail, household care sector are:

- Standardised packaging to allow for quicker return cycles and smaller pooling volumes, durable packaging to maximise life cycle and number of uses, and stackable to minimise transport volume;
- Proper cleaning logistics to ensure compliance with hygienic and safety product specific legislation and avoid leakage and cross-contamination.
- Deposit return scheme, subscription or a reward system - ideally streamlined and available at or close by familiar locations such as supermarkets, municipal collection points.
- Short distance reverse logistics, ideally with refilling capacity in each country;
- User education and labelling so that reusable/refillable packaging is not confused with (single-use) recyclable ones.

### 3. Results and scale up

A comparative analysis was carried between detergent provided in reusable packaging, and a typical single-use bottle.

The reuse system modelled was an industrial led refill system using deposit return, this included 100 cycles and a 10% loss rate. The LCA analysis showed that the reusable packaging system has nearly **12 times less impact** than a single-use system in the household care category. The scale up analysis for household care focused on liquid detergents and fabric conditioners (representing 25% of the market).

#### Scaling up reuse for household care to 20% of the segment by 2027 delivered savings of:

201,000 tonnes less resources used  
603 MILLION cubic meters of water saved  
240,000 tonnes CO<sub>2</sub> eq  
300 BILLION EUR in savings



#### Scaling up reuse for household care to 50% of the segment by 2030 delivered savings of:

537,000 tonnes less resources used  
1.6 BILLION cubic meters of water saved  
642,000 tonnes CO<sub>2</sub> eq  
804 BILLION EUR in savings

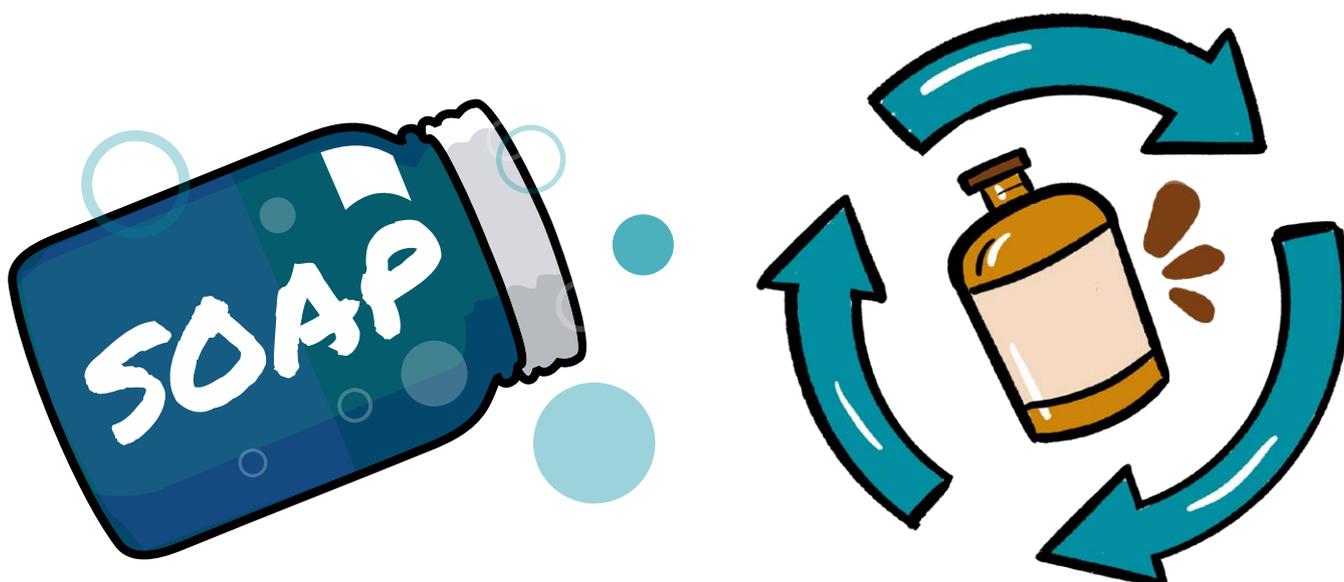


#### 4. Case study

Reusable systems for retail in the household sector are already being implemented in various formats. Given the different products in the sector, there are a variety of models that can be implemented to provide the best option for each case. Below there are some main findings of reusable systems for household products in the UK and France.

##### Refill & reuse for mainstream markets (retailers and brands)

- Reuse models in retail for household care comprises either the refilling at home (concentrated version in reduced packaging to be diluted with water) or refilling on the go (dispensing systems in stores).
- Refilling on the go: Ecover and Unilever's Persil refilling systems can be found at UK-based retailers with gravity-based dispensers and automatic machines offering Ecover detergents in 100% post-user recycled plastic bottles and Unilever's Persil in QR-coded reusable aluminium or stainless-steel bottles in touch-free refill stations.
- Loop, developed by TerraCycle, offers both return from home and on the go models and can be found at major retail players in France and the UK offering delivery and pick-up of both products and empty reusable packaging, while taking care of reverse logistics, cleaning, sanitation, and redistribution. Loop's charge companies a membership fee and customers pay a deposit.
- Algramo: a Chile-based startup, also based in London sells 'by the gram' as a refill from home model using mobile electric tricycles and reusable packaging equipped with a hidden RFID tag, offering a 'sustainable consumption credit' on the next purchase (10% discount on average) upon packaging reuse.



<sup>14</sup> A.I.S.E - International Association for Soaps, Detergents and Maintenance Products, "A.I.S.E Product Portfolio". [Online]. Available: [https://www.aise.eu/documents/document/20160704160734-a\\_i\\_s\\_e\\_\\_product\\_portfolio.pdf](https://www.aise.eu/documents/document/20160704160734-a_i_s_e__product_portfolio.pdf)

<sup>15</sup> A.I.S.E - International Association for Soaps, Detergents and Maintenance Products, "Packaging in the Detergents Industry". [Online]. Available: <https://www.aise.eu/our-activities/sustainable-cleaning-78/circular-economy/packaging-2222.aspx>



# The role of standardisation in scaling up reuse

The primary role of standards for reusable packaging should be to guide businesses in complying with regulatory requirements by providing harmonised packaging formats and reuse system requirements which, if applied, allow businesses to be compliant with the law. Legal measures and standards could be differentiated at the highest level between business-to-business (such as industrial and transport packaging) and business-to-consumer packaging systems (such as beverages, food take-away and delivery, e-commerce, etc.)

By harmonising reusable packaging formats and systems, standards will reduce business uncertainty by limiting packaging and infrastructure diversity, thus providing clear framework conditions for investors and operators to develop interoperable reusable packaging systems, without stifling innovation and product differentiation. Standardisation can help create value chains of standard-compliant systems where packaging types, as well as the infrastructure and logistics that support them are streamlined and interoperable. As such, standardisation will facilitate collaboration of value chain actors to yield more predictable economic outcomes.

More specifically, by streamlining packaging dimensions and adapted logistics, storing and washing, standardisation can:

Reduce the **INVESTMENT AND OPERATING COSTS** of reusable packaging systems, as packaging designers and operators avoid having to design packaging and systems from scratch, following instead the requirements proposed by standards to ensure they are compatible with logistics and washing infrastructure.

Provide **METHODOLOGIES AND TOOLS** for monitoring and reporting the efficiency of reusable packaging systems.

Ensure **SAFETY FROM HEALTH AND ENVIRONMENTAL RISKS** thanks to standardised minimum requirements for washing processes, which enhance washing results for different packaging material, shapes and dimensions.

Enable policymakers to **IDENTIFY REUSABLE PACKAGING BUSINESSES** eligible for financial support.

Foster **ECONOMIES OF SCALE AND MARKET PENETRATION** of reusable packaging systems by potentially enabling companies to share the same packaging and/or the same logistics and washing lines.

Maximise **ENVIRONMENTAL BENEFITS AND ECONOMIC VIABILITY** by of reusable packaging systems, as packaging designers and operators avoid having to design packaging and systems from scratch, following instead the requirements proposed by standards to ensure they are compatible with logistics and washing infrastructure.

Increase the **RETURN RATE OF USED PACKAGING** by reducing confusion and increasing convenience for users, e.g. by reducing the number of systems or incompatible return points.

If designed properly, standards will not stifle innovation in reusable packaging: they can enable variable degrees of product differentiation through design, and still provide the necessary product information over multiple rotations. Standardised packaging systems exist for instance in the beverage industry where only the labels on the bottles change. These systems have existed for decades for instance in the Netherlands and Belgium with the brown glass beer bottle system, and in Germany with the glass Perlenflasche or “pearl bottle” for mineral water. In South America and in Germany, Coca-Cola is also experimenting with reusable bottles for its line of beverages using the same plastic bottles.

Standardised reusable packaging can have a different look and feel from one brand to another while following the same dimension requirements in order to fit logistics and washing systems. Plastic containers can be of the same size and overall shape, but their colour, edges, embossing, finish, and other details of the design could still differ. The most specific designs would not be exchanged between brands, but they could be washed and transported using the same systems.



While some reusable packaging systems are created from scratch, other systems can be developed that match existing standards and practices. In the food sector for instance, reusable food packaging can be developed according to Gastronorm sizes and which fit in collomodular Euronorm crates.<sup>16</sup> Standardisation can be seen as a tool to reduce research and development costs by identifying best practices for reusable packaging. One Dutch study stressed the role standards can play in enabling effective cleaning and reverse logistics. For example, that study underlines the suitability of polypropylene as a reusable material due to its resistance to high cleaning temperatures (up to 85°C), as well as using rectangular nestable shapes with separable universal lids.<sup>17</sup>

**Reusable packaging is most successful when consumers are given an incentive to return it,** either as part of a deposit return system (where consumers pay a deposit fee on the packaging which they can collect when they return it), or some other form of reward.

**When the system is also digitally fitted to track the movements of the packaging, it becomes easier for operators to predict and foster the return of the packaging into the chain.** Standardisation processes can enable industry and civil society to identify together the most effective tracking system and practices to facilitate their functioning.



<sup>16</sup> A.I KIDV, ‘Standardisation in reusable food packaging’, July 2020, page 1. Accessed at: [https://kidv.nl/media/cop/herbruikbaar/shared\\_packaging\\_def\\_standardisation\\_in\\_reusable\\_food\\_packaging\\_cop\\_jan-21\\_.pdf?1.1.7](https://kidv.nl/media/cop/herbruikbaar/shared_packaging_def_standardisation_in_reusable_food_packaging_cop_jan-21_.pdf?1.1.7)

<sup>17</sup> KIDV, ‘Standardisation in reusable food packaging’, July 2020, page 1. Accessed at: [https://kidv.nl/media/cop/herbruikbaar/shared\\_packaging\\_def\\_standardisation\\_in\\_reusable\\_food\\_packaging\\_cop\\_jan-21\\_.pdf?1.1.7](https://kidv.nl/media/cop/herbruikbaar/shared_packaging_def_standardisation_in_reusable_food_packaging_cop_jan-21_.pdf?1.1.7)

# Conclusion and policy recommendation

The study reveals the environmental benefits and the existence of viable systems as shown in the case studies which, if scaled up, can make a formidable contribution to circular economy objectives. However there is a clear need for policy support to maximise the business case for reuse and therefore its environmental benefits. At the EU level the current revision of the Packaging and Packaging Waste Directive (PPWD) presents an opportunity to support the transition to reusable packaging systems while ensuring packaging waste prevention and supporting a circular and local economy.

Setting specific reuse targets by sector as well as general waste prevention targets and ensuring the harmonisation of reusable packaging across the EU should be at core of the strategy. In addition, a set of complementary measures need to be put in place to support and optimise this transition.

## SOME KEY RECOMMENDATIONS ARE:

Set binding sector-specific reuse/refill targets for sectors in business-to-consumer applications where reuse and refill are already being explored, such as:



### Horeca: By 2030

- 100% target for eat-in food and beverages
- 75% target for takeaway and delivery food and beverage



### Grocery: By 2030

- 75% target for household cleaning products
- 75% beverages (soft drinks & alcoholic)
- 50% cosmetics (shampoo, soaps, etc.)



### E-commerce: By 2030

- 50% target for clothing and accessories shipped within the EU
- 50% target for all other goods shipped within the EU



- Set a **100% reuse target in business-to-business packaging** applications by 2030.
- Adopt **sector-specific minimum requirements** for reusable packaging systems, supported by a **series of packaging- and system-specific standards on reusable packaging**, including clear definitions and harmonised packaging dimensions;
- Make it mandatory that **HoReCa/retailers/ (re)sellers offer consumers a reusable packaging option by 2022, and e-commerce businesses by 2025**. This should include an obligation to **use reusable tableware for in-site consumption and to provide a reusable option while giving consumers the option to bring their own**.
- Ensure better design of packaging, notably by **reducing the complexity of packaging materials** (e.g: fewer layers, materials and polymers used) to ensure its recyclability and safety for health and the environment;
- Introduce **minimum mandatory green public procurement (GPP)** criteria and targets for packaging;
- Enforce the measures by requiring a **mandatory reporting mechanism on reuse/ refill target**;
- Introduce **economic incentives to support reusable packaging and initial capital investments for reuse systems** (e.g: EPR fee eco-modulation, VAT-based incentives).
- **Invest public funds in research and development** and pilot projects for industrial reuse systems, for example using Horizon Europe, LIFE, or the Cohesion Funds.
- Set an overall **cap on the amount of single-use packaging** material put on the EU market;
- **Restrict the use of some single-use packaging** formats for certain applications (e.g monodose, vegetables and fruits wrappers), and support sales in bulk, in particular where reusable products or systems are possible or consumer goods can be handled safely without packaging;
- Set up **minimum requirements** for the implementation of **deposit return schemes (DRS)** so that it is **harmonised across the EU** and ensure an optimised system for refill to support the achievement of reuse targets.
- Provide **guidance on setting reusable packaging system models** as well as promote best practices.





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