

# #EUCircularTalks

## *EU CIRCULAR TALKS TOOLBOX FOR CIRCULAR PACKAGING IN THE RETAIL SECTOR*

### POLICY GUIDANCE



Hosted by



European  
Circular Economy  
Stakeholder Platform



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# Introduction

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This document aims to offer some food for thought for retailers on how to improve the sustainability of their packaging. It draws on ideas shared during two EU Circular Talks workshops, a new exchange concept of the European Circular Economy Stakeholder Platform. One, on packaging in the retail sector took place on 19 October 2020 and another, on the circular economy to revitalise retail on 3 November 2020.

The recordings and presentations of these workshops are available online:

- [EU Circular Talks - Packaging in the retail sector](#)
- [EU Circular Talks - The circular economy to revitalise retail](#)

## 1. Why focus on packaging?

Packaging fits **several purposes** (hygiene, reduction of food waste and prolonging shelf life, safety of products and protection in transport, consumer information, branding...). It can be difficult to delineate between 'necessary' and 'unnecessary' packaging. But it is clear that retailers have shown their commitment to find alternative and more sustainable forms of packaging.

If you manufacture, import, or distribute goods within the EU and the EEA, you must check whether your goods contain any restricted substance or substances on the Candidate List, as this may mean that you are obliged to adopt specific measures to deal with them.

### Packaging functions



**Safety** – The risks to user safety will have strong influence on the packaging objectives.



**Packaging Differentiation** – The degree that the packaging must stand out from, or blend with, competitor packaging.



**Functionality** – An organisation with a focus on fresh produce may require its packaging strategy to be developed around technology to keep freshness through a shelf life.



**Convenience** – Ease of opening and ease of disposal are factors to consider under the function of convenience.



**Promotion** – How much will the packaging be relied upon to promote the product?



**Brand Reinforcement** – Is it important that the brand is recognised, for example through shape and colour?

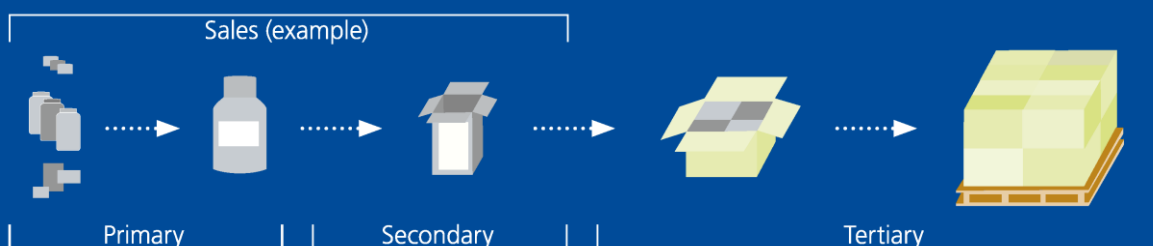


**Communication** – What are the messages that the packaging must carry?

Despite these efforts, including using fewer materials through the trend for light-weighting packaging, the volume of **packaging waste** is increasing. In 2017, packaging waste reached an all-time record of 173 kg per capita, an 8.5% growth of packaging placed on the market over the previous 10 years. At the same time, the share of reusable packaging has drastically declined in all EU Member States. Retailers have shown individual initiatives to close the loop and engage with consumers on re-usable options to reduce the volumes of packaging and packaging waste.

Retailers and wholesalers have sought to live up to **their role and responsibility** by offering a wide variety of solutions, from removing certain materials, finding a renewable alternative, and promoting behavioural and consumption changes.

### Packaging types



**Cooperation and partnering** with other companies in the value chain, along with academics, independent third parties and initiatives on Circular Economy, has proven a key element for successful projects to bring about change. Indeed, the whole concept of the Circular Economy is aimed at transforming supply chains and cannot be reliant on the efforts of single companies alone. By working together, partners can leverage their influence, scale-up processes and business models and benefit from each other's experience and networks.

## 2. Tools retailers identified as helpful to implementing the Circular Economy in their business activities

### *A strategy embedded in a company's culture*

A clear and well-defined strategy, including a commitment and buy-in from the company leadership and employees down to the store level, is an important factor for success. Staff able to answer questions from customers may need training, and information should be available for staff and customers alike.

As in any context, it is important to ensure that targets are manageable and achievable. To make this work, a company will need to make a prior assessment of the expected outcomes, whether economic, or covering safety and environmental impacts, against practicable targets. This can be a life-cycle assessment or other science-based methodologies<sup>1</sup>. The best choice of a specific methodology will depend on what is to be compared and where it is in the supply chain, as well as what is possible with the resources of the retailer or wholesaler.

### *Rely on science-based methodology*

Life-Cycle Assessment either full or streamlined	Non-LCA software tools
<p>Reliance on Life Cycle Assessments (LCAs) need to access a full range of information and extensive training as highlighted by the United Nations Environmental Programme (UNEP)<sup>2</sup>.</p> <p>Non-exhaustive examples are:</p> <ul style="list-style-type: none"> <li>• Packaging Impact Quick Evaluation Tool (PIQUET)</li> <li>• PackageSmart</li> <li>• Comparative Packaging Assessment (COMPASS)</li> <li>• Bilan Environnemental des Emballages (BEE) by CITEO<sup>3</sup></li> <li>• Instant LCA Packaging</li> <li>• IK-Eco-Calculator</li> <li>• EasyLCA</li> </ul>	<p>Other less resource-intensive suggested methodologies:</p> <ul style="list-style-type: none"> <li>• Superpac (calculates carbon emissions)</li> <li>• RecyClass<sup>4</sup> developed by Plastic Recyclers Europe to evaluate (from A to F) the technical recyclability of the packaging based on best available technology</li> <li>• Consumer Good Forum Global Protocol on Packaging Sustainability<sup>5</sup> providing a framework and a measurement system</li> </ul>

<sup>1</sup> Methods for the assessment of environmental sustainability of packaging: a review, June 2017 [https://www.researchgate.net/publication/318529206\\_Methods\\_for\\_the\\_assessment\\_of\\_environmental\\_sustainability\\_of\\_packaging\\_a\\_review](https://www.researchgate.net/publication/318529206_Methods_for_the_assessment_of_environmental_sustainability_of_packaging_a_review)

<sup>2</sup> Ref of UNEP

<sup>3</sup> <https://bee.citeo.com/>

<sup>4</sup> <https://recyclclass.eu/>

<sup>5</sup> <https://www.theconsumergoodforum.com/wp-content/uploads/2017/11/CGF-Global-Protocol-on-Packaging.pdf>

## Set quantitative targets

Whatever the type of methodology used, the choice of indicators and expected outcomes needs to come first. The most suitable indicators will depend on the goals defined in a company's overall sustainability strategy. A retailer may want to decide to focus on e.g., recyclability, environmental impacts, transport optimisation or greenhouse gas emissions reduction. The targets need also to be achievable against long-term goals based on several mid-term quantitative landmarks.

List of possible environmental indicators	
Life-Cycle Assessment (LCA) indicators	
Impact on climate/ atmosphere	Global warming potentials Ozone
Impact on human health	Toxicity
Impact on ecosphere	Land use, freshwater consumption
Other non LCA indicators	
Packaging weight and optimisation	Assessment and minimisation of substances
Packaging to product weight ratio	/
Material waste	Packaging reuse rate
Recycled or renewable content	Use of Recovered Materials Cube utilisation
Resource use	Water, non-renewable resources



Look at product groups as packaging cannot be analysed separately from the contained product.

### 3. Possible criteria for improved packaging in the circular economy

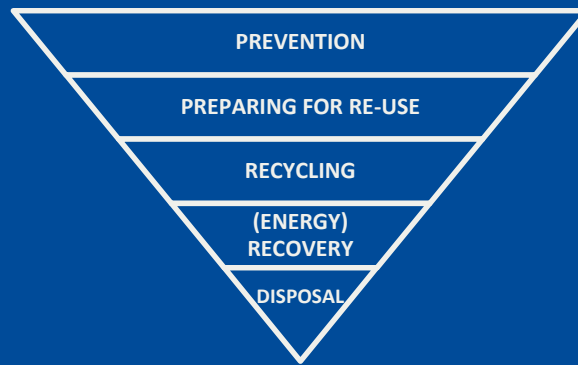
Following the waste hierarchy in the EU Waste Framework Directive<sup>6</sup>, retailers have engaged in seeking to use as little packaging as possible. Where packaging remains a necessity, it can be designed to make it more easily recyclable. Improving packaging will depend on many factors, and there is no one-fits-all-solution.

For each of the proposed options, we set out below, and for illustration only, a set of concrete examples of how to tackle waste reduction in packaging:

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<sup>6</sup> [Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives](#)

## Waste hierarchy



Retailers only have direct influence over packaging for **own-brand products**. Good practice points to reviewing systematically the whole assortment to identify where packaging can be improved and, in cooperation with suppliers, produce internal guidelines on packaging.

### *Removing packaging substantially*

Retailers are actively changing and reviewing the packaging and composition of products that are within our sphere of influence and share the goal to reduce packaging and packaging waste as much as possible.

#### Criteria:

- Target packaging that is not necessary to the preservation of product's safety or quality.
- Target to be set in volume or in percentage terms to ensure that progress can be tracked and measured.

#### Example:

- Offer unpackaged products and sell them in bulk, subject to hygiene requirements.
- Prefer reuse to single-use packaging.
- Avoid individual packaging

#### Lessons learnt:

- Safety and quality remain the core priority and cannot be subordinate to others.
- There is a necessary trade-off in terms of shelf life and convenience when removing packaging for fresh products.
- Similarly, there is compulsory information required on non-food products (like detergents) and this will need to be provided to the consumer in line with the relevant legislation.



“Optimised packaging often provides environmental advantages. The reason is that the benefits of prevented food waste are often higher than the environmental impacts of production or optimization of the packaging involved.”<sup>7</sup>

<sup>7</sup>Ibid,p.36+

[https://pdfs.semanticscholar.org/9e14/3ab1a428f7a8f89a511a0ab832ffbc16a63c.pdf?\\_ga=2.166720894.1512874973.1606904581-294225077.1606904581](https://pdfs.semanticscholar.org/9e14/3ab1a428f7a8f89a511a0ab832ffbc16a63c.pdf?_ga=2.166720894.1512874973.1606904581-294225077.1606904581)

## *Improve packaging design*

The sector supports the Commission's goal to ensure that, by 2030, all packaging on the market is either reusable or recyclable, and many companies have committed to reach this target a number of years earlier.

### Criteria:

- Reduce the amount and volume of packaging.
- Increase the recyclability of the packaging.

### Example:

- Change the composition of packaging material:
  - use wherever possible recyclable materials (mono-layer plastics) It is worth noting that some natural-based materials like polylactic acid, produced from renewable resources, may not be easier to recycle and are confusing to consumers as they tend to dispose of them in the general PMC bin, whereas it is – in some cases – a compostable materia,
  - increase the use of recycled materials,
  - use alternative materials, remove hazardous substances such as PFAs.
- Reducing the volume and/or weight of packaging by:
  - packaging weight and optimisation,
  - increased recycled content,
  - partial or total use of renewable content.

### Lessons learnt:

- These strategies can have a significant impact on the resources used.
- The main issue and challenge remain how far today there is sufficient access to safe, efficient, and readily available recycled material at competitive costs. A complication is the difficulty of incorporating recycled content into some polymers.
- Increased use of recycled content in food packaging not possible today because of restrictions under the Food Contact Material legislation.
- Packaging reduction may not be visible to consumers – communication and information campaigns can help raising awareness of the company's commitment and action to reduce packaging. The EU could usefully help and develop communication guidelines.



“Regardless of the material choices in packaging design, the product packaging with the highest environmental burden is one that is either underpackaged, enabling breakage or theft, or overpackaged, requiring more material, and therefore burden, than is necessary. Designs must strive for the optimum package design”.<sup>8</sup>

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<sup>8</sup> United Nations Environment Programme, *An Analysis of Life Cycle Assessment in Packaging for Food and Beverage Applications*, 2013 [https://www.lifecycleinitiative.org/wp-content/uploads/2013/11/food\\_packaging\\_11.11.13\\_web.pdf](https://www.lifecycleinitiative.org/wp-content/uploads/2013/11/food_packaging_11.11.13_web.pdf)



## *Promoting reuse while ensuring the safety of goods and customers*

Retailers traditionally sell goods like drinks in reusable packaging and are increasingly exploring ways to offer more reusable packaging, but depending substantially on their suppliers and supply chains.

### Criteria:

- Removing unnecessary packaging.
- Multiple rounds of circulation need to take place to reach an environmental break-even point, including transport.

### Example:

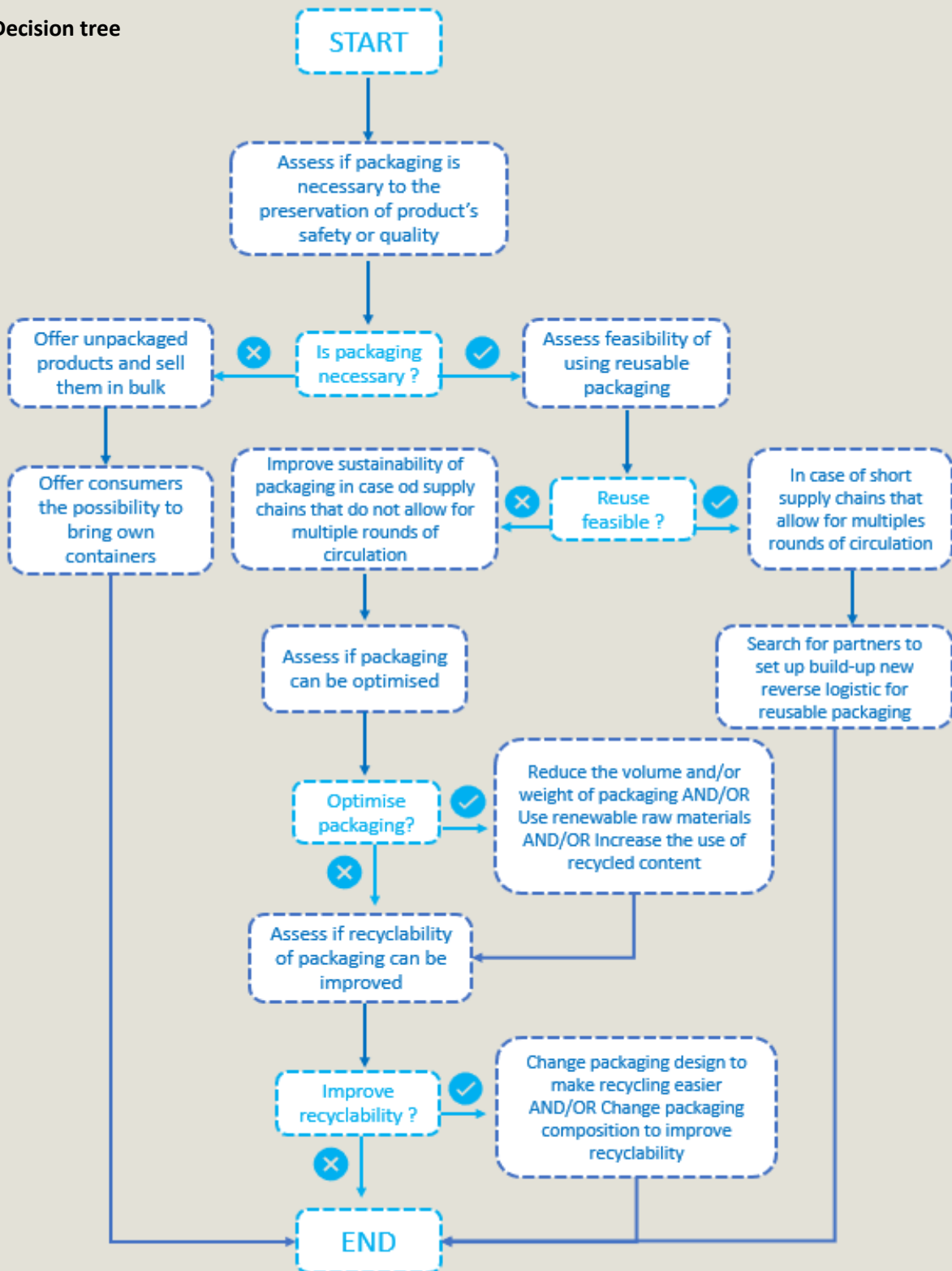
- Offer the possibility for consumers to use their own containers, as long as this can ensure health and safety requirements are met, particularly in present pandemic.
- Developing deposit schemes, where it makes economic and environmental sense.

### Lessons learnt:

- In the area of reusability, cooperation with partners was valuable; retailers and wholesalers excel in the distribution of goods and products, but reusable packaging requires the establishment of new reverse logistics processes. Companies had good experiences in partnering with start-ups or established big consumer product manufacturers: more centralised reverse logistics seem to offer the best means of building an efficient loop system.
- Responsibilities need to be defined and shared between partners, and agreement reached on how processes, packaging and products used could be standardised to achieve efficiency.
- Efficient cleaning and refilling of reusable food packaging remain a challenge, particularly if the cleaning facility network is too extended, and factories refilling the containers are too far away.
- At least for the present, sophisticated reverse logistic chains have been shown to work better in densely populated urban areas. Customers are more willing to participate if the assortment covers a wide range of products, as this is necessary to make the effort of changing buying habits worthwhile for consumers.



## Decision tree



#### 4. Monitoring and reviewing: pilot projects can help save money and time

Often trial-and-error turned out to be the best way to test if a new initiative was working and acceptable to customers. Retailers reported that if they introduced e.g., new reusable packaging formats in two or three stores to start with, they could quickly establish what worked successfully and where problems arose. This helped decisions on which initiative should be rolled-out company-wide, while avoiding unsuccessful ideas creating substantial costs and holding up progress on initiatives that proved to work well.

#### 5. What can legislators and regulators do to support and accelerate efforts made by the sector and its partners?

While all these efforts can and have achieved a lot, they can hit regulatory and market barriers to accelerating the transition towards a circular economy. Below are a list of asks which rule makers should consider urgently to support the sector's efforts:

##### *Harmonise waste management criteria*

- Harmonised standards and criteria on issues like recyclability, bio-based plastic, end-of-waste criteria and quality of recycled materials.
- Key elements of Extended Producer Responsibility schemes, in particular definition of items, sorting rules and reporting obligations, need to be harmonised to reduce differences between Member States and unnecessary administrative burdens that hold back the Circular Economy.
- Complete and deepen the single market, including a true single market for waste, to harness the potential of a European Circular Economy, with specific attention given e.g., to amending the Waste Shipment Directive. Without proper-functioning rules for the waste phase, circular business models will not be able to take off. Clear rules to address the safety of recycled content while promoting its use; if recycling processes for plastic are deemed to be safe for producing food contact-grade material, these processes should be given rapid approval to allow an acceleration of the use of recycled content in food packaging.
- Mutual recognition of certification schemes for bio-based and renewable materials to ensure a consistent approach.

##### *Support innovative business models*

- Deploy the right market conditions to incentivise innovative models and reward front-runners and start-ups, for example through Green Public Procurement or favourable taxation.
- Boost the quality of waste sorting through investment in innovation and harmonisation work.

#### 6. How can customers support this transition?

- A successful roll-out of reusable packaging needs customers to be willing to change their habits, start to do more inventory management at home, and get used to a new way of dealing with empty packaging. They will need to accept the need to return reusable packaging either to a shop, a dedicated pick-up point or arrange for it to be picked up at home.
- They should be willing to try out new packaging ideas when shopping. Companies will only be able to test new packaging concepts successfully if enough customers are willing to try them too, with some guidance to consumers.
- Retailers' existence depends on providing their customers with the products and services they demand. Customers will need to be encouraged by retailers and suppliers to give feedback on new circular products and initiatives.

## 7. Further reading

Consumer Goods Forum: ["Golden Design Rules for optimal plastic design, production and recycling"](#).

Ellen Mac Arthur Foundation: ["Reuse – Rethinking Packaging"](#) and ["Upstream Innovation: a guide to packaging solutions"](#).