

Photo by Lovisa Kullman  
Kearney, Stockholm

## **No silver bullet**

Why a mix of solutions  
will achieve circularity  
in Europe's informal  
eating out (IEO) sector

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There is no silver bullet to solve Europe's growing packaging waste footprint in the IEO sector.

Achieving circularity in this sector requires balancing economic, environmental, and consumer outcomes—and this goal can only be achieved through a mix of solutions tailored to each consumption format (dine-in and takeaway). Based on our extensive impact study across Europe, there is a clear need for legislation supporting the sector in achieving circularity, enabled by a tailored policy framework ensuring harmonization on a European level.

Europe has historically fallen short of achieving circularity by adopting legislation that does not fully consider sector-specific business models, operational requirements, and consumer behaviors. This has led to the creation of complex and suboptimal solutions that are hard to implement, measure, and track—and that, ultimately, have been unsuccessful.

To address this, the European Union (EU) has revised the Packaging and Packaging Waste Directive (PPWD). In the revised Packaging and Packaging Waste Regulation (PPWR), EU legislators have set out different options to improve circularity in the IEO sector, including updated targets for recycling and new targets for reuse.

**Achieving circularity in the IEO sector requires balancing economic, environmental, and consumer outcomes.**

## **The sector's unique characteristics pose both challenges and opportunities**

The IEO sector plays a key role in the European economy, representing more than one percent of total European employment today. The sector has a unique set of business, operational, and consumer characteristics: it is highly fragmented, with small and medium enterprises (SMEs) making up more than two-thirds of the sector, and with more than 320,000 individual business owners. IEO consumers also have a very different set of demands compared to those in the broader restaurant sector: they expect speed, affordability (the average price of an IEO meal is approximately €4), and above all convenience. Take-away consumption accounts for more than 70 percent of sector revenue, and this figure continues to grow.

These unique characteristics mean that adopting effective circularity solutions at scale presents multiple challenges, including identifying an effective mix of circularity solutions for a sector dominated by SMEs with packaging that must meet food-grade standards and safety requirements. In addition, underdeveloped waste infrastructure to collect, sort, and effectively dispose of waste presents limitations and the sector is categorized by consumer behaviors that are difficult to influence and change (particularly in takeaway, where visibility into, and control over, consumer behavior is highly limited). However, some clear opportunities do exist, including the ability to build on and scale existing circularity options such as recycling, the potential to introduce and roll out compostable packaging solutions, and the opportunity to further test and roll out reuse for select packaging items across some consumption formats.

## **Assessing the impact of different circularity solutions across dine-in and takeaway**

Designed to facilitate a fact-based dialogue among stakeholders, this study modeled a variety of scenarios to assess and quantify the economic, environmental, and consumer impact of three different circularity options and specific solutions—**reduce/replace (composting), reuse (indexed on proposed PPWR targets), and recycle**—across both dine-in and takeaway formats (see sidebar: Key findings for more details on the next page).

# Key findings

## Takeaway

Our study concludes that **reusable models of consumption** should **not** be implemented in takeaway consumption formats for the European IEO sector, based on:

- the **negative environmental impact** projected by this study (increase in plastic waste, water and energy usage, and in GHG emissions)
- the required **significant upfront investment** and ongoing operating costs
- the overall **impact on the consumer experience** and potential **heightened food safety risk**

In contrast, both **recycling** and **composting** solutions appear to have high potential—albeit at different scales and likely within different time frames.

## Dine-in

All circularity solutions explored in this study can play a role for dine-in consumption, although at different magnitudes. Going forward, the greatest opportunities outlined are to:

- prioritize **scaling recycling** solutions and infrastructure
- continue to **explore composting** for select packaging items that are highly food contaminated or of too low quality to recycle
- introduce and continue **testing reusable packaging** across select packaging items, where this is supported by an environmental and economic case

## Solutions

A mix of solutions is needed to ensure circularity across the takeaway and dine-in segments (see figures 1 and 2).

Figure 1  
**The best environmental outcomes are achieved through a mix of solutions**

<sup>1</sup> Represents variety of solutions: recycling, composting, or mixed (for example, reuse for cups, composting for napkins/wraps, and improved recycling for rest of the portfolio). Midpoint of projected impact assumed.

<sup>2</sup> The 2030 baseline represents an estimate of total waste in the IEO sector, calculated by extrapolating 2021 waste data and assuming no changes in innovations, resources, or waste management techniques by 2030.

<sup>3</sup> Mandatory reuse targets assume 100% reuse across the full packaging portfolio.

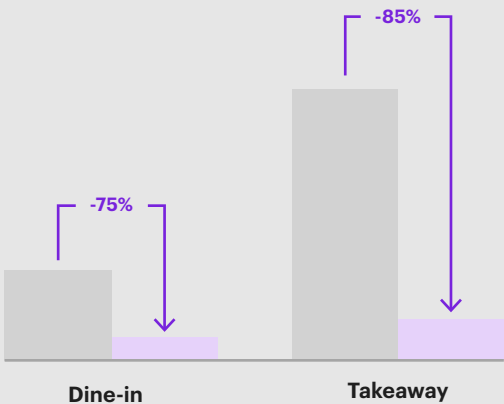
Sources: Simapro, EPA; Kearney analysis



Figure 2  
**A group of mixed solutions also comes at a significantly lower cost versus single solutions such as reuse**

- Mandatory reuse targets 2030
- Mixed solutions

**Example:** Upfront investments required to scale circularity solutions (EUR billion)



### 1. Reduce/replace

- Innovations in **packaging design**
- **Infrastructure** requirements to scale composting

### 2. Reuse

- **Collection, washing/drying, transportation** at scale
- **Plastic packaging availability**

### 3. Recycle

- **Recycling innovation** in collection and sorting techniques
- **Acceptance of recyclable waste** by MRFs
- Improved **recycling rates**

Source: Kearney analysis

## Solutions for a more circular future

Achieving circularity for the IEO sector, while also balancing economic, environmental, and consumer outcomes, will depend on fact-based coordinated action from Europe's policymakers. Our study reaches a clear conclusion—only a tailored, multi-solution approach will allow Europe to meet its circularity ambitions.

- **Better economic, environmental, and consumer outcomes can be achieved by scaling existing circularity solutions and know-how, such as recycling.** Circularity solutions in the IEO sector must consider the significant importance of takeaway consumption. Improving recycling shows the best environmental outcomes in the short term, especially for takeaway, where we project reuse models will lead to negative environmental outcomes.
- **“Blanket” circularity solutions and targets, such as reuse mandates, can generate negative economic, environmental, and consumer outcomes for the European IEO sector.** A rollout of reuse models across all packaging types and channels is expected to lead to higher packaging waste volumes and a sharp increase in plastic waste (reuse models often use thicker plastic materials as packaging needs to undergo multiple washing and drying cycles before being disposed of). In addition, it would also lead to an increase in GHG emissions and added stress on water and energy systems (already under pressure in several European countries). We project “blanket” solutions would generate negative environmental outcomes and would adversely impact the entire value chain without improving circularity in the sector.

- **Europe must accelerate investment and rollout of both reduce/replace and reuse solutions in parallel.** Recycling alone will not be sufficient to drive the required level of circularity for the IEO sector. Europe must explore a range of alternative solutions, starting with using existing compostable packaging design technology and expanding infrastructure to support the compostable value chain. Reuse solutions, across dine-in formats and for certain packaging types, should also be explored.
- **Realizing Europe's circularity ambitions and adopting the right circularity solutions for the IEO sector requires a multi-stakeholder coalition.** Scaling multiple circularity solutions requires an ecosystem-wide, end-to-end approach. Stakeholders across the value chain—including private, public, and civil sectors—need to be held accountable and work together to develop a set of mixed solutions to ensure efficient and effective circularity.

As momentum continues to build toward greater circularity, Europe requires a robust policy framework to assess, select, and scale the right mix of circularity solutions, while also ensuring legislative harmonization at a European level. Now is the time to do so.

**Only a tailored, multi-solution approach will allow Europe to meet its circularity ambitions.**

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The authors would like to thank Ulvi Abdullazada, Beth Bovis, Carsten Gerhardt, Mohamad Keaik, Lovisa Kullman, Dominik Leisinger, Felix Muyldermans, Lovisa Sjoqvist, and Attila Turos for their valuable contributions to this report.

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