

Unpacking the EU's packaging regulations

Best practices for packaging standards

March 2026



Without strong standards, EU packaging rules risk weak enforcement, loopholes, or fragmentation across Member States. To ensure that they best serve society and the environment, **these standards must be developed collaboratively by diverse experts, including industry and civil society.**

The EU's Packaging and Packaging Waste Regulation ([PPWR](#)), published in January 2025, introduces essential measures to prevent and reduce packaging waste.

Rules governing the EU packaging sector will become more harmonised, but the regulation leaves a lot of room for exemptions ([learn more in our analysis](#)).

Implementing this important piece of legislation now depends on **technical rules and harmonised European standards.**

Policy decisions have defined the objectives and minimum legal requirements (the “what”), **now standards will define technical methods** to meet those requirements (the “how”). Technical details, such as how packaging minimisation is measured, or how reusable and refillable packaging systems should operate, will be shaped through a combination of secondary legislation and European standards requested by the European Commission.



Three pillars of standardisation under the Packaging and Packaging Waste Regulation

PPWR milestones: Reusable packaging and packaging minimisation



Regulation (EU) 2025/40 Packaging and Packaging Waste Regulation (PPWR)



Minimisation

What the PPWR requires

All packaging placed on the EU market must be designed so that its weight and volume is reduced to a minimum by **January 2030**.

Timeline

February 2027 (expected) - A Standardisation Request to revise the existing harmonised European standard: **EN 13428:2004 Packaging - Requirements specific to manufacturing and composition - Prevention by source reduction**.

This creates a tight, three-year window (2027-2030), which is shorter than the usual four-year period, making it essential to start the standardisation process as soon as possible.



What standards are needed

Revising the existing standard is essential, and must:

- Specify the methodology to calculate and measure compliance with packaging minimisation performance criteria.
- Define maximum adequate weight and volume limits.
- Set parameters such as wall thickness and maximum empty space for most common packaging types and formats.



Reuse systems and reusable packaging

What the PPWR requires

All packaging should be considered reusable if it has been designed and placed on the market with the intention of multiple reuse, and must accomplish as many rotations as possible within a reuse system.

Timeline

February 2027 - The European Commission will adopt a delegated act that sets a minimum number of rotations for the most frequently used reusable packaging formats to withstand under normal conditions of use. The delegated act could be informed or reinforced by European standards developed by CEN.

What standards are needed

- A full revision of [EN 13429:2004 Packaging Reuse](#), which is outdated and not aligned with PPWR requirements.
- Harmonised rules for reuse systems, including logistics, return processes, and hygiene.

[How to align the European reuse standard with new packaging rules](#) 



Refill

What the PPWR requires

No formal Standardisation Request exists yet, but standards are needed to operationalise refill provisions.

Timeline

February 2027 - The Hotel, Restaurant, & Catering (HORECA) sectors, must provide a refill option.

What standards are needed

- Hygiene and safety protocols.
- Consumer information.
- Storage rules for bulk sale and HORECA.
- Packaging suitability.



Key insights from experts

A summary of insights from [our workshop](#), held in October 2025, where we invited experts to discuss the relevant standardisation process, best practices, and recent developments regarding solutions for packaging minimisation, refill, and reuse. **The recording and presentation slides (including full references), can be found [on the ECOS website](#).**



Workshop | Packaging minimisation, refill, and reuse standards



Food contact chemicals in standards



“Chemical safety should be embedded into reuse and refill standards from the start.”

Justin Boucher

Operations Director, Food Packaging Forum

Food contact materials can contain thousands of hazardous, and often untested chemicals

- Over 2,160 chemicals are known to migrate from packaging into food.
- Up to 100,000 non-intentionally added substances (NIAS) can be found migrating into foodstuffs, representing both major data gaps as well as potential exposures.

Chemical migration increases under common real-world conditions

- Heat, long contact time, small portion sizes, and fatty foods are all factors that can increase the risk of chemical migration from food packaging to food.
- Chemical migration can occur not only from packaging but also from processing equipment.

Safer system design for food packaging are needed

- Known chemicals of concern must be removed from the design stage.
- Chemical formulations must be simplified, for example - reduce NIAS, and identify essential uses.

Material selection for reuse and refill systems is key

- Complex materials, such as plastics and paper, can contain and release many more chemicals compared more inert materials, such as glazed ceramics, stainless steel, or glass.



Final-product toxicity testing is needed

- Supply-chain opacity, the sheer number of chemicals, and the creation of NIAS make upstream testing impractical and insufficient.
- Standards should be developed so they can adapt to evolving scientific knowledge and expand testing on health impacts beyond carcinogenicity, genotoxicity, and endocrine activity.

Reuse and refill standards must integrate chemical safety

- Standards should not focus on durability or design alone.
- **Harmful chemicals impose far greater public health costs than the investments needed to create safer types of packaging.**

Reusable packaging in standardisation



“PPWR sets the legal backbone, but standards are the practical toolkit and the invisible infrastructure that will make reuse systems function in practice.”

Lara Beekma

Head of Business Development, New European Reuse Alliance (NewEra)

A major achievement of the PPWR is the differentiation between refill and reuse

This distinction ensures that all stakeholders **apply uniform definitions**, which are essential for coherence across the supply chain.

While referenced in the PPWR, **precise and harmonised rules need to be developed to make these definitions workable** for container formats, hygiene or safety protocols, tracking, labelling system, reverse logistics, and minimum number of rotations.

Defining a minimum number of rotations for reusable packaging

This is essential to ensure credibility, prevent greenwashing, secure true environmental benefits, provide business certainty, and avoid divergent national rules.

- Europe lacks large-scale, real-world, reuse data pilot projects. Projects exist at a regional or city-level, such as [Citeo](#) or [Lisbon](#), which show the potential of standardised packaging, washing, and traceability - but they cannot evolve to Europe-wide as their scale cannot reliably determine figures applicable to diverse contexts.

Action is urgent

Policymakers must set clear rotation rules based on **accelerating data collection**, while industry must engage actively in standardisation processes, sharing data from pilots and business operations to help shape effective rules.

International standards for reuse systems



“Businesses, communities, and consumers benefit from consistent rules when developing new systems. A diverse consensus body ensures reuse systems are effective and inclusive.”

Claudette Juska

Co-founder and Technical Director, The Global Alliance to Advance Reuse (PR3)

Rules and blueprints for scalable reuse systems

Developing the necessary rules and blueprints for scalable reuse systems (and expanding the types of packaging they can accommodate), requires a **full infrastructure grid** - including collection, washing, distribution, and transport. Standardisation is critical to **ensure that these systems, operations, and protocols are efficient, safe, and consistent**.

Collaboration

Collaboration is essential to solve complex environmental and social challenges. PR3, accredited by American National Standards Institute (ANSI), develops standards through a transparent, consensus-based process that involves industry, SMEs, civil society, public health, environmental groups, consumers, workers, and governments. PR3 has developed [six standards covering the full reuse system](#).

These standards cover best practices for reuse systems and provide **ready-to-use, interoperable frameworks** for free that can be adopted or adapted nationally - helping reuse systems scale and function reliably across diverse markets.

The value of civil society in European standardisation



“We need civil society organisations represented and meaningfully involved in standardisation to ensure their unique expertise can contribute to building stronger standards. ECOS supports environmental organisations throughout their standardisation journey.”

Amina Aissani

Senior Programme Manager, ECOS

The PPWR relies on European harmonised standards

Engagement of civil society organisations in European and national standards-making is, therefore, essential.

ECOS participates in the PPWR Standardisation Request Ad Hoc Group (SRAHG)

We can help ensure the ambition of the Standardisation Request effectively supports the regulation's objectives. Standards stemming from the PPWR need to be developed by a **balanced group of stakeholders, including environmental NGOs.**

Civil society must be at the table

Meaningfully engaging civil society in the standardisation process provides otherwise absent, or overlooked, environmental expertise. ECOS is present in these processes at EU level, while NGOs operating at national level can engage by joining National Standardisation Bodies (NSBs) to shape their position and address national interests and concerns.

How to engage with the development of packaging standards

Get involved now with your National Standardisation Bodies (NSBs)

Take a look at how ECOS can support you.



Become an ECOS member

Get further personalised support to understand standardisation processes, access committees, and align strategies.



What needs to happen next

Timely implementation

- **Start standardisation work early.** European standardisation bodies and experts need to meet 2027 deadlines to avoid delays in PPWR implementation.

Ambitious standards

- **Revise EN 13428 and EN 13429** to bring them in line with PPWR requirements and real-world system needs.
- Ensure future standards incorporate **chemical safety** - including final-product toxicity testing and considerations beyond durability.
- Develop harmonised rules for **minimum rotations**, supported by accelerated real-world data collection.
- Draw on **international standards**, e.g. PR3, to speed development and improve interoperability across markets.

Inclusiveness in action

- Guarantee **balanced stakeholder participation**, especially strong civil-society involvement, to ensure credible, ambitious, and environmentally robust rules and standards.





Environmental Coalition on Standards

ecostandard.org



@ecos.ngo



ECOS-NGO



ECOS gratefully acknowledges financial support from **Plastic Solutions Fund** and **Norwegian Retailers' Environment Fund**, supporting our work to prevent and reduce plastic consumption and pollution, through improved reuse and refill. Views and opinions expressed belong to the author(s) only and do not necessarily reflect those of our funding partners, who cannot be held responsible for them.



Resources

- ECOS. [Analysis – EU Packaging and Packaging Waste Regulation](#). 2025.
- ECOS. [Durability of reusable packaging](#). 2025.
- ECOS. [How to align the European reuse standard with new packaging rules](#). 2024
- ECOS. [Comparative assessment of packaging reuse and standards](#). 2025
- ECOS & RPA. [Recommendations for a standardisation request on packaging and packaging waste](#). 2024
- [Understanding Packaging Scorecard. UP Scorecard Chemicals of Concern guidance](#) (Last accessed February 2025).
- NewEra. [European Reuse Barometer](#). (Last accessed February 2025).
- Citeo. ["Reuse: Building, experimenting and financing the development of reuse"](#) [FR] (Last accessed February 2025).
- Tomra. [Citywide reusable cup system "CopoMais" launches in Lisbon](#). 2025
- PR3. [The PR3 standards](#). (Last accessed February 2025).
- ECOS. [Best practice for including NGOs in national standardisation](#). 2024.

Contacts

Environmental Coalition on Standards (ECOS)

ecostandard.org

Fanny Rateau, Senior Programme Manager
fanny.rateau@ecostandard.org

Amina Aissani, Senior Programme Manager
amina.aissani@ecostandard.org

Food Packaging Forum

foodpackagingforum.org

Justin Boucher, Operations Director,
info@fp-forum.org

New European Reuse Alliance (NewEra)

newreusealliance.eu

Iara Beekma, Head of Business Development
iara@newreusealliance.eu

The Global Alliance to Advance Reuse (PR3)

pr3standards.org

Claudette Juska, Co-founder & Technical Director
cjuska@resolve.ngo