

whitepaper

Navigating the Future: A Guide to EU Packaging Related Regulations

Introduction

The new EU Packaging and Packaging Waste Regulation (PPWR) and growing Extended Producer Responsibility (EPR) laws are changing packaging rules. This white paper gives advice on how to adapt to these changes. It highlights the benefits of reusable packaging in the supply chain, including cutting down on new materials and lowering fees and taxes, to help businesses succeed in a sustainability-focused environment.

What is driving the legislation?

The EU Packaging Regulations are in response to the environmental issues caused by single-use packaging. They promote waste reduction, reuse, recycling, and sustainable alternatives based on circular economy principles. Their goal is to reduce pollution and encourage positive environmental change.

What are the EU Plastic Packaging Regulations?

In November 2022, the EU proposed a new regulation – the PPWR – as part of the European Green Deal to tackle packaging waste issues. The PPWR replaces the existing Packaging and Packaging Waste Directive (PPWD) making requirements more stringent and ensuring consistency of approach to packaging and packaging waste across EU states. Its focus is to reduce excessive packaging, promote a circular economy, boost reuse rates, and encourage the use of recycled materials in new packaging.



180 kg
of packaging waste per
person, per year is generated
by Europeans

46%
projected increase in plastic
packaging by 2030*

* <https://rb.gy/sl9tk3>

Extended Producer Responsibility (EPR)

The PPWR now clearly supports the EPR approach which requires producers and users to be financially responsible for their packaging from cradle to grave and help reduce waste to landfill. This shift aims to promote sustainable packaging practices and promote a circular economy model. By aligning with EPR principles, the reform addresses environmental impacts and promotes producer adoption of sustainable practices for a resilient, resource-efficient future.

EPR usually involves eco-modulated fees, where eco-friendly packaging pays lower fees. More importantly Reusable Packaging is often exempt from these fees altogether, promoting its use over simply recycling.



Understanding Packaging

Not all packaging is the same. It's important to understand the differences between **primary** (direct product encasement), **secondary** (additional protection for transportation), and **tertiary** (bulk transport) packaging. The new regulations affect each type differently. These changes will encourage a shift from single-use items like plastic bags to **reusable** options, which are ideal for secondary and tertiary packaging. Examples of secondary and tertiary packaging include reusable plastic crates (RPCs), plastic pallets, and bulk containers.

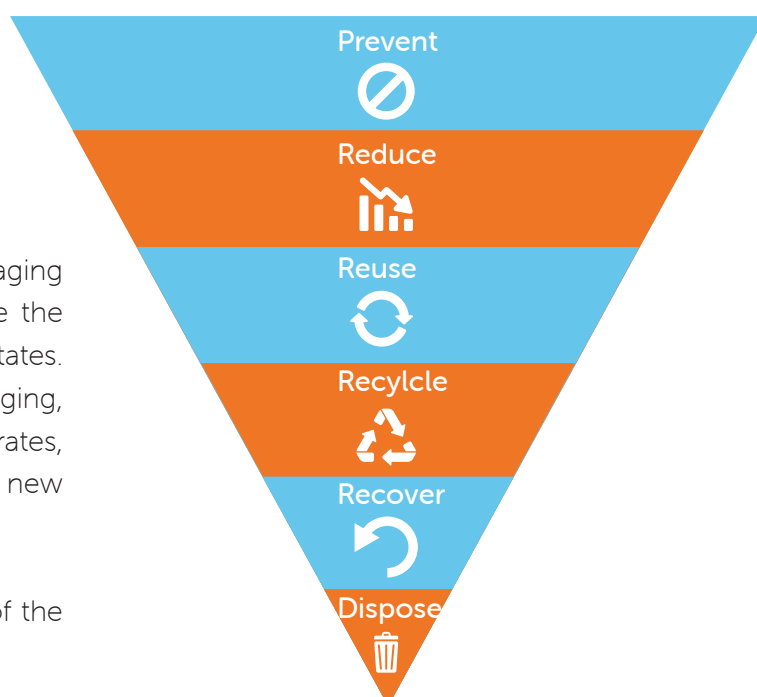


Key Regulation Insights

Packaging and Packaging Waste Regulation (PPWR)

The PPWR replaces the Packaging and Packaging Waste Directive (PPWD) and aims to standardise the management of packaging materials across EU states. Its objectives are to reduce excessive packaging, promote a circular economy, increase reuse rates, and encourage the use of recycled materials in new packaging.

The regulations set targets across each section of the waste hierarchy:



1. Reduction targets for a circular economy

The Regulation sets reduction targets for packaging waste: **5% by 2030, 10% by 2035, and 15% by 2040**. These targets, especially aimed at reducing single-use plastic waste, will drive changes in design, consumption habits, and enforcement.

Businesses must innovate and adopt sustainable practices to meet these targets. One requirement is to reduce empty space in packaging by 50%, ensuring packaging is more fit for purpose.



What are the implications for businesses?

The Regulation bans environmentally harmful packaging, especially single-use formats for food and beverages in restaurants, cafes, and for fruits and vegetables. This pushes businesses to adopt sustainable alternatives, requiring changes in packaging, supply chain distribution, and exploring new materials and formats.

Businesses should consider the efficiency and environmental impact of their packaging choices. Reusable alternatives like bulk containers or reusable plastic crates (RPCs) align with sustainability goals and offer practical solutions. Reusable, foldable bulk containers, when used with efficient liners which allow more product to be removed from the container, can greatly reduce waste and improve operational efficiency.

2. Reuse and reusable packaging targets

The Regulation sets reuse targets of 40% by 2030 and 70% by 2040 for certain packaging types, including transport (tertiary), sales (primary and secondary), and grouped packaging.

This legislation is significant as it is the first to explicitly mention "reuse," marking a major step towards embracing circular economy principles.

"Did you know
Tosca can provide
a personalised Life
Cycle Analysis? Get
in touch to request
yours today"

Understanding the value of reusable packaging for business

While cardboard is exempt from reuse requirements, reusable products greatly reduce environmental impact resulting from their manufacture and use, especially regarding water usage (**30%+ reduction**) and greenhouse gas emissions (**20%+ reduction**). The more a product can be reused, the lower its overall environmental footprint.

Therefore, businesses should consider the entire lifecycle of their packaging options when making choices. Reusable items like plastic pallets, reusable plastic containers (RPCs), and foldable plastic containers are more sustainable and suitable alternatives compared to single-use options. Embracing these reusable solutions can help businesses meet regulatory requirements and achieve sustainability goals.



3. Recyclable and Recycled Content

The Regulation sets recycled content rates and design criteria to enhance recyclability. Manufacturers must include minimum recycled content percentages, and design standards will focus on material composition, labelling, and ease of dismantling for recycling. This redesign aims to reduce waste and promote sustainability.

For non-PET food contact packaging, targets are set at 10% recycled content by 2030 and 25% by 2040, with specific methods and exemptions to be determined in implementing acts. Many reusable secondary and tertiary packaging options already contain over 30% recycled content ensuring immediate compliance with the regulations.



What are the benefits?

Adhering to the new and updated regulations will drive benefits to businesses across supply chains, both for sustainability and for their operations. These include:

1. Reduction in Greenhouse Gas Emissions:

The reforms targets a substantial decrease in emissions by curbing virgin plastic production and improving recycling processes. Shifting from single-use plastics to reusable options that are designed for recycling reduces the demand for virgin plastic. Additionally, reusable plastic packaging provides better protection, minimising food damage and improving product quality meaning less emissions from food going to landfill or product production. This will be a key focus in the upcoming Waste Framework Directive update.

2. Decrease in Water Use: Promoting the use of sustainable packaging options can lead to reduced water consumption in production processes. An example of this is the manufacturing of cardboard. Using reusable plastic crates lead to significantly less water consumption across the life cycle compared to cardboard.

Our RPCs weigh approximately 2.5 times more than an equivalent-sized corrugated box, but they perform on average 80 trips over their service life. This means every kg of plastic used to manufacture a reusable plastic crate replaces just over 25 kg of single-use corrugated boxes, and even though on a per kg basis less water is needed for cardboard than for plastic (approx. one third when comparing to virgin plastic), on a per trip basis making a reusable plastic crate only requires one tenth of the water needed to produce the 80 single-use corrugated boxes it replaces."

After accounting for water used for washing, Tosca's pooled reusable plastic crates typically allow our clients to reduce water use by 50% compared to single-use cardboard.

3. Increased Cost Savings for Businesses: Businesses save costs with efficient packaging, reuse, and supply chain optimisation, reducing expenses for materials, waste management, and environmental compliance.

4. Eliminating Taxes: Companies can reduce environmental taxes by utilising third-party asset management. Pooling resources minimises tax on usage, as seen in Spain, where reusing packaging items such as in a pooled approach is cheaper than opting for a single use alternative, inherently promoting waste reduction. For added context, in the UK, initial reporting is required for reusable packaging, (its 'maiden voyage') but subsequent usage is free from extra charges, emphasising reusability's waste-reducing benefits



Introducing Reusable Plastic Packaging: Puratos' Successful Sustainable Partnership with Tosca

Puratos, a global food industry leader, prioritises sustainability with aims for carbon neutrality by 2025 and zero waste to landfill by 2030. Collaborating with Tosca, Puratos eliminated single-use packaging, transitioning to reusable plastic packaging.

This shift reduced costs and environmental impact, utilising Tosca's Superior Hybrid IBCs, CR1 Pallet, and Magnum Optimum containers. This partnership showcases collaboration efforts in introducing reusable plastic packaging, optimising supply chains, and achieving sustainability goals.

SAVINGS

Weight Reduction Plastic only

61 metric tons of plastic reduced by switching to just **12.5 metric tons** of reusable Tosca load carriers.

Reduced Greenhouse Gas Emissions

Greenhouse gas emissions reduced by **87 metric tons**. That's the equivalent of taking a car off the road for 342790 kilometres!

Water Conservation

31,461 cubic meters of water saved – equivalent to 13 Olympic-sized swimming pools!

Energy Savings

Enough energy saved to power **44 homes**.

CRAI and Tosca: Reusable Packaging Partnership and Transformation

CRAI, a leading Italian supermarket retailer, partnered with Tosca to transform their operations. By adopting Tosca's folding, reusable wood-look crates for transporting produce from fields to distribution centres and stores, CRAI has achieved several sustainability benefits, including:

SAVINGS

Reduced Greenhouse Gas Emissions

Reduced greenhouse gas emissions by **54%**, equivalent to 2.6 million km travelled by car.



Energy Savings

Savings in energy consumption of **538 homes**.



Water Conservation

Reduction in water consumption by **42%**, or the capacity of 82 Olympic-size swimming pools.



Steps to take to increase reusable packaging

The New Regulations underscore the importance of reuse in waste reduction, emphasising that recycling alone is not enough to achieve the desired outcomes. Businesses are urged to adopt sustainable packaging practices and reduce single-use plastics.

Some key steps to achieve this are:

1. **Evaluate Current Packaging:** Assess the environmental impact of your current packaging across its full life cycle and identify areas for improvement.
2. **Choose Reusable Alternatives:** Select durable and reusable packaging options such as reusable plastic crates (RPCs), plastic pallets, and foldable bulk containers.
3. **Redesign for Reusability:** Ensure packaging is designed for multiple uses, including easy cleaning, refill, and durability.
4. **Optimise Supply Chain:** Adjust supply chain processes to incorporate reusable packaging, including efficient collection and return systems.
5. **Educate Stakeholders:** Inform customers, suppliers, and employees about the benefits and usage of reusable packaging to ensure proper implementation and acceptance.
6. **Monitor and Adjust:** Continuously monitor the performance and impact of reusable packaging and make necessary adjustments to improve efficiency and sustainability.
7. **Prioritise Reusable Packaging:** Use reusable crates and containers through a pooling model to achieve sustainability goals and align with a circular economy approach.
8. **Collaborate with Industry:** Establish supportive frameworks for reusable packaging through collaboration and innovation, increasing sustainability while maintaining business competitiveness.
9. **Innovate in Sustainable Packaging:** Invest in new materials and technologies that reduce environmental impact while maintaining product quality and cost-effectiveness.
10. **Integrate Sustainability:** Embed sustainable practices, like reusable packaging and waste reduction, into core business strategies.



Conclusion

The EU Plastic Packaging Regulation (PPWR) marks a significant shift, requiring businesses to adapt strategically and supports the various incoming and developing Extended Producer Responsibility legislation across the EU. Embracing reuse is vital for compliance, helping businesses to thrive in a sustainability-focused environment with optimised supply chains.

How can Tosca help?

At Tosca, we're your expert partner in navigating evolving regulations and sustainability demands. Specialising in innovative reusable plastic packaging and pooling solutions, we drive cost efficiencies and sustainability across supply chains.



Get in touch with us today and see how we can help revolutionise your supply chain with Tosca's reusable plastic packaging.

www.toscaltd.com/contact