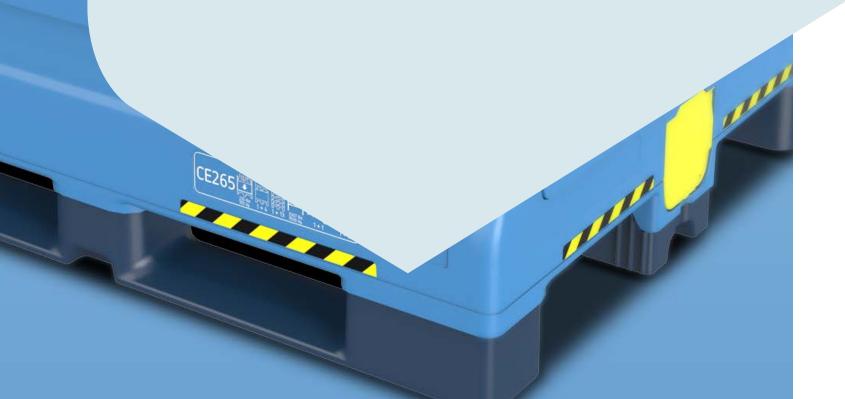
Whitepaper | November 2024

New EU sustainability regulations and their impact on packaging





This white paper aims to provide a (non-exhaustive) overview of relevant (current and upcoming) EU sustainability regulations and their impact on the packaging sector, particularly returnable transport packaging. The regulatory requirements referenced in this white paper are based on the EU's provisional agreement on the Packaging and Packaging Waste Regulation (the **PPWR**). The white paper summarizes Schoeller Allibert's current view on and understanding of the provisional agreement on the PPWR, **as well as certain other rules and regulations relevant for the packaging industry**, and should not

be relied upon as legally binding or for compliance with any such **rules and regulations**, including but not limited to the PPWR (in this regard, please refer to the full text of **the PPWR** and any other applicable rules and regulations). Please note that this document by no means can be interpreted as a representation, warranty or guarantee of any kind. Schoeller Allibert does not make any (express or implied) representation or warranty as to the accuracy or completeness of the information and shall have no liability to you or any other party in relation to the use of this white paper.





A guide to compliance and the opportunities it brings

European regulations concerning sustainability, waste, and plastics are set to change. Transport packaging in particular will be affected, dramatically changing requirements for reuse, recycled content, and recyclability.

In this guide, we explain the effects of these new regulations, the standards you'll be held to and how to future-proof your transport packaging. We also look at how these new standards can directly benefit your business.

At Schoeller Allibert, we know through experience that the right transport packaging can provide not only a path to greater sustainability, but also a direct route to innovation and growth. We are committed to helping your business achieve greater sustainability through reusable transport packaging (RTP).



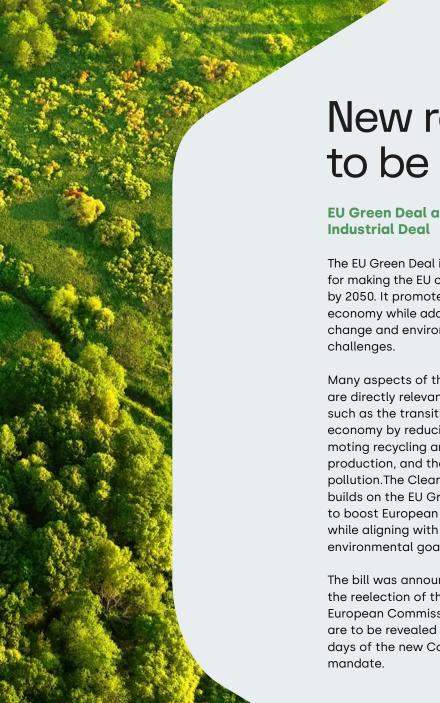
The complexities of packaging

Packaging is crucial in ensuring product safety and quality. It now also has a sustainability component.

As packaging regulations and safety standards continue to increase in complexity, businesses need to stay abreast of new legislation. It's only by understanding what's coming that you can prepare in time.







New regulatory developments to be aware of

EU Green Deal and Clean

The EU Green Deal is a roadmap for making the EU climate-neutral by 2050. It promotes a sustainable economy while addressing climate change and environmental

Many aspects of the EU Green Deal are directly relevant to packaging, such as the transition to a circular economy by reducing waste, promoting recycling and sustainable production, and the need for zero pollution.The Clean Industrial Deal builds on the EU Green Deal, aiming to boost European competitiveness while aligning with the Green Deal's environmental goal.

The bill was announced just before the reelection of the President of the European Commission and details are to be revealed in the first 100 days of the new Commission's

Packaging and Packaging Waste Regulation (PPWR)

The PPWR is a key part of the EU Green Deal and the Circular Economy Action Plan. The PPWR is intended to address Europe's ever-growing waste problem, of which packaging waste is a pressing concern.

For companies in Europe, the PPWR is a clear signal to review and future-proof their current packaging solutions. Even critics of the PPWR admit that reuse is part of the solution to reduce packaging and packaging waste. Most of the requirements listed below (such as reuse targets, recycled content and recyclability) stem directly from the PPWR.

The PPWR is nearly finalized. A compromise was agreed upon by the EU Parliament and Council on 4 March 2024 and a final vote to approve the text and translations is expected at the end of 2024.

The publication of the PPWR is likely in the first quarter of 2025 and it will then enter into force 20 days later.

The PPWR will apply from 18 months after it enters into force, which is likely to be around mid-2026.

While the PPWR will have implications for every company using packaging, it will have a particularly noticeable impact on companies using (B2B) transport packaging.



Extended Producer Responsibility (EPR)

Extended Producer Responsibility (EPR) schemes are environmental policies that make producers responsible for the entire lifecycle of their products, especially the take-back, recycling, and disposal stages.

EPR schemes are a key part of the EU Green Deal. In addition, the current Packaging and Packaging Waste Directive (PPWD) states that member states shall ensure that extended producer responsibility schemes are established for all packaging by the 31st of December, 2024.

Though they share common principles, EPR schemes are not the same in all European countries. Each country implements its schemes with variations in scope, fees, compliance, and administrative processes Reusable packaging, thanks to its waste reduction potential, may receive favorable treatment such as lower fees or more lenient regulations.

We expect that in most European member states reusable packaging will only have to pay EPR fees once, at the moment it's brought into the market. This hopefully creates a competitive advantage compared to single-use packaging. The exact details will depend on the specific EPR rules in each country, but the



general trend across the EU is to incentivize the use of reusable packaging to support sustainability goals.

The EU Taxonomy

The EU Taxonomy Regulation is another key component of the EU Green Deal. It aims to create a common language for investors, businesses, and policymakers to understand what constitutes a sustainable investment, thereby driving the transition to a more sustainable economy.

The regulation introduces a classification system aimed at determining whether an economic activity is environmentally sustainable. Companies that are disclosing against the EU Taxonomy may benefit (under the Circular Economy technical screening criteria) from the shift from single-use to reusable packaging.



Packaging in the supply chain

Packaging systems can be categorized into primary, secondary, and tertiary packaging, each serving distinct functions within the supply chain.

Primary packaging

Also called 'sales packaging' by the Packaging and Packaging Waste Regulation (PPWR), it constitutes a sales unit consisting of products and packaging. It directly holds a product, protecting it from contamination and damage while also serving as a branding tool.

For example: bottles, cans and wrappers

Secondary packaging

Also called 'grouped packaging' by the PPWR, it groups multiple sales units for easier handling and display in retail settings.

For example: Boxes

Tertiary packaging

Also called transport packaging by the PPWR, it is conceived to facilitate handling and transport of one or more sales units or a grouping of sales units to prevent damage to the product from physical handling and transport.

For example: pallets and crates

Primary and secondary packaging are typically used in B2C packaging, focusing on protection and brand appeal. In contrast, B2B packaging involves mainly tertiary packaging (also called transport packaging by the PPWR), prioritizing functionality and durability for efficient transport and storage. Transport packaging accounts for about a third of packaging waste, largely invisible to consumers but significant in its environmental impact

Based on a German study on transport packaging, most waste comes from:



40.3%

Paper and cardboard

18.3%

Glass



19%

Plastic

17.1%
Wood

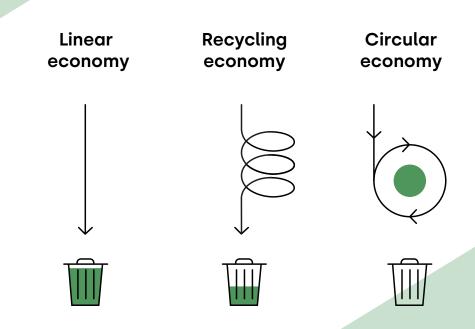


An opportunity for B2B sustainability

While a lot of media attention has been focused on the changes in consumer (retail) packaging, the changes for B2B transportation packaging are equally or even more significant.

We see this change as more than just a requirement—it's a chance for businesses to innovate, adopt sustainable practices, and transform supply chain logistics with new materials and designs.

By moving to reusable packaging, companies stand to improve efficiency, reduce waste, and contribute to a circular economy.





Reuse targets for transport packaging

The PPWR is a key milestone for "reuse" as it sets clear goals to reduce waste and promote sustainable packaging. It encourages businesses to move from a "takemake-dispose" model to a more resource-efficient, circular system where materials are reused multiple times rather than discarded.

The PPWR is the first piece of European legislation to set tangible targets for reuse, making it central to reducing environmental impact and advancing circular economy principles.

In our experience, reusable packaging has big benefits. As compared to alternatives, it produces significantly fewer emissions and has helped to reduce our customers' environmental footprint.

And it's not just us. In a Zero Waste Europe² study comparing 32 life cycle assessments, 72% of the analyses found that reusable packaging had a more positive environmental impact than single-use alternatives, primarily due to its long lifespan of five to 15 years and its lighter, foldable design compared to materials like wood.

Essentially, the more a product is reused, the smaller its environmental footprint, making reusable packaging a smarter choice for the planet.

For transport packaging, or as the PPWR calls it, for transport packaging in the form of pallets, foldable-plastic boxes, boxes, trays, plastic crates, intermediate bulk containers, pails, drums and canisters of any size or material, the reuse targets are as shown on the right.

Must be 40% by 2023

70% by 2040

In addition, the PPWR requires transport packaging to be reusable (exclusively reusable) from 1 January 2030 when used within one member state or used to deliver goods between sites of the same operator in different member states.

Cardboard boxes (as well as packaging for dangerous goods, largescale machinery and other special cases) may be exempt from reuse requirements, but regardless, the legislation sends a clear signal that reuse is required and mandated to prevent further waste creation.







Recyclability and recycled content standards

Alongside reuse targets, the PPWR sets new standards to ensure packaging materials are designed for effective recycling and that contamination in recycling streams is minimized.

The legislation mandates that by 2030, all packaging must be recyclable, focusing on the packaging's end-of-life. At the same time, manufacturers must ensure that packaging contains a certain % of recycled materials.

For non-PET plastic packaging, the following requirements apply.

Contact-sensitive use cases (such as food packaging): a minimum of 10% recycled content

All other applications: a minimum of 35% recycled content
These recycled content standards will be assessed at the factory level.

At Schoeller Allibert, we are uniquely positioned to help you meet these new requirements. Our team (and our factories) have a long track record of recycling transport packaging in a closed-loop system and using recycled polypropylene and polyethylene in our products.



Is your business ready?

With increasing regulations like the PPWR, businesses must adapt to stricter requirements for recyclability and recycled content. But there's more—reusable transport packaging is also gaining attention as a sustainable solution.

By incorporating durable, reusable options like plastic pallets and con tainers, you can significantly reduce waste, lower environmental impact, and ensure your business is compliant with upcoming regulations.

Now is the time to rethink your packaging strategy to stay ahead in Europe's evolving market.

At Schoeller Allibert, we recognize that achieving sustainability requires more than just switching materials—it demands a joint effort to enhance efficiency and environmental responsibility across industries. We help achieve this with our range of reusable solutions, including bulk containers and reusable plastic crates.

As Europe's leading RTP products company with over 65 years of experience, we have the expertise and qualifications to process food contact and other recycled materials.

Our commitment to sustainability includes a target of using 35% recycled polymers by 2026, and we lead innovations in upcycled materials, such as polymers made from discarded fishing gear and tulip net waste.

To help you track your packaging's CO2 footprint and minimize waste, we also offer innovative digital solutions, such as SmartLink. This empowers data-driven decisions, enhancing supply chain efficiency and promoting circularity on a global scale.

Likewise, our RTP products made from recycled materials, have the ability to reduce your Scope 3 greenhouse gas emissions.

By choosing Schoeller Allibert, you can not only meet your emerging compliance requirements, but also improve the circularity of your supply chain. A change that can be positive to both your company's bottom line and the world.





Building a sustainable supply chain together

We partner with companies of all sizes. Recently we partnered with Coca-Cola and Renewi. Together, we made improvements in their supply chain circularity and targeted specific sustainability goals through the use of reusable packaging solutions.

Coca-Cola Europacific Partners:
 On the road to climate neutrality

We teamed up with Coca-Cola Europacific Partners and recycler Healix to take another step towards a circular economy and sustainable reusable packaging. We developed a cutting-edge material mixture that allows the iconic red hospitality crates to be produced with 97% recycled plastic³.

This development is estimated to save 64% CO2 emissions in crate production compared to crates made from virgin plastic.

With this partnership, we support Coca-Cola Europacific Partners in achieving its "World Without Waste" sustainability target, which aims for 100% recyclable packaging by 2025.

 Renewi: Innovating waste management

We partnered with Renewi to re-introduce our MaxiLog® containers, specifically designed to support a circular economy. The collaboration brought impressive environmental and operational advantages.

Our MaxiLog® containers, now made from 98% recycled materials (including 50% old Renewi containers), significantly reduce carbon emissions. Each container saves 82 kg of CO2 compared to those made from virgin materials, slashing emissions by 77%⁴.

Through this partnership, we're proud to support Renewi in reaching its circular economy goals, especially by boosting the recovery of valuable materials that can be reused from waste.



Coca-Cola Europacific Partners: If we compare the emissions of the virgin-recycled the new crate allows us to save 69% TnCO2e (based on 3000 products), which compared with other tangible activities means saving:



5

Flights NYC-AM roundtrip



19884

Avocados



Renewi: If we compare the emissions of the virgin-recycled the new MaxiLog® containers allow us to save 77% TnCO2e (based on 3000 products), which compared with other tangible activities means saving:



149

Flights NYC-AM roundtrip



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Avocados







- 1 Source: 3 Based on a study in Germany. NABU. (2022). NABU-Studie zu Transportverpackungen.https://www.nabu.de/umwelt-und-ressourcen/ressourcenschonung/einzelhandel-und-umwelt/32297.html
- 2 Zero Waste Europe (2020). Reusable packaging vs single-use packaging. https://zerowasteeurope.eu/wp-content/uploads/2020/12/zwe_reloop_report_reusable-vs-single-use-packaging-a-review-of-environmental-impact_en.pdf. pdf_v2.pdf
- 3 EuCertPlast certificate of compliance, SachverständigenbüroWidmayer Widmayer GmbH + EuCertPlastic certificate Healix 04/12/2023
- 4 Please note that this is only an estimate which by no means can be interpreted as a representation, warranty or guarantee of any kind. We do not make any (express or implied) representation or warranty as to the accuracy or completeness of such estimate and shall have no liability to you or any other party in relation to the use of such estimate (other than in case of fraud).



