



GROUP

PPWR and flexible plastic packaging

What we stand for

Who are we?

KIVO Plastic Packaging has been a trusted name in the field of flexible plastic packaging for over 60 years. We are a leading European producer of polyethylene packaging materials. KIVO offers a broad product portfolio based on LDPE, HDPE, MDPE and Paperlike materials, available in both mono-extrusion and co-extrusion variants. In addition to semi-finished products for the converting industry, we also supply finished products.

What do we stand for?

As long as businesses and consumers use and consume goods, products must be transported, stored, protected, cleaned and ultimately processed as waste. We believe this should always be done in the least polluting way possible. In many cases, plastic is, also from an environmental perspective, the most suitable material. We apply a holistic approach, taking into account raw material sourcing, production, logistics, use, waste management and recycling. Already in the development phase, this approach leads us to strive for an optimal balance. We produce flexible plastics for applications where we are convinced that plastic packaging is the least polluting choice.

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PPWR and flexible plastic packaging

What does the packaging and packaging waste regulation mean for your plastic packaging?

The Packaging and Packaging Waste Regulation (PPWR) marks a fundamental shift in the way packaging is designed, used and managed within the European Union. The Regulation introduces binding requirements aimed at reducing packaging waste, increasing circularity and improving the efficient use of resources. For companies using plastic packaging, this means that existing packaging concepts must be thoroughly reassessed. Recyclability is

no longer the only consideration; material selection, composition, labelling requirements and the future-proofing of packaging solutions towards 2030 and beyond must also be taken into account.

At KIVO, we monitor this legislation in detail. As a producer of flexible PE packaging, we support our customers in making the plastic component of their packaging PPWR-compliant, offering technically substantiated solutions tailored to specific product and market requirements.



Why this change?

Europe generates more than 80 million tonnes of packaging waste each year. Without additional measures, this volume is expected to continue increasing. With the PPWR, the European Commission aims to reverse this trend and make packaging a structural part of a circular economy.

The focus is shifting from recycling alone to a broader approach that includes:

- prevention and reduction of packaging waste;
- packaging design aimed at high-quality recycling;

- the use of recycled raw materials where technically and legally feasible;
- reuse in supply chains where this is logistically and economically viable.

For brand owners and producers, this requires different design choices and a long-term vision for packaging within their portfolio.

Recyclability under the PPWR

From **2030** onwards, only packaging that is technically recyclable may be placed on the European market. The assessment will be carried out according to the Design for Recycling principle, evaluating the actual processability of packaging within existing sorting and recycling systems.

Packaging will be classified into three recyclability grades:

- **Grade A:** at least 95% recyclable
- **Grade B:** at least 80% recyclable
- **Grade C:** at least 70% recyclable

Packaging scoring below Grade C may no longer be placed on the market from 2030. From 2035 onwards, Grades A, B and C must also be “recycled at scale” (RaS). From **2038**, only packaging achieving Grade A or B (RaS) will be permitted.

What does this mean in practice?

For flexible plastic packaging, this translates into, among other things:

- a clear preference for mono-material solutions such as PE;
- avoiding material combinations that hinder recycling, such as PE combined with PP or PE combined with paper;
- limiting the use of dark pigments, coatings and additives that interfere with sorting processes;
- using inks, adhesives and labels that are compatible with the base material.



In addition to these aspects, further Design for Recycling criteria apply when assessing packaging, including ease of emptying, product residue, ease of disassembly, and the application of labels, sleeves and other components.

KIVO Plastic Packaging supports customers in optimising packaging structures towards recyclable mono-material solutions and advises on material selection and printing. Examples include replacing multilayer, non-recyclable laminated films with recyclable mono-PE structures, while maintaining product protection and runnability on existing packaging lines, and converting non-recyclable paperlike films into a recyclable alternative such as RecyWrap, without requiring significant process modifications.

When assessing recyclability, the complete packaging system is always taken into consideration. The party placing the packaged product on the market remains responsible for the final verification against all Design for Recycling criteria. KIVO provides the necessary technical information and substantiation as input for this assessment.

Recycled content in plastic packaging

The PPWR introduces mandatory minimum percentages of post-consumer recycled (PCR) content for plastic packaging. These percentages are calculated as an annual average per production site and will gradually increase between 2030 and 2040.

From 1 January 2030, the following minimum levels will apply:

- 10% for contact-sensitive packaging other than PET;
- 35% for all other PE packaging;

Exemptions apply to certain types of packaging, such as:

- Primary packaging for medicinal products, medical devices, infant formula and hazardous substances.
- Packaging in which the plastic component represents less than 5% of the total packaging weight is exempt from these minimum PCR quotas.
- Food contact packaging where the recycled content may pose a risk to human health and does not comply with Regulation (EC) No 1935/2004.

The PPWR does not distinguish between mechanically and chemically recycled PCR. By 31 December 2026, further clarity is expected regarding the methodology to be applied for demonstrating PCR content and the specific requirements that PCR must meet (including origin and recycling technology).

Important nuance: direct food contact

- for food-contact packaging, constructions with a virgin inner layer and PCR in an outer layer are not automatically considered a valid solution.
- for contact-sensitive PE packaging, the use of PCR appears, in the longer term, to be feasible only via chemically recycled, food-grade PCR.
- for the time being, the availability and cost of qualitatively suitable PCR for each application pose significant challenges, and tailor-made solutions will often be required.
- from 12 February 2028 onwards, more clarity is expected regarding whether and to what extent biobased content may count towards the mandatory PCR percentages.

Role of KIVO in recycled raw materials

KIVO has its own recycling facility for PIR (KIVO Recycling) and collaborates with strategic partners for the supply of certified PCR recyclate. This enables KIVO to provide targeted support to customers in making PPWR-proof choices, tailored to the specific application, regulatory requirements, and availability of raw materials.

PFAS in food packaging

As of 12 August 2026, a ban on PFAS in food contact packaging will apply within the European Union. This ban is part of the PPWR and is aimed at protecting human health and the environment.

PFAS (per- and polyfluoroalkyl substances) are used for their water-, oil-, and soil-repellent properties, for example in coatings and functional barriers. At the same time, these substances are known for their persistence in the environment and potential health risks. For this reason, PFAS are designated as undesirable in food packaging under the PPWR.



What are the practical implications?

- as of 12 August 2026, food packaging containing PFAS may no longer be placed on the European market.
- the ban applies to all food packaging, regardless of material type or application.
- coatings, additives and processing aids containing PFAS components are also covered by the ban.
- multilayer structures with a virgin inner layer are not exempt.

Responsibility for compliance lies with the producer or importer of the packaging.

What does this mean for packaging design?

For brand owners and packaging users, this means that existing packaging must be assessed in a timely manner for the presence of PFAS, particularly in applications where barrier properties are required, such as grease, moisture or oxygen barriers.



KIVO supports customers with:

- identifying PFAS risks in existing plastic packaging structures;
- selecting PFAS-free alternatives, such as water-based barriers, biopolymer coatings or suitable multilayer solutions;
- redesigning packaging while maintaining product protection and food safety.

KIVO does not intentionally add PFAS components and actively monitors developments regarding PFAS-free materials and coatings.

KIVO has converted all raw materials to grades for which the supplier explicitly declares that they do not contain intentionally added PFAS.

In addition, KIVO has reference materials externally tested against the limits as laid down in Article 5 of the PPWR.

Besides the PFAS restriction, the PPWR also imposes limitations on the presence of heavy metals. For lead, cadmium and hexavalent chromium, a combined total limit of 100 mg/kg applies. This requirement has been in force within the packaging industry for a considerable time and is structurally safeguarded, meaning that in practice it should not constitute a limiting factor.

Reuse and reusable packaging

The PPWR establishes concrete reuse targets for packaging for the first time. It requires packaging to be designed for multiple use cycles, without loss of quality, functionality or safety.

Examples of targets from 2030 onwards:

- 100% reusable transport packaging within one Member State;
- 40% reusable transport packaging for transport between Member States;
- increasing percentages towards 2040, depending on the type of packaging and its application.

Not all packaging qualifies for reuse. The PPWR provides for exemptions, including on the basis of:

- food safety and hygiene requirements;
- the perishability of products;
- specific functional or logistical product requirements.

KIVO supports customers by clarifying which PPWR obligations apply and which design options are available within the applicable framework. Depending on the application, logistics and regulatory requirements, this may lead to a consideration between reuse systems and a focus on high-quality recyclable packaging design as a future-proof route.

Labelling and information requirements

From 2028 onwards, harmonised European labelling for packaging will become mandatory. This labelling is intended to provide end users with clear and uniform information about the composition of packaging and the correct waste stream.

The labels will provide information on:

- the material composition, including the share of PCR and biobased raw materials;
- recyclability, compostability or reusability, displayed through standardised pictograms.

In addition, this information will be supported by QR codes or other digital data carriers, enabling users to access more detailed information to assist with correct sorting and processing. Certain packaging types are exempt, such as transport packaging or packaging that forms part of a return system. As of 12 August 2026, the harmonised standards for these labels and pictograms will be established, allowing market participants to prepare in time for implementation.

KIVO supports customers by providing input on the material composition of packaging and by advising on label materials and solutions that do not negatively affect recyclability or sortability.

Reduction of single-use plastics and waste prevention

The PPWR will introduce restrictions from 2030 on the use of certain types of single-use plastic packaging.

This includes, among others:

- specific promotional multipack packaging;
- packaging for fruit and vegetables weighing less than 1.5 kg;
- plastic packaging for on-site consumption.

In addition, the PPWR introduces concrete waste prevention targets for packaging waste, expressed in relation to the reference year 2018:

- 5% reduction by 2030;
- 10% reduction by 2035;
- 15% reduction by 2040.

In addition to these quantitative targets, design requirements are also being tightened.

KIVO can, upon request, provide support by contributing to further packaging minimisation, for example through film downgauging while maintaining mechanical properties.

Based on extensive experience in material reduction, KIVO can help identify where optimisation opportunities still exist within the applicable functional requirements.

In particular, e-commerce and transport packaging are subject to requirements regarding the maximum permitted empty space and the prevention of overpackaging. Under the definitions of the PPWR, responsibility lies with the producer, who must be able to demonstrate for each packaging type that weight and volume have been reduced to the minimum necessary to maintain functionality. This includes, among other things, avoiding double walls, false bottoms and unnecessary material layers.



PPWR timeline - key milestones

The PPWR will be implemented in phases. The milestones below outline the key moments that will guide packaging design, material selection and market access:



These milestones represent the main focus areas within the PPWR for KIVO and many of its customers. Although the European Commission will publish further detailed measures and refinements in the coming years, this timeline already largely defines the scope and boundary conditions that packaging must meet.

Packaging that does not comply with the applicable PPWR requirements may not be placed on the European market. Timely assessment and preparation are therefore essential to safeguard continuity within the supply chain.

How does KIVO support

In most cases, under the definition of the PPWR, KIVO is regarded as a supplier — the party that provides packaging or packaging materials to a manufacturer. In this role, we are primarily obliged to provide all relevant technical information about our materials, such as composition, specific density, PCR content and the absence of hazardous substances (such as PFAS and heavy metals). This also includes the necessary declarations (such as PCR statements or PFAS-free declarations).

The party that subsequently completes the packaging or places the packaged product on the European market has, under the PPWR and Extended Producer Responsibility (EPR), among others, the following responsibilities:

1. Registering and reporting all packaging placed on the market, including: material type, weight, recycled content and recyclability;
2. Being able to demonstrate that the packaging complies with the PPWR requirements, such as bans on certain substances, minimum recycled content percentages and design-for-recycling criteria;
3. Maintaining detailed packaging records and submitting reports in a timely manner to the relevant EPR scheme operator (in the Netherlands, for example, Verpact).

Enforcement and responsibility under the PPWR

The PPWR is a European Regulation and is actively enforced by national supervisory authorities. Packaging that does not comply with the PPWR requirements may not (or may no longer) be placed on the European market. This may result in corrective measures, the modification or withdrawal of packaging and, depending on the Member State, financial penalties. Responsibility always lies with the party that places the packaged product on the market. As compliance is assessed at the level of the total packaging, timely alignment within the value chain is essential to prevent risks, delays and redesign under time pressure.



KIVO as a partner

The PPWR requires preparation, expertise and well-informed choices. While each of us has our own role, ensuring that packaging as a whole is PPWR-compliant is best achieved by working together across the value chain to optimise packaging wherever possible. In addition to the obligations we have as a supplier under the definition of the PPWR, KIVO considers it our mission to support you in striving for PPWR-compliant packaging.

This includes:

- analysing existing plastic film structures and identifying optimisation opportunities;
- improving the recyclability of plastic films in line with Design for Recycling (D4R) criteria;
- providing the technical input required to assess the full packaging against D4R criteria;
- adding or increasing PCR content in the plastic component of the packaging, where technically and legally feasible;
- sharing best practices regarding documentation, labelling and information provision;
- providing the necessary declarations and data sheets;
- jointly monitoring regulatory developments and translating them into concrete improvement actions.

In this way, KIVO contributes to plastic packaging solutions that align with the PPWR and are prepared for future requirements.



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