



GUIDE TO MORE SUSTAINABLE PACKAGING.

Current Legislation in a Nutshell.



Our goal is to support you in designing and producing the most sustainable packaging tailored to your needs.

Our recommendations are based on the recently adopted EU legislation PPWR, which outlines criteria and targets for more sustainable packaging. We also consider other relevant legislation, such as the EUDR, which focuses on deforestation, while monitoring current packaging trends.

There are several legislations which affect the packaging industry. We closely monitor their development and make sure that we always have the most up-to-date information. We are ready to advise you and ensure your product's compliance with these legislations.

In the future, the packaging industry will be affected mostly by PPWR and EUDR.

PPWR

Packaging and Packaging Waste Regulation aims to reduce packaging waste and supports the transition to circular economy in packaging industry. Its main goal is to increase recyclability of the packaging, promote usage of recycled content and to avoid excessive or disposable packaging.

The regulation comes into effect on January 1st, 2030 which may seem a long time from now but to comply with the rules it will require significant time and resources.

EUDR

European Deforestation Regulation's main purpose is to reduce global deforestation, forest degradation, and biodiversity loss. Compliance requires implementing due diligence reporting. This involves information collection proving that the packaging products and their wood sources are deforestation-free.

EUDR takes effect on December 30th, 2025, and our company closely monitors any updates to make sure we are EUDR compliant.

Checklist When Designing Your Packaging.



✓ Minimize packaging

Isn't my packaging excessive?

Packaging plays a crucial role in protecting goods and serving as an effective marketing tool. Design your packaging to use as little material as possible. PPWR requires the packaging to be reduced to necessary minimum to protect the product, and packaging that aims to increase the perceived size of the product will be forbidden. As of 2030, the void space ratio is set to 50% maximum.

✓ Reusable Packaging

Can I maximize the life span of my packaging?

Single-use materials are not favourable for sustainability. Can your packaging be reused again (and again) or serve to different purpose once its function is finished?

✓ Recycled content

Is recycled material suitable for my project?

Recycled material enables to reduce the need for harvesting raw materials. Therefore, we recommend you prefer materials partly or only from recycled inputs.

✓ Design for recycling

All packaging in the EU must be recyclable by 2030.

This means easily collected, sorted, and recycled. To ensure this, it is crucial that different types of materials are not mixed, are easily separable and can be effectively recycled at scale on the market you deliver to.

✓ Responsible/local source

Can the materials be sourced locally?

All the wood-based products come from controlled sources or from FSC certified suppliers and we follow EUDR law to prevent the risk of deforestation. To minimize the environmental impact of the international transport, it is recommended to prioritize local suppliers.

Tips for Specific Actions.



Evaluate the need of plastic film packaging

Plastic packaging often plays a crucial role in protecting your goods. However, one-way plastic films are not reckoned as a suitable sustainable model. Consider whether using plastic packaging such as shrink-wrap or overbag is necessary or contact us for their more sustainable alternative.



Vegetable – based printing inks

Usage of vegetable-based printing inks and solvent-based varnishes is considered to have lower environmental impact of the printed products.



Consider plastic fitment alternative

When there is a need for inner fitment in your product, there exist several alternatives to standard EVA foams or plastic trays. Together we can find the best solution to fit your needs.



Avoid using magnets, textile ribbons and other non-paper components

Mixing different materials together makes the recycling process more complicated. Avoid using non-paper components like magnets or ribbons and contact us for innovative construction ideas instead.

Paper or Plastic?

Easy question but not an easy answer. The preferable more sustainable option always depends on different factors such as local recycling infrastructure, end-of-life disposal methods, the specific environmental impacts prioritized (e.g., carbon emissions vs. pollution) etc.

	Paper	Plastics (fossil-based)
Source & Manufacturing	Renewable resource , can be sustainably sourced from managed forests.	Made from fossil, non-renewable resources .
	Unsustainable logging practices can lead to deforestation, habitat loss, and biodiversity reduction .	Extraction of fossil fuels and their processing have negative impact on the environment (water, soil, and air pollution).
Recyclability	Paper is widely recyclable . <i>EU: approx. 70% of paper¹ is recycled.</i> <i>US: approx. 68% of paper² is recycled</i>	Plastic recycling is complex and often inefficient, with many types of plastics being difficult to recycle. <i>EU: approx. 40% of plastic³ is recycled.</i> <i>US: approx. 5-6% of plastic⁴ is recycled.</i>
Disintegration in nature	Paper is biodegradable and can break down naturally in the environment in relatively short period of time.	Plastic takes hundreds of years to decompose, leading to long-term environmental pollution .
		Plastic breaks down into microplastics , which persist in the environment and can enter food chains, posing health risks.
Material properties	Suitable for dry goods with minimal moisture exposure.	Plastic is strong, flexible, and durable, often requiring less material to perform the same function as paper.
	Paper is less flexible than plastic, suitable rather for goods of symmetrical shape.	Plastic is lighter than paper and therefore more efficient for transport .

Source: 1) www.statista.com



2) www.statista.com



3) www.europarl.europa.eu



4) www.statista.com



Material Preference Guidelines.



Prefer paper over plastic when:

- ✓ The packaging needs to be easily recyclable.
- ✓ It is important to avoid plastic pollution.
- ✓ Biodegradability and compostability are prioritized.
- ✓ Packaging protects dry goods or products with minimal moisture exposure.

Prefer plastic over paper when:

- ✓ Durability and moisture resistance are critical.
- ✓ Lightweight packaging is needed to reduce transportation emissions.
- ✓ Reuse or refill options are available and practical.
- ✓ Clear visibility of the product is necessary.

Virgin vs. Recycled Paper.



We can offer wide range of paper materials, from pure virgin fibres to fully recycled paper. Our standard offer comes from so called “controlled resources” where it is guaranteed that the wood is not from illegal logging. To expand your environmental approach and also address social aspects, you might consider using FSC-certified paper or cardboard.

✓ Virgin paper

Virgin fibres are recommended for:

- complex construction packaging,
- physical properties like bending and bursting strength, tear resistance,
- consistent opacity (whiteness).

✓ Recycled paper

Recycled materials contribute to conserve natural resources and we recommend their usage. However, there are several limitations which need to be taken into consideration when opting for recycled paper. These include:

- visible impurities in recycled material,
- inconsistent whiteness of recycled paper leading to instable colour result,
- lower tear resistance during some post-pressing operations,
- dust raise during processing of some recycled materials,
- higher price in comparison to virgin paper.

✓ FSC certified paper/cardboard

Both virgin and recycled paper or board can be sourced with FSC certification. FSC is the strictest certification that ensures responsible management of the forest. Apart from environmental factors such as prevention of deforestation, focus on biodiversity and reforestation, it also covers social aspects such as safe working conditions in the supply chain and the rights of indigenous peoples. Feel free to contact us regarding possibility of FSC certified packaging.

We can offer the following options of certified material:

- **FSC MIX** paper that ensures the material contains at least 70% FSC Certified wood and/or strict post-consumer recycled material, and the rest of max. 30% may include, pre-consumer recycled material, reclaimed (industrial) recycled and/or “Controlled Wood”.
- **FSC RECYCLED** paper is made from 100% recycled materials (post-consumer waste and post-industrial waste). Using recycled material reduces the pressure to harvest more trees.

Plastic vs. Bioplastic.

From an environmental perspective, bioplastics have the potential to be a more sustainable alternative to conventional plastics, but only under certain conditions. Another option is so-called bio-attributed plastic*, produced using the mass-balance principle.



The positives of bioplastics are:

- no reliance on fossil fuels,
- lower carbon footprint production (under the condition that waste is used as feedstock rather than primarily produced crops),
- elimination of other negative environmental impacts such as oil spills, habitat destruction (again, under condition that crops production does not compete with food / feed production) etc.,
- biodegradable options that mitigate long-term pollution issues. Be aware that not all bioplastics are biodegradable, and some are only biodegradable under industrial conditions, not in home or natural environments.



Current weak points:

- **source of the material:** bioplastic can be more sustainable alternative only if 2nd or 3rd generation feedstock** is used. They should never be made from primarily sources such as food and should not lead to deforestation to gain new land for crop farming.
- **unsolved end – of – life:** the infrastructure to collect and efficiently compost / biodegrade is not widespread. This means that this material may end up with similar pollution like with fossil-based plastic e.g., by creating microplastics. (not valid for bio-attributed plastic)
- **insufficient labelling:** inability to distinguish between fossil-based plastic and bioplastic by consumers, potentially contaminating fossil-based plastic recycling streams. (not valid for bio-attributed plastic)

We recommend using recycled **fossil-based plastic** or **bio-attributed plastic**. Bio-based or partially bio-based plastic made from second- or third-generation feedstocks is also an option to avoid using fossil-based sources, but its end-of-life disposal can be problematic.

*The mass-balance principle in plastic packaging allows the mixing of sustainable and conventional materials while allocating a certified share of recycled or bio-based content to the final product. This enables a gradual shift toward sustainable packaging without requiring separate production lines, ensuring efficiency and traceability.

**Second- and third-generation feedstocks for bioplastics come from non-food sources, avoiding competition with food supplies.



The information in this document reflects our best knowledge to the date it was created. It was compiled using data from suppliers, consulting environmental experts, with our extensive experience in the packaging industry, and by considering current and pending EU legislation.

Please note that insights into the environmental impact of materials may evolve over time as new studies and analyses are conducted.

If you have any inputs or comments, we will be happy to hear from you.