

Brussels, 20 September 2022

Cepi views on the revision of the Packaging and Packaging Waste Directive.

The Confederation of European Paper Industries supports the intentions behind the revision of the current Packaging and Packaging Waste Directive (PPWD) and wishes to raise some crucial points related to the Commission's upcoming proposal.

Key policy asks

1. **Re-use and recycling are complementary solutions to achieve circularity. The principle of life-cycle thinking should be considered when regulating packaging.**
2. **Packaging must be recyclable and fit for purpose.**
 - a. **We do not support a negative list for fibre-based packaging components.**
 - b. **Definition of recyclable packaging must be complemented by material specific definitions.**
3. **Mandatory recycled content is not an appropriate tool in regulating well-functioning markets of secondary raw materials, such as the one of Paper for Recycling.**
4. **Renewable and recycled content should be equally considered in reaching circularity targets.**
5. **Separate collection is key to further increase recycling rates and uptake of recycled content.**

Paper-based packaging is made from sustainably sourced renewable and recyclable raw materials, has the highest recycling rate in Europe, namely 82% in 2019¹, and is easily recyclable ranking it a key contributor to the circular economy. Paper fibres can be recycled many times when they remain within the paper loop, not necessarily for the same application, while the fibre loop is replenished with virgin fibres, sourced from sustainably managed forests as defined by Forest Europe and certified by internationally recognized schemes such as PEFC and FSC. Paper fibres from packaging were used 5.5 times on average in 2019² and in specific product applications, research shows that the fibre itself allows recycling over 25 cycles³. The paper and board industry has the advantage of being able to efficiently recycle together different kinds of paper products (used packaging, used printed products, and even non-paper products) to produce a multitude of recycled products (packaging papers, printing and writing papers, tissue, and others). The PPWD revision has the potential to contribute to the EU's climate neutrality by 2050 goal. To achieve this, fossil resources will need to remain in the ground and the emissions from sourcing and manufacturing of all products must be reduced. Paper-based packaging is from renewable and recyclable sources and prevents product loss along the supply chain and the associated emissions.

1. **Re-use and recycling are complementary solutions to achieve circularity. The principle of life-cycle thinking should be considered when regulating packaging.**

In the circular economy turning waste into resources is recognized as a cornerstone of waste reduction and prevention. Waste prevention **can be achieved via both recycling and re-use. Both solutions display a crucial role in the transition towards a more circular economy, as recognized in the EU Taxonomy screening criteria.** Implemented as complementary measures, they can support the achievement of a circular and resource efficient packaging model. Their implementation should always be assessed with the support of a life cycle approach pointing

¹ Eurostat (2022). Recycling rate of packaging waste by type of packaging, EU 27. Available here: <https://ec.europa.eu/eurostat/databrowser/bookmark/d73804e4-e7d8-464d-9d5d-c9f1019d3fcf?lang=en>

² Calculation based on 2019 Eurostat recycling rate for paper-based packaging.

³ Eckhart, R. (2021). Recyclability of Cartonboard and Carton. Technical University of Graz. Available here : <https://www.procarton.com/wp-content/uploads/2022/01/25-Loops-Study-English-v3.pdf>

towards the most efficient environmental solution. As the revision of the PPWD also aims to ensure the waste hierarchy is implemented, we would like to highlight that the Waste Framework Directive dictates that when applying the waste hierarchy, measures that deliver the best overall environmental outcome should be considered⁴. This may require in specific cases that certain waste streams depart from the waste hierarchy, where this is justified by life cycle thinking on the overall impacts⁵. Furthermore, the WFD outlines that **both the environmental impact of products throughout their life cycle and the waste hierarchy need to be considered** when taking the appropriate measures to reduce the environmental impact of products and the generation of waste⁶.

Adopting a case by case approach and taking into consideration the current recycling and environmental performance of each material stream, should be preferred over setting horizontal targets. This is supported by the fact that, in order to identify the optimal solution for each situation, a life cycle approach must be adopted.

A recent LCA study conducted by Ramboll demonstrates that prioritising reuse is not always the most sustainable choice⁷. Compared to reusable systems used for the same purpose, fibre-based single-use packaging used in quick service restaurants in Europe achieves a superior environmental performance in several categories, such as climate change, fine particulate formation, fossil depletion, freshwater consumption, and terrestrial acidification⁸. The comparative analysis of studies with highly variable transportation distances, from as short as 8.5 km⁹ to thousands of kilometres in cases of intercontinental transportation¹⁰, highlighted the importance of transportation distance when evaluating overall environmental performance of packaging. In the case of longer transportation distance, single-use packaging solutions proved to have a significantly lower environmental impact compared to the reusable ones. Studies comparing transit packaging all showed that cardboard packaging weights less compared reusable packaging and other single-use packaging options¹¹. Meaning that the impact from the transportation of single use cardboard packaging is lower compared to the impact of reusable packaging.

To align with the overall objective of the revision of the PPWD, the focus should be kept on promoting sustainable packaging solutions over a “one size fits all” approach. As well-established paper recycling capacities are in place in all Member States, their contribution to circularity should be duly recognized. When looking at the Material Circularity Indicator, published by the Ellen MacArthur Foundation in 2019¹², it is noticeable that recycling is as important for the circularity of the product as its reuse. The paper industry in Europe has already developed a system where any fibre collected is recycled and each single fibre is allocated to its best use.

⁴ Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 4 (2).

⁵ Ibid.

⁶ Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 8 (2)

⁷ EPPA, Jan 2021, “Single-Use Vs. Multiple-Use: Using Science to Challenge the Misconceptions” Executive Summary of Ramboll LCA study.

⁸ For instance, the reusable system generated 2.8 times more CO₂-equivalent emissions, led to 3.4 times more fossil resource depletion, consumed 3.4 times more freshwater and generated 2.2 times more fine particulate matter compared to the fibre-based single-use system.

⁹ Raugel, M., Fullana-i-Palmer, P., Puig, R., & Torres, A. (2009). A comparative life cycle assessment of single use fibre drums versus reusable steel drums. *Packaging Technology and Science*, 22(8), 443–450. <https://doi.org/10.1002/pts.865>

¹⁰ Bernstad Saraiva, A., Pacheco, E. B. A. V., Gomes, G. M., Visconte, L. L. Y., Bernardo, C. A., Simões, C. L., & Soares, A. G. (2016). Comparative lifecycle assessment of mango packaging made from a polyethylene/natural fibre-composite and from cardboard material. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2016.08.135>

¹¹ Abejón, R., Bala, A., Vázquez-Rowe, I., Aldaco, R., & Fullana-i-Palmer, P. (2020). When plastic packaging should be preferred: Life cycle analysis of packages for fruit and vegetable distribution in the Spanish peninsular market. *Resources, Conservation and Recycling*, 155(December 2019), 104666. <https://doi.org/10.1016/j.resconrec.2019.104666>

Accorsi, R., Cascini, A., Cholette, S., Manzini, R., & Mora, C. (2014). Economic and environmental assessment of reusable plastic containers: A food catering supply chain case study. *International Journal of Production Economics*, 152, 88–101. <https://doi.org/10.1016/j.ijpe.2013.12.014>

Koskela, S., Dahlbo, H., Judl, J., Korhonen, M. R., & Niininen, M. (2014). Reusable plastic crate or recyclable cardboard box? A comparison of two delivery systems. *Journal of Cleaner Production*, 69, 83–90. <https://doi.org/10.1016/j.jclepro.2014.01.045>

¹² <https://www.ellenmacarthurfoundation.org/resources/apply/material-circularity-indicator>

2. Packaging must be recyclable and fit for purpose.

The paper and board sector is a frontrunner in contributing to the success of the circular economy and in setting high standards in terms of renewability and recyclability. This goes hand in hand with ensuring that our products are fit for purpose. The paper and board industry is actively taking measures in developing products that contribute to waste prevention by placing on the market packaging that is fit for purpose, and at the same time making sure that it is lightweight and with minimum void spaces. It is therefore crucial to **safeguard the primary function of packaging, which is to protect goods throughout the logistics chain as well as through their shelf lives, preserve the product it contains, maintain high standard of food hygiene and minimise food waste, and provide product information to consumers as required by legislation** (e.g. quality assurance, usage instructions, dosage, allergen information, and use-by dates).

The functional properties expected from the packaging to deliver its purpose require it to be in some cases coated, laminated or treated in other ways to meet the different barriers or functional requirements (e.g. grease and/or moisture resistance for food contact) which can be more challenging for standard recycling processes. Nevertheless, **when necessary to combine paper and board with other materials, the paper industry is committed to always apply this combination in a way that does not hamper recycling**, while ensuring that the expected role of packaging is fulfilled. In practise, paper-based packaging with such barriers or functional requirements (i.e. paper products with adhesives or coated with plastic) can still be recycled in some cases at low amounts in standard recycling mills if separation takes place at the paper recycling process, or in specialised recycling mills in EN 643 identified flows. In any case, collecting and sorting paper as a separate waste stream is an essential prerequisite supporting this process.

We do not support a negative list for fibre-based packaging components. Introducing the notion of avoidable/forbidden packaging and defining a negative list of packaging to be phased out, as suggested by Eunomia, would set a precedent in EU legislation, which would hinder market freedom, consumer choice, inhibit innovation drive to optimise packaging recyclability, and create discrimination. As technological innovation is accelerating, the development of enhanced technologies should not be hampered by restrictions on products and/or product characteristics. Including fibre-based packaging components in a negative list and banning the placement of certain composite fibre-based packaging solutions on the market, could lead to an increase in the uptake of mono-material fossil-based alternatives, which have a higher carbon footprint and lower recycling rates. Afterall, paper-based packaging is the most recycled packaging in Europe¹³.

Instead of the proposed negative list, which would lead to market exclusion, we suggest the use of such a list to determine which products shall be tested for recyclability. This could also work as a basis for a certification approach in the Design for Recycling (DfR) assessment process. Products containing components that may affect the recycling process should be assessed according to their recyclability. Paper-based packaging that does not have such components and is accepted in the general paper and board collection, should be therefore automatically exempted. Instead of focusing on creating a negative list of packaging components, other enabling conditions for recyclability should be prioritised, starting from the optimisation of waste management systems.

The paper and board industry support the adoption of existing standards and industry guidance documents to improve the recyclability of packaging. In the case of paper and board, the EN 643 (European List of Standard Grades of Paper and Board for Recycling) defines the composition and tolerance levels for non-paper components and unwanted materials. In addition, our industry has **developed Paper-Based Packaging Recyclability Guidelines¹⁴ and Circularity by Design Guidelines¹⁵ to support the value chain in the design of paper and board packaging that is recyclable.**

¹³ Eurostat (2022). Recycling rate of packaging waste by type of packaging, EU 27. Available here: <https://ec.europa.eu/eurostat/databrowser/bookmark/d73804e4-e7d8-464d-9d5d-c9f1019d3fcf?lang=en>

¹⁴ Cepi, CITPA, ACE, FEFCO (2019). Paper-Based Packaging Recyclability Guidelines. Available here: https://www.cepi.org/wp-content/uploads/2020/10/Cepi_recyclability-guidelines.pdf

¹⁵ 4evergreen. Circularity by Design Guidelines for Fibre-based packaging. Available here: <https://4evergreenforum.eu/4evergreen-releases-expert-based-guidelines-for-how-to-produce-packaging-designed-for-recycling/>

Definition of recyclable packaging must be complemented by material specific definitions:

Recyclable packaging should be: “that which can be effectively and efficiently collected, in line with article 3(11) and article 11(1) of the Waste Framework Directive by a minimum of 50% of EU consumers and with a goal to reach 90% within five years; sorted, meaning the majority of these packaging materials is directed into the defined and recognised waste streams for recycling processes; and is capable of being recycled at scale, with full transparency on the tonnages recycled and resulting output, and with guarantees that the secondary raw materials produced, in line with Article 6a of the PPWD (regulating the methodology to calculate the attainment of the targets) are of sufficient quality that they can find end markets to substitute for the use of virgin raw material. Recyclable packaging is that which does not contain elements or substances that prevent recycling.”

Furthermore, the **definition of recyclable packaging** must be **complemented by a material-specific and technology-neutral approach**. A definition should be focused on the design of packaging, recycling technologies and infrastructure, as well as product and material specificities need to be accounted for. For example, packaging that protects perishable food has different design requirements from other packaging, e.g. a milk carton requires a different design from a water bottle. The proposed qualitative definition of recyclable packaging does not sufficiently take into account the different material specificities, included in the proposed thresholds, and it could undermine the performance and product requirements of certain packaging applications (“At least 95% of the unit of packaging shall be recyclable ... the recyclability of the main components of the unit of packaging. “). Therefore, material specific definitions of recyclability should be provided in the revised PPWD or in secondary legislation. A material specific definition of recyclable paper-based packaging would read as follows: ***Recyclability of paper-based packaging is the individual suitability of a paper-based package for its factual reprocessing in the post-use phase into new paper and board. Factual reprocessing means that separate collection (where relevant and followed by sorting) into EN 643 grades and final recycling takes place at an industrial scale***¹⁶.

3. Mandatory recycled content is not an appropriate tool for regulating well-functioning secondary raw materials markets, such as the one of Paper for Recycling.

The introduction of mandatory recycled content requirements for certain product groups might be an appropriate tool to correct market failures in material sectors where there is no sufficient demand for secondary raw materials and the market is underperforming. However, this **should not distort already well-established and functioning secondary raw materials markets, such as the one for Paper for Recycling (PfR)**.

Mandatory recycled content requirements is not appropriate for paper and board packaging as the demand for PfR is already very high in Europe. In 2021 in Europe¹⁷ **52.4 million tonnes of PfR were used to make new paper and board products** out of 57.1 million collected¹⁸. The remaining volumes were imported by the paper industry of third countries as there is also a strong demand for this secondary raw material at global level. The high recycling rate of paper and board packaging (82%¹⁹) suggests a high uptake and quality of recycled content²⁰. Both fresh and recycled fibres are sustainable and are needed to satisfy customer needs or desired product specifications, This is particularly true in the case of direct food contact packaging solutions, as the hygiene and safety requirements for this specific type of packaging are very stringent and for instance in the case of paper and board packaging, not yet harmonized at EU level. Fresh fibres are a prerequisite for the existence of recycled fibres and are needed to keep the recycling loop ongoing, as material losses always occur in the recycling process. Fresh fibres are strong and can be recycled multiple times and a well-functioning recycling loop needs a continuous input of fresh fibres.

There is already a strong market demand for recycled content in paper and board packaging and the value chain remains committed to increase recycling rates even further. Nevertheless, **it should be left to supply and demand**

¹⁶ Cepi, CITPA, ACE, FEFCO (2019). Paper-Based Packaging Recyclability Guidelines. Available here: https://www.cepi.org/wp-content/uploads/2020/10/Cepi_recyclability-guidelines.pdf

¹⁷ EU27, UK, Norway and Switzerland)

¹⁸ Cepi. European Pulp & Paper Industry Key Statistics 2020.

¹⁹ Eurostat (2019). Recycling rate of packaging waste by type of packaging, EU27.

²⁰ [Cepi graphs on Paper recycling rates and utilisation of PfR.](#)

to regulate the market and decide in which product groups recycled content is most efficiently used. A mandatory recycled content target in a specific sub-sector would risk diminishing the availability of PfR for another sub-sector, where it would be more efficient to use. It would also increase transport related costs and emissions and the overall economic and environmental impact would be negative.

If mandatory recycled content targets on plastic are to be considered, these should focus on packaging primarily made of plastics (i.e. packaging containing more than 50% plastics). These products would also most likely be collected and sorted in the plastic fraction, recycled as plastics, hence contributing to reaching the material specific targets set in the PPWD.

Any requirements for recycled content in packaging should be informed by a measurement methodology that is material specific. Existing recycling targets for packaging waste are material specific, as are the calculation points for the measurement of waste for recycling. The measurement methodology for recycled content should follow the same rationale to ensure consistency with existing legislation²¹ and should be based on a robust impact assessment. However, any mandatory recycled content requirements should be well assessed, and the necessary framework conditions need to be in place before such a requirement is imposed. If the formal authorisation of recycling technologies with positive EFSA opinions are not fast tracked and current hurdles are not addressed urgently, the proposed targets for both scenarios for food contact materials will not be attainable.

4. Renewable and recycled content should be equally considered in reaching circularity targets.

Raw materials from renewable sources, such as those used for paper-based packaging, should be recognised as building blocks of the new circular economy. The complementarity and equality of recycled and renewable materials is also recognised in the Technical Screening Criteria as developed by the EU Platform on Sustainable Finance. The use of both renewable (deriving from renewable feedstock) and recycled material are assessed equally in their contribution to the sustainability criteria²².

Consequently, the Commission should differentiate between fossil-based primary raw materials and renewable raw materials but also recognise **the equal importance and contribution of both renewable and recycled materials**. To achieve climate neutrality by 2050, fossil resources will need to remain in the ground and the emissions from sourcing and manufacturing all products must be reduced. As such, we recommend that renewable and recycled materials are **equally weighted in reaching our circularity targets**. Wood fibres from sustainably managed forests can provide alternative solutions to products which are currently made with materials from sources that do not naturally replenish themselves. For this reason, it is important, whenever possible, **to incentivise 'renewable products' made of resources that can be sustainably managed rather than on finite resources**. Fibre-based solutions exist on the market already and are an immediate and readily available alternative to fossil-based products, that can replace of at least 25% of current fossil-based plastic packaging by 2025²³ without significant compromise in functionality. Moreover, innovative fibre-based materials and articles are continuously being developed and launched thus further increasing the potential for material substitution.

5. Separate collection is key to further increase recycling rate and the uptake of recycled content.

For the paper and board industry, the biggest barrier in further increasing recycling rates, product recyclability, and the valorisation and uptake of secondary raw materials is the lack of harmonised application of separate collection at source of paper and board. **Separate collection of paper and board is the most effective way to increase the circularity of the product and its recyclability potential by keeping the materials clean.**

²¹ Commission Implementing Decision (EU) 2019/665. Annex II.

²² Platform on Sustainable Finance: Technical Working Group. Part B Annex: Technical Screening Criteria. March 2022 (page 208). Available here: https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/220330-sustainable-finance-platform-finance-report-remaining-environmental-objectives-taxonomy-annex_en.pdf

²³ 25% of plastic packaging equals to 4.5 million tonnes of plastics consumption reduction; baseline of 2019. According to Material Economics study this can be done without significant compromises on functionality and with significant benefit for climate change mitigation. <https://materialeconomics.com/publications/sustainable-packaging>

For paper and board separate collection does not only mean separate from the residual waste, but also from other recyclables such as plastic, metal or glass. **Separate collection of paper ensures that fibres are not lost and return back in the paper loop, it enhances the quality of fibres** by avoiding soiling at source and in the sorting line, **ensures that materials end up in the appropriate recycling operation** (in the case of paper packaging with non-paper constituents in specialised recycling mills), **and this increases the valorisation of secondary raw materials** which in turn can support more efficient EPR schemes. Cepi has developed a guidance on how to implement separate collection of paper and board²⁴ and the Cepi vision on paper collection and sorting in Europe.²⁵

While the Cepi guidance does not challenge existing well-functioning systems, it is deemed necessary that an increased harmonisation of separate collection of paper and board should be implemented as a baseline measure before considering any other additional targets, measures, obligations to boost the circularity and recyclability of paper-based packaging²⁶.

Conclusion: Safeguarding the internal market for packaging

While it is crucial to further increase the circularity of packaging and support the contribution of packaging to a carbon neutral society, including by preventing waste of goods and packaging, it is important to conclude that the measures taken are consistent with each other and with the further completion of the Internal Market.

As this piece of EU legislation aims at addressing waste prevention, policy measures challenging its implementation should be avoided. Setting a high recyclability threshold that for some packaging applications could only be met by increasing the overall weight of recyclable materials in packaging is counter intuitive with the notion of waste prevention. Furthermore, proliferating legislation on reuse and waste prevention measures at the Member State level creates legal uncertainty to economic operators, hinders market investment, and consequently risks fragmentation of the Internal Market.

Cepi is the European association representing the paper industry. We offer a wide range of renewable and recyclable wood-based fibre solutions to EU citizens: from packaging to textile, hygiene and tissue products, printing and graphic papers as well as speciality papers, but also bio-chemicals for food and pharmaceuticals, bio-composites and bioenergy. We are a responsible industry: 85% of our raw materials are sourced from within the European Union and 78% of the wood comes from certified forests, 92% of the water we use is returned in good condition to the environment. We are the world champion in recycling at the rate of 71.4%. At the forefront of the decarbonisation and industrial transformation of our economy, we embrace digitalisation and bring 21 billion value addition to the European economy and €4.5 billion investments annually. Through its 18 national associations, Cepi gathers 495 companies operating 895 mills across Europe and directly employing more than 179,000 people.

²⁴ Cepi. Guidance on how to Implement Separate Collection (2020). Available here: https://www.cepi.org/wp-content/uploads/2020/10/19-2905_Industry-position-paper-on-separate-collection_A4_20190903.pdf

²⁵ Cepi. Cepi vision on paper collection and sorting in Europe (2020). Available here : <https://www.cepi.org/wp-content/uploads/2022/01/Cepi-vision-on-paper-collection-and-sorting.pdf>

²⁶ Harmonisation at EU-level of separate waste collection systems used locally in Member States should focus on situations where certain fractions are not yet collected separately from residual waste and/or other recyclables and avoid disrupting well-functioning systems.