

Eunomia Stakeholder Questionnaire on the PPWD Revision and Recyclability Requirements

Fibre Packaging Europe response

Fibre Packaging Europe appreciates the opportunity of providing feedback to Eunomia concerning the latest draft proposals (circulated in March 2022) on recyclability requirements considered as part of the impact assessment and revision of the Packaging and Packaging Waste Directive (PPWD). We welcome the upcoming revision of the PPWD as a crucial opportunity to increase the recycling rate of renewable packaging made from wood fibre and recycled paper and board, referred to as fibre-based packaging.

The proposals on packaging recyclability are a crucial part of the PPWD revision and should be drafted in coherence with the remainder of the provisions. Fibre Packaging Europe believes that a few key principles should guide the proposal on recyclability.

- Legislation should be outcome-based, that is to set enforceable, material specific and technology neutral targets and objectives on the basis of which industry can innovate.¹
- A definition should be focused on the design of packaging, recycling technologies and infrastructure, and product and material specificities need to be accounted for². 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 account for different material specificities, included in the proposed thresholds ("at least 95% of the unit of packaging shall be recyclable ... the recyclability of the main components of the unit of packaging").
- Therefore, the definition of recyclability for fibre-based packaging should read as follows: *"The individual suitability of a paper-based packaging for its factual reprocessing in the post-use phase into new paper and board; factual means that separate collection (where relevant and followed by sorting) into EN 643 grades and final recycling takes place on an industrial scale."*³

Fibre Packaging Europe believes that certain proposals tabled by Eunomia are contradictory to the above set of principles, in particular the negative list of packaging characteristics, and the 95% threshold suggested in the recyclability definition.

The proposed negative list, which includes two-sided plastic coating / laminates for paper and board products (hence some fibre-based composite packaging products):

- **Disregards** that beverage cartons and other fibre-based composite packaging are recyclable and recycled at scale. The consultant fully disregards the existing recycling stream. Paper and board packaging has the highest recycling rate of all packaging materials in the EU, at 84.2%.⁴

¹ FPE (2022). [Packaging and Packaging Waste Directive revision: Concrete measures to boost packaging recycling across Europe.](#)

² Ibid.

³ [Cepi, CITPA, ACE, FEFCO \(2019\). Paper-Based Packaging Recyclability Guidelines.](#)

⁴ [Recycling rate of packaging waste by type of packaging, EU27, Eurostat \(2018\)](#)

- **Disregards** the functionality of the packaging that would be listed and whether their fossil-based substitute would a) provide the same functionality and b) have a higher environmental impact. If fibre-based composite packaging are included in the proposed negative list (two-sided plastic coating/laminates paper/board packaging), substituting them by plastic or glass packaging would significantly increase the amount of GHG emissions emitted for the same functionality and for packaging that would have the same application and purpose.
- **Disregards** the fact that recyclability assessment and the DfR Guidelines *de facto* represent negative lists for packaging recyclability. But these Guidelines are technically sound (and not based on beliefs) and can be updated on a regular basis whereas lists are never up-to-date, hinder innovation and are therefore discriminatory and counter-productive.
- **Is liable to hinder sustainable innovation**, create an uneven playing field and further distort market competition. Industry needs clear and tangible targets and time to innovate and reach them. The impact assessment criteria backing up the proposed list have not been disclosed to stakeholders and are entirely absent from the proposals shared for a swift 3-day consultation.
- **Was developed without proper consultation** with the fibre-based packaging industry, which it aims to regulate; neither Fibre Packaging Europe nor its members were invited by the consultant to provide feedback to these proposed measures that impact our business.

Fibre Packaging Europe believes that the proposal tabled by Eunomia for a 95% threshold suggested in the recyclability definition is inappropriate. An actionable and forward-looking definition of recyclability applicable to all packaging must be complemented by a material-specific and technology-neutral approach. The definition of recyclability for fibre-based packaging should read as follows:

“The individual suitability of a paper-based packaging for its factual reprocessing in the post-use phase into new paper and board; factual means that separate collection (where relevant and followed by sorting) into EN 643 grades and final recycling takes place on an industrial scale.”

Definitions and core criteria must be clearly defined in the body of the Directive to avoid any ambiguity for stakeholders and ensure harmonised and effective implementation across the EU. The qualitative definition of recycling, which includes terms, such as “efficiently or effectively separated” or “recycled at scale” should be clearly defined in legislation.

We call for the same clarity to be ensured with respect to the quantitative functional unit threshold of 95%, as well as an appropriate clarification of why this threshold was chosen by Eunomia as part of the impact assessment. It is unclear what is meant by “functional unit of packaging”, a definition of this term is necessary for the clarity of the definition of recyclability.

The 95% threshold proposed in the definition is not suitable for several types of packaging as it would require increasing the thickness of the main material just to reach this threshold. This would lead to unintended environmental consequences (waste of material, creation of more waste) contradicting the key EU objective of minimising packaging waste. We recommend not to include a threshold in the definition of recyclable packaging but instead include any specific threshold in material- and format-specific Design-for-Recycling guidelines.

Packaging recyclability must be assessed on recognised Design-for-Recycling (DfR) guidelines built on multistakeholder input and specific to each material and packaging type.

The relevant guidelines might be different depending on the packaging material and/or format. An assessment of the different guidelines that already exist or are being developed is necessary to determine relevance per packaging material and/or format (for example, ACE will issue a DfR for beverage cartons in a matter of weeks).

DfR must be individually assessed, taking into account the packaging material composition, format design, manufacturing processes, and the most likely way of using, disposing, and collecting it. Easiness of sorting, absence of components that could hinder recycling streams as well as percentage of target material(s) for recycling should also be considered when assessing DfR.

- The 95% threshold is not based on any impact assessment or scientific data but is a rather arbitrary threshold that does not account for essential requirements such as composition and functionality, recyclability, market impact and associated increased environmental impact. It risks causing adverse effects by focusing on one criterion only. In the past, the sole focus on resource efficiency led to lighter but non-recyclable packaging. A holistic approach should be taken.
- The threshold is not coherent with the objective to ensure packaging recyclability while lowering the environmental impact of the packaging. Design-for-Recycling Guidelines provide the required technical assessment approach to ensure recyclability, while accounting for packaging composition, functionality and potential for recycling in existing streams and with existing technologies. Such guidelines should be (re-)defined and updated regularly. Banning products from the market based on an arbitrary criterion is not meaningful. Design-for-Recycling guidelines also enable industry to identify additional testing required to prove recyclability without banning from the start.
- The first step to recycling is separate collection from other recyclables to ensure the high quality of our secondary raw materials, and increased collection for fibre-based packaging application where collection rates are lower when compared to the overall paper and board fractions.

Please find our answers to the questionnaire below.

1. Definitions

1.1. Which overarching definition of recycled at scale is preferred? Why?

We do not consider an overarching definition is required – these requirements should be decided at Member State-level. That said, from the 3 options considered for the definition of “recycled at scale”, options 1 and 3 are superior, as option 2 would not necessarily represent the majority of EU market share or population. “Population” is a more relevant metric than “number of Member States”.

1.2. Would you add/remove any of the specific criteria for defining recycled at scale? Why?

We would remove the possibility for “EU-wide” determination (especially on reprocessing/recycling at scale) among the specific criteria proposed to define “recycled at scale”, given the possibility to determine this at regional or Member State-level (page 4).

Any definition of recycled at scale recyclability needs to look at separate collection at scale, where needed sorting at scale where needed, and reprocessed at scale. We would like to support Eunomia in further fine-tuning the definitions it proposed, with the following points:

- **On the collection at scale criteria:** 75% of EU Member State population should have access to collection and the ability to sort used packaging in an effective separate collection system. Waste packaging must be then sorted at scale where sorting is needed and reprocessed at scale. The assessment of collection at scale should be done on a Member State-level and according to a minimum EU-level harmonised reporting methodology. This will ensure that Member States all use the same methodology for the assessment and therefore that the reported figures are comparable.
- **On the sorting at scale criteria,** a minimum standardised waste quality standard (e.g., specific level of contamination by waste that can disrupt recycling) is essential.
- **On the sorting at scale criteria,** it is important that both existing and planned recycling streams are acknowledged under this definition. Packaging must be collected, sorted and recycled in an existing or planned collection, sorting and recycling stream. There should be a 5-year transition period for packaging that requires the planning of new recycling streams or infrastructure.
- **On sorting at scale criteria:** as acknowledged in the Eunomia proposal, it is vital that the assessment is not limited to looking at Member State-level capacities. This would inhibit the internal market as, in smaller Member States with lower volumes of recycled materials, it would be more efficient and workable to transport the material to neighbouring countries and create regional synergies. Therefore, it is important that the definitions allow assessment both at Member State-level and at regional level.
- **On reprocessing at scale criteria:** we do not deem necessary to set reprocessing capacity thresholds for sorted packaging waste materials, but to ensure the high-quality of our secondary raw materials entering our reprocessing operations and this can only be achieved with separate collection of paper and board (not only from residual waste but from other recyclables). If, however such targets/thresholds would be defined, it should be at the EU level and not at Member State level in order to safeguard the single market.
- **On reprocessed/recycled at scale,** the criteria “The packaging must be acceptable for recycling in an existing recycling stream” should be further defined. Fibre Packaging Europe recommends that for packaging to be qualified as acceptable in a recycling stream, it must be licensed by the relevant Producer Responsibility Organisation (PRO).

Although we do endorse the set criteria when defining “recycled at scale”, we believe that further clarification is needed when referring to “an existing recycling stream”. For paper and board, existing recycling streams are defined by the standard grades as in EN643.⁵

1.3. Would you add / remove any of the specific criteria for defining innovative packaging? Why?

We support the criteria on innovative packaging proposed by Eunomia. However, although the proposed approach attempts to provide clarity, it includes subjective, nonquantifiable, and indemonstrable criteria, such as “significant improvement”. Such ambiguities should be corrected to ensure a future-proof definition of “innovative packaging”. Further, we would add two new criteria:

- **Innovations that significantly reduces the environmental impact of the packaging.** This would ensure that the definition of recyclability encourages new packaging innovations in line with the European Green Deal objectives.

⁵ [European List of Standard Grades of Paper and Board for Recycling \(EN 643\) CEPI Guidance](#)

- **Innovations that improve the circularity of the packaging.** This means aligning the packaging with established Design-for-Recycling criteria. For example, for fibre-based packaging, the 4evergreen alliance has Circularity by Design Guidelines for Fibre-Based Packaging.⁶ These guidelines are currently being developed by 4evergreen and will be living documents to also cover innovations. The main point here is that to achieve efficient recycling, there cannot only be one mandated recycling process, but several dedicated recycling processes will be needed to increase the recycling rate of fibre-based packaging

2. Negative list

2.1. Do you agree with the need for a negative list of packaging features to be published? Why?

We do not agree, nor see the need for a negative list, as this would:

- Restrict consumer choice and create barriers to trade.
- Hinder innovation. The recyclability assessment is sufficient to help the market remove difficult to recycle materials.
- Result in an increase in the uptake of fossil-based alternatives with higher carbon footprint and lower recycling rates.

Almost all base paper leaving a paper mill to be formed into packaging is fully recyclable through standard paper recycling mill. Functional properties expected from the packaging to deliver its purpose require it to be in some cases coated, laminated or treated in other ways in order to meet the different barrier or functional requirements (e.g. for food contact) which can be more challenging for the recycling process.

In practice, paper- and board-based packaging with such barriers or functional requirements (i.e. paper and board products with adhesives or coated with plastic) can still be recycled in some cases if those barriers or coatings are used 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.

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. The paper and board recycling, manufacturing and converting industry has developed the Paper-Based Packaging Recyclability Guidelines informing on the implications of certain converting steps on the recyclability of used paper-based packaging in the collection, sorting and recycling processes.

2.2. Are there any specific packaging features you would add/remove from the example list provided?

All packaging formats should be removed from the proposed list. As stated above, we strongly disagree with the creation of a negative list for packaging. A negative list would not be effective.

The negative list as presented by Eunomia is not evidence-based. For example, Eunomia proposed adding two-sided coated paper and board on the negative list. There is no basis for this as it can be recycled at scale in specialised recycling mills with enhanced processes. **It is essential that “two-sided plastic coating / laminates” and paper-based packaging with plastic windows and other components that cannot be separated are removed from the list.** These latter appear to specifically refer to

⁶ [Guidelines and protocol - 4evergreen \(4evergreenforum.eu\)](https://www.4evergreenforum.eu/guidelines-and-protocol)

beverage cartons and other fibre-based composite packaging, which, due to their high recyclability at product level and at scale,⁷ should be removed from the list.

Furthermore, DfR guidelines themselves represent a negative list. They are developed together with industry experts, are re-assessed periodically in light of technological developments. These should be sufficient for the PPWD to enable a timely, science-based and periodically reviewed assessment of recyclable packaging. In addition, DfR guidelines⁸ have already been developed for our industry (and continue to be developed, such as the DfR Guidelines for beverage cartons that are soon to be released) which will also create product specific guidelines that will in turn increase recycling.

The proposed negative list refers to packaging materials, components or features and suggests that they are avoided in paper-based packaging with the justification that they are known to hamper recyclability and/or are not recyclable anywhere in the EU. However, the fibre-based (paper and board) packaging applications/constituents/components mentioned under this list are recyclable and can be recycled in the EU. Therefore, they should not be included in a negative list for packaging.

- **Fibre-based packaging with plastic windows and other components that cannot be separated:** Non-paper constituents which form part of the paper packaging can be removed through the initial standard paper reprocessing system i.e. tape, adhesive, labels, tags, staples, windows etc. and do not hinder recycling. Separation of these constituents can be effectively achieved in the initial stages of a standard paper reprocessing system. Even in the case where plastic windows cannot be separated manually, they will be removed in the recycling mills.
- **Silicone/wax coatings;** To meet functionalities such as water-resistance or greaseproof, there are special papers such as wet strength, waxed or wax coated papers, siliconised papers, or papers treated with fluorochemicals. To improve recyclability, attention should be paid to the amounts of substances used that make these papers greaseproof or water-resistant. The majority of paper coatings applied to base paper to achieve general packaging performance criteria do not hinder the recyclability of paper packaging. Where the paper coatings applied are designed to provide a strong water, gas or other barrier (and particularly where they are applied to both sides of the base paper) or are surface treated with non-recyclable paper coatings (such as silicone, heat-seal or cold-seal for other purposes) then this can act as a hindrance to standard paper reprocessing systems, but can still be fully recycled in a specialised recycling mill if collected as a separate paper recycling stream and graded as such, according to EN643.⁹
- **Insoluble adhesives & hotmelt adhesives with softening >450:** non-paper constituents, including adhesives, can be removed through the initial standard paper reprocessing system and do not hinder recycling. Separation of these constituents can be effectively achieved in the initial stages of a standard paper reprocessing system. Moreover, the proposed threshold of >450 lacks a unit of measurement. According to the industry's Paper-Based Packaging Recyclability Guidelines,¹⁰ manufacturers prefer adhesives that can be applied in a way that they can be easily removed from the pulp at typical temperatures in the packaging recycling mill environment. For instance, for graphic paper products, the EPRC Scorecard for the Removability of Adhesive Applications¹¹ recommends adhesives with a softening point of more than 68°C Celsius. The recently released 4evergreen Alliance Circularity-by-Design

⁷ 51% recycling rate for beverage cartons in the EU28 in 2019 – [Alliance for Beverage Cartons and the Environment press release](#)

⁸ [4evergreen Circularity-by-Design Guidelines](#)

⁹ [European List of Standard Grades of Paper and Board for Recycling \(EN 643\) CEPI Guidance](#)

¹⁰ [Cepi, CITPA, ACE, FEFCO \(2019\). Paper-Based Packaging Recyclability Guidelines](#)

¹¹ [EPRC Scorecard removability_of_adhesive.pdf \(paperforrecycling.eu\)](#)

Guidelines for Fibre-Based Packaging¹² also concluded that adhesive lines with a softening point higher than 68°C are considered acceptable for standard recycling.

- **Two-sided plastic coating/laminates:** these are fully recyclable in a specialised recycling mill if collected as a separate paper recycling stream and graded as such, according to EN643. It should not be on the negatives list. There are many examples where these products are being recycled 'at scale' in Europe today and where there is an economic demand for recycled fibres.
- **Decorative elements using PP/PET metallised laminates, PET-metallised film;** when a base paper is laminated to a non-paper material (such as plastic or aluminium) this can reduce the full recyclability of the laminated paper in standard paper reprocessing systems, nevertheless it can still be fully recycled in a specialised recycling mill if collected as a separate paper recycling stream and graded as such, according to EN643. Moreover, there needs to be careful consideration of what is a 'decorative' or 'functional' element with the use of PP/PET metallised laminates, PET-metallised film – this would ensure a functional use of these laminates in order for the packaging to fulfil its functional requirement.

3. DfR Assessment Process

3.1. Does the two-staged approach ensure that recyclability will be assessed in practice, not just in theory?

We do not agree with a two-staged approach as proposed by Eunomia to assess recyclability. There are many implementation and technical aspects that need to be further developed and adjusted in order to make this a viable solution in practice.

The proposed **Design-for-Recycling (DfR) rating needs to be a value chain approach**. Indeed, the DfR guidelines are built on multistakeholder input and specific to each material and packaging type. DfR must be assessed individually and take into account several variables, such as material composition, format design, and manufacturing processes. Moreover, the 70% target for 2030 is unclear, even if it is based on the new calculation methodology adopted at the EU level in 2019, which is clearly expected to see packaging rates dropping across all materials. If the DfR rating is properly implemented and takes into account our comments, we would support a one-step Design for Recycling approach.

When it comes to collection and sorting, there are national and regional differences that would make the two-staged approach difficult to implement. The focus should not just be on recycling but on local behaviours too.

When it comes to the certification, industry has already taken up on both existing voluntary measures and certification schemes on assessing recyclability. As packaging material producers, we often already verify that our packaging material can technically be recycled through relevant recyclability tests. It is important that there are material-specific harmonised test and evaluation protocols and Design-for-Recycling criteria across Europe. However, these tests only evaluate the recyclability and do not cover the enabling processes of aspects of collection and sorting. Therefore, for the Eunomia proposal to be workable, more third-party certification bodies would need to be set up.

Furthermore, the two-staged approach proposed by Eunomia does not take into account costs, reporting requirements, need for workforce nor newly developing technologies and materials. It

¹² [4evergreen Circularity-by-Design Guidelines](#)

would simply add an administrative burden and avoidable costs. Finally, the 3-year certification cycle could become very expensive for all companies, but especially for SMEs.

3.2. Will the suggested exemptions reduce the administrative burden associated with the assessment?

We agree that the suggested exemptions reduce the administrative burden associated with the assessment, but it needs to be clarified that packaging which does not contain elements impeding recycling should be exempted. Assessments should be limited to products that represent impediments to recycling.

Furthermore, the certification must build on Design-for-Recycling guidelines¹³ and assessments developed for the European market as a whole to avoid assessments that are only valid in certain national markets.

3.3. Do you have any suggestions for improving the implementation of this measure?

Furthermore, we would advise that the recyclability assessment (i.e. technical feasibility) should not be carried out by brands alone, but by the industry involved in the packaging value chain. The recyclability assessment can be done for example via a third party in collaboration with the packaging value chain who developed the guidelines for recyclability or by involving the expertise of PROs.

Further clarity is needed when defining 'type of packaging' – after all, recycling rate targets should not be set per packaging type but per packaging *material* as per existing EU legislation.¹⁴

Finally, the 3-year certification cycle is too short. If a packaging is recyclable, it should be considered as such unless there are new technological innovations that are applied to it.

Fibre Packaging Europe looks forward to working with policymakers to ensure that stakeholder concerns and scientific evidence are taken into consideration before the legislative proposal is released. We remain available to provide additional information, expertise and data, and would appreciate the opportunity to continue the dialogue with policymakers on this crucial topic.

About Fibre Packaging Europe

Fibre Packaging Europe is an informal coalition of seven trade associations representing industries involved in forestry, pulp, paper, board and carton production and recycling from across Europe. Our joint mission is to provide renewable, circular and sustainable fibre-based packaging solutions to European citizens to achieve the European Green Deal objectives. Together, we represent around 1500 companies and over 2200 manufacturing plants, we employ more than 365.000 people across Europe and our annual turnover is around EUR 120 billion.

For more information, please contact papercoalition@apcworldwide.com.

¹³ [Cepi, CITPA, ACE, FEFCO \(2019\). Paper-Based Packaging Recyclability Guidelines](#)

¹⁴ [Commission Implementing Decision \(EU\) 2019/665, Annex II](#)