



ACE'S CONTRIBUTION TO THE REVISION OF THE PACKAGING AND PACKAGING WASTE DIRECTIVE

Introduction

ACE – The Alliance for Beverage Cartons and the Environment – provides a European platform for beverage carton manufacturers and their paperboard suppliers to benchmark and profile beverage cartons as a safe, circular and sustainable packaging solution with low carbon benefits. Thanks to their composition, beverage cartons allow to safely pack, transport, shelve and use sensitive products such as milk and juice.

Today, beverage cartons today are mainly made from renewable materials (on average 75% fibres), are recycled at scale and have the lowest carbon footprint compared to alternative packaging in their core category of milk and juice as demonstrated by Life Cycle Analysis (LCAs)¹. ACE members are actively supporting increased collection and recycling of beverage cartons. Significant investments to recycle the fibre and the non-fibre components of beverage cartons (around 200 M euros) will support the industry's ambition to reach a 70% recycling rate by 2030.

ACE supports the European Commission's vision that by 2030 all packaging should be recyclable and/or reusable. In our view, a holistic approach is needed to ensure that circularity and climate change mitigation are mutually supportive, while remaining technology and material neutral. Hence we support in addition, all packaging should be sustainably sourced and deliver low carbon benefits by 2030.

The packaging sector will innovate and act towards that vision, but it needs the enabling conditions to support increased recycling, including the infrastructure and regulatory certainty. We are concerned that a hierarchical approach to reuse and recycling, ignores the current reality and life cycle thinking as mandated by the Waste Framework Directive². This could potentially lead to unintended consequences e.g., a higher environmental footprint.

ACE would like to share its views on some key aspects of the review of the Packaging and Packaging Waste Directive (PPWD), including wording proposals.

¹ <https://www.beveragecarton.eu/wp-content/uploads/2021/03/20-011-Circular-Analytics-ACE-Full-report-2021-03-11.pdf>

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



EXECUTIVE SUMMARY

Collection

- **The beverage carton industry invests in increased capacity to recycle the fibre and non-fibre components of beverage cartons.**
- **Without collection and sorting, packaging designed for recycling will not have access to the appropriate recycling process and hence cannot be recycled.**
- **ACE calls for a 90% collection target for fibre-based packaging that does not currently reach a 70% collection rate. Collection and sorting is a pre-requisite for recyclable packaging like beverage cartons to enter a recycling stream and process.**

Definition of recyclability

- **The definition of recyclability should be based on design for recycling guidelines that are specific to different packaging formats.**
- **The definition of recyclability shall be complemented by material specific definitions to be defined through secondary legislation. There is a material specific definition of recyclability for fibre-based packaging provided on page 5.**

Reuse

- **Reusable packaging must be recyclable and only implemented where beneficial for the environment and safe for the consumers.**
- **Where appropriate, reuse targets must be assessed with the support of a comparative life cycle system-based approach and allow opting for recyclable solution with a better environmental outcome.**
- **Measures must not compromise food system resilience, hygiene and integrity as well as the health and the safety of consumers.**

Recycled content

- **Recycled content requirements are not to be set on packaging formats, but on materials for which the secondary raw materials market is underperforming.**
- **Any mandatory recycled content target for plastic packaging should recognise both recycled and biobased content.**



Collection

Collection is the precondition to recycling. **Without collection and sorting packaging designed for recycling will not have access to the appropriate recycling process and hence will not be recycled.**

Beverage cartons are recyclable and recycled at scale as highlighted in a previous Eunomia report³. On average around 900.000 tons of beverage cartons are put on the market annually in Europe. In 2019, around 450,000 tons of beverage cartons (51%)⁴ were recycled, with some countries, like Belgium or Germany, officially recording recycling rates over 70%.

51% is a good basis but we need to improve. In the ACE 2030 Roadmap, our industry commits to reach a 90% collection rate and at least a 70% recycling rate by 2030, verified by third parties. The beverage carton industry has invested significantly across Europe to support collection and recycling of used beverage cartons and will continue to do so (some 200 M euros investments are planned).

However, for these investments to be secured and for the recycling rate to significantly increase, we need an enabling EU policy framework, including a mandatory collection for recycling target for packaging that is not collected at a sufficiently high rate - this is the case in many Member States for beverage cartons. The separate collection requirement provided in the 2008 WFD⁵ and the 2018 PPWD does not provide any performance target and should therefore be supported by a mandatory target.

ACE calls for a 90% collection target for used beverage cartons as highlighted by the 2022 Roland Berger study, which would present many benefits including⁶:

- Significant savings in GHG emissions contributing to the EU climate ambitions.
- A large contribution to the paper recycling rate and to Member State targets contributing to the EU circularity ambitions.
- A level playing field for all packaging (some packaging formats currently benefit from a collection target. This is discriminatory)
- Traceability of recycling of beverage cartons leading to more credibility.
- A harmonised approach across the EU. Some Member States support a collection target for used beverage cartons but would prefer an EU approach.
- An incentive to stimulate investments in sorting and recycling.

ACE supports the below wording proposed by Fibre Packaging Europe. It is fully consistent with the ACE objectives and extends the scope to all packaging that needs an enabling policy framework to reach a higher collection rate.

³ Eunomia report for the European Commission "Effectiveness of the essential requirements for packaging and packaging waste and proposals for reinforcement" that "beverage cartons are recycled at scale across the EU, however, so based upon this consideration they should be categorized as recyclable packaging".

⁴ Using the existing calculation method according to which recycling is accounted to the predominant material, in ACE's case, paper. (EC Decision 2005/270).

⁵ Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 4 (2)

⁶ Roland Berger study, 2022 - <https://www.squareandcircular.eu/>



Wording proposal

Member States shall take the necessary measures to implement mandatory collection targets for recycling of specific fibre-based packaging in the following categories:

- (a) by 2025, packaging not collected at a rate of 70% by existing collection systems as specified in the annex to this directive shall be collected to a level equal to 75 % of such packaging placed on the market in a given year by weight;*
- (b) by 2030, packaging not collected at a rate of 75% by existing collection systems as specified in the annex of this directive shall be collected to a level equal to 90 % of such packaging placed on the market in a given year by weight.*
- (c) By 2030, packaging used in HORECA shall be collected at the consumption point to a level equal to 90%.*

Member States should look to a range of measures to fulfil the target, including economic measures and investment in collection, sorting and recycling, designing fit for purpose, reducing overpackaging and consideration of other measures such as DRS and mandatory take back.

Deposit Return Schemes (DRS)

DRS is a valuable system in countries where the existing selective collection schemes are unable to deliver high collection rates. In countries with well-functioning collection and recycling systems, i.e. they can demonstrate that they reach a 70% collection rate of beverage cartons latest by 2025 so as to reach a 90% collection rate by 2030, it would not be meaningful to establish a DRS.

A mandatory collection target for packaging that does not reach a sufficiently high collection rate such as beverage cartons will set the performance target⁷ to be reached either through EPR or DRS. In addition, our industry asks that beverage cartons be included in the mandatory minimum scope for DRS of the upcoming Packaging and Packaging Waste legislation.

In our understanding it means:

- Where Member States set up a DRS, beverage cartons will be in scope.
- Member States that can demonstrate that they reach a 70% collection rate of beverage cartons latest by 2025 so as to reach a 90% collection rate by 2030 should not be mandated to set up a DRS.
- DRS should focus on formats regardless of the content. Excluding dairy products from DRS would confuse consumers as to how and where to recycle beverage cartons. There are no technical limitations to including dairy in DRS as is demonstrated in some countries. Beverage cartons are collected with PET and cans in many countries in the LWP (light weight packaging) stream and that does not hamper recycling.

Minimum requirements for DRS

- DRS should be industry-owned (by the obligated industries), not-for-profit, based on the net cost principle and centralised systems.

⁷ The 2018 PPWD mandates the separate collection of packages, but it does not set any efficiency target to Member States. Hence, as done for PET (SUPD) a performance target (efficiency of the scheme) should be set. It can be reached either through EPR or DRS schemes.



- DRS fees should vary depending on the size of the packaging but should be high enough to provide an incentive to return the packaging.
- A transition period should be foreseen where DRS is already in place and needs to be retrofitted to include other packaging formats.
- DRS should be set up in retail establishments, but it should not be limited to retailers. There should be an option for dedicated collection points.⁸

Definition of recyclability

The aim of the upcoming Packaging and Packaging Waste legislation is to ensure that all packaging is recyclable and/or reusable by 2030.

To reach this objective, we need an actionable and forward-looking definition of recyclability that fosters the improvement of the existing recycling schemes and is **technology and material neutral**, based on transparent and reliable facts, while not hindering innovation.

The recyclability of packaging must be defined for each packaging material or format considering technical requirements for the given functionality. For example, packaging that protects perishable food has different design requirements to other packaging, e.g. a milk carton requires a different design/composition than a water bottle.

Legislation should avoid focusing on one criterion only, as it could lead to unintended consequences and adverse effects as in the past the sole focus on resource efficiency led to lighter but non-recyclable packaging. There should be a holistic approach. Criteria such as composition and functionality, recyclability, impact on the market and associated increased environmental impact need to be taken into account. **Legislation should also incentivise low carbon packaging** as circularity and climate mitigation must be mutually supportive objectives.

Design for recycling Guidelines (DfR) provide the required technical guidance to ensure recyclability through taking account of each packaging composition, functionality and potential for recycling in existing streams and with existing technologies. Such guidelines should be defined with stakeholders and updated regularly. ACE's Design for Recycling Guideline⁹ will provide producers of beverage cartons with technical guidance to:

- Evaluate the recyclability of beverage cartons on the market today
- Specifically focus on how the recyclability of beverage cartons can be optimized.

A 95% threshold would de facto ban many packaging formats from the market. It is not coherent with the objective to ensure packaging recyclability while lowering the environmental impact of the packaging as explained in the joint packaging industry position developed by EUROPEN published in June 2022.

Similarly, a negative list would disregard the functionality of the packaging impacted and whether their substitute would a) provide the same functionality and b) have a higher environmental impact. It would also disregard the fact that recyclability assessment and the DfR Guidelines *de facto* represent negative lists for packaging recyclability. It could hinder sustainable innovation, create an uneven playing field and further distort market competition. Different recycling plants have different requirements, which is why DfR guidelines need to be tailored for different packaging. Updating such lists is a real challenge that can create a discrepancy with innovation on the ground. Any negative list should be evidence based so that no packaging that is recyclable and is recycled is listed.

Beverage cartons are recyclable and recycled at scale (ca. 50% of beverage cartons were recycled in 2019) and new investments are planned. The beverage carton industry invested about 200

⁸ Especially in rural areas, the number of retailers may not be sufficient to collect all packaging covered.

⁹ Publication in Fall 2022 – www.beveragecarton.eu



M EUR in recycling and is planning to invest some 120 M additional mainly into the recycling of plastic and aluminium barrier materials in beverage cartons¹⁰.

Wording proposal

Recyclable packaging is that which can be effectively and efficiently collected, in line with article 3 (11) and article 11 (1) of the WFD, – by a minimum of 50% of the EU population and with a goal to reach 90% within 5 years –, sorted – meaning the majority of these packaging is oriented 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 outlets, and with guarantees that the recycled materials produced, in line with Article 6a of the PPWD, are of sufficient quality that they can find end markets to substitute for the use of raw material, and based on the updated guidelines of the European technical committee representing the entire value chain mandated by the European Commission. Recyclable packaging is that which does not contain elements or substances that either prevent recycling or are detrimental to the recycling process.

The above shall be complemented by material specific definitions to be defined by secondary legislation. A material specific definition of recyclability for fibre-based packaging should read as follows:

"The individual suitability of a fibre-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."

Reuse

Setting mandatory reuse targets for packaging is not necessarily the most environmentally beneficial option, as demonstrated through different recent studies¹¹. It can present technical, hygiene and logistical challenges for the economy and additional costs due to the extra logistic and sanitisation needed. Recyclable single-use solutions such as fibre-based packaging sourced from renewable materials are often more environmentally friendly than reusable alternatives. The European Commission should consider solutions that have the most positive impact on the environment considering the whole supply chain and life cycle.

Reusable packaging should be recyclable and only implemented where most beneficial for the environment and safe for the consumers.

Should the EU or its Member States consider introducing reuse targets, these should always be specific, proportionate and based on a sound scientific and comparative life cycle assessment of the impact of packaging, the packaged product and its system, accompanied by an evaluation of the economic and technological implications associated with such

¹⁰ Roland Berger study, 2022 - <https://www.squareandcircular.eu/>

¹¹ Ramboll Comparative LCA on Single-Use and Multiple Use dishes systems for in-store consumption in QSR
<https://zerowasteurope.eu/library/reusable-vs-single-use-packaging-a-review-of-environmental-impact/>
Supporting evidence – Environmental performance of beverage cartons, Circular Analytics,
<https://www.beveragecarton.eu/news-and-resource-centre/publications/>



solutions. Measures should be clearly defined and focus on achievable goals for packaging that can be reused in practice.

In other words, reusable packaging shall be required in a system that clearly delivers a better environmental outcome in real life conditions compared to its single-use alternative. Paper and board packaging solutions are a scientifically proven sustainable alternative to many reusable and single-use fossil-based products. It is essential that their place in the circular economy – as low-carbon recyclable solutions that deliver a better environmental outcome – is recognised and that EU legislation encourages their development.

As the revision of the PPWD aims to ensure that *"all packaging on the EU market is reusable or recyclable in an economically viable way by 2030"*, we wish to stress that fibre-based packaging has a high recycling rate (82%) and produces high quality recycled products; it would not be sustainable or productive to impose restrictive and unrealistic reuse targets on packaging made of paper and board.

Moreover, to ensure that 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 shall be taken¹². This *"may require specific waste stream departing from the waste hierarchy, where this is justified by life cycle thinking"*¹³. **"... technical feasibility and economic viability, protection of resources, as well as human health, economic and social impacts should also be taken into account"**¹⁴.

Beverage cartons are low-carbon, recyclable and made from sustainably sourced materials. Studies confirmed that single-use beverage cartons outperform reusable solutions in the juice and milk category on environmental criteria: 1 - The carbon footprint of a single-use beverage carton is lower than that of a reusable glass bottle when the transport distance is greater than 100km (Reusable VS single-use packaging: a review of environmental impact, Zero Waste Europe, <https://zerowasteurope.eu/library/reusable-vs-single-use-packaging-a-review-of-environmental-impact/>). Compared to reusable plastic bottles, the Global Warming Potential (GWP, given in gram CO₂ equivalents per litre) is higher than that for cardboard as of 1200 km transport distance. A truck can be loaded with 25% to 41% more milk using beverage cartons compared to glass bottles (Supporting evidence – Environmental performance of beverage cartons, Circular Analytics, <https://www.beveragecarton.eu/news-and-resource-centre/publications/>).

Wording proposal

Where appropriate, reuse targets must be related to their environmental outcome and comply with the Waste Framework Directive 2008/98/EC stating that waste treatment is not limited to mere waste volume reduction but needs also achieving *« the best overall environmental outcome »* (Article 4,§2).

When implementing the waste hierarchy and setting reuse targets, Member States shall provide the ability to opt for an alternative recyclable solution that demonstrates a better environmental outcome and allow to *"depart from the waste hierarchy where this is justified by life-cycle thinking"* (WD 2008/98/EC Article 4, §2).

All reusable packaging that is placed on the market must be recyclable and effectively recycled at the end of its life.

Measures shall not compromise food hygiene and integrity as well as the health and the safety of consumers.

¹² Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 4 (2).

¹³ Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 8 (2)

¹⁴ Directive 2008/98/EC of the European Parliament and of the Council on waste. Article 4 (2).



Recycled content

ACE strongly supports that recycled content requirements are not to be set on packaging formats, but on materials for which the market for secondary raw materials is underperforming. Fibres are already recycled through a well-functioning recycling value chain and hence it would be counter-productive and unnecessary to set mandatory recycled content target for fibres, as an example.

If needed, the recycled plastic content target should be set using as 100% base the plastic weight content of the package. Any mandatory recycled content requirement should be well assessed, and the needed framework conditions need to be in place before such a requirement is imposed. In the case of beverage cartons that are in contact with food and beverages, EFSA approvals are needed before any recycled plastic can be used. Recycled plastic content also needs to be available in sufficient quantity and quality at competitive prices with primary materials.

The objective of the targets should be to ensure that the material is recycled and finds a new life in a new product – not to mandate the use of the recycled material in the same product as this may deprive other applications from the recycled material and may not be the most appropriate application (e.g., for food contact), nor environmentally beneficial.

For contact sensitive packages, the 2030 target should not exceed the beverage bottle target from SUPD (30% recycled content) as this would set a competitive disadvantage for food packaging.

ACE fully supports Eunomia's proposal of a joint bio-based recycled content target. The beverage carton industry has committed to only produce beverage cartons from renewable and/or recycled material by 2030 (2030 Beverage Carton Industry Roadmap Commitments). This is particularly important for food contact materials and articles for which recycled polymers are not yet widely available on the EU market. Biobased plastics have a lower GHG footprint as their equivalent fossil-fuel based ones, while being recyclable in the same recycling streams. This allows packaging producers to actively contribute to the EU ambitions on climate neutrality and strategic autonomy on fossil resources; it is also a flexible approach as the market for recycled polymers is still in the start-up phase.

ABOUT ACE

ACE provides a European platform for beverage carton manufacturers and their paperboard suppliers to benchmark and profile cartons as renewable, recyclable and low carbon packaging solutions. Engaging with stakeholders and partners seeking high environmental stewardship, it contributes expertise to EU policy, legislation and standard setting.

ACE members include beverage carton producers Tetra Pak, SIG Combibloc and Elopak, who develop, manufacture and market systems for the packaging and distribution of food and produce packaging material at 20 plants in Europe. Most of the paperboard used by ACE members in beverage cartons in Europe is produced by Stora Enso in Skoghall (Sweden) and Imatra (Finland) and BillerudKorsnäs in Gävle and Frövi (Sweden), who are also members of ACE.

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