

# EPPA's response to Zero Waste Europe, Eunomia, Reloop and Tomra in the publication: **Assessing Climate Impact: Reusable Systems vs. Single-use Takeaway Packaging**

## The Packaging and Packaging Waste Regulation: The need for science, transparency and evidence

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We are deeply concerned about the direction of the debate on different studies relating to the proposals contained in the Packaging and Packaging Waste Regulation (PPWR). In particular, how Life Cycle Assessment (LCA) studies such as those undertaken by Ramboll, which are conducted to international standards, comparing paper-based packaging with reusable alternatives for in-store consumption (Jan 2021) and takeaway (Nov 2022) in Quick Service Restaurants within the EU are compared with non LCA studies such as “Assessing Climate Impact: Reusable Systems vs. Single-use Takeaway Packaging” produced by Eunomia for reuse promoters like Tomra, Zero Waste Europe and Reloop.

Firstly, we want to highlight that the Ramboll LCAs **are conducted strictly to ISO 14040/14044 standards and are subject to rigorous third-party reviews**, thus providing a grounded, factual basis for decision-making. Both Ramboll LCAs demonstrate significant benefits for paper-based packaging over rigid plastic reusable alternatives in both takeaway and dine-in settings, notably in CO<sub>2</sub> emissions and freshwater use, mainly due to the resource-intensive impacts of washing/drying required to meet hygiene standards and transportation.

These LCAs clearly stand out in terms of robustness and reliability since they are the **only ones combining a system approach (not a simplistic product-to-product comparison), representative assumptions and primary data for the environmental “hotspots” along with extensive sensitivity analysis** (12 for the in-store LCA, 9 for the takeaway LCA). They were also subject to third-party reviews.

At the same time, it is deeply concerning that Eunomia – the same consultancy that prepared the European Commission’s flawed impact assessment for the PPWR – is now developing utterly aspirational and unscientific advocacy tools on behalf of the proponents of reusable systems.

The authors of this report admit the study is a piece of futurology – speculation about “the art of the possible” rather than analysis of empirical data: it speculates on the environmental benefits of a hypothetical, centrally planned, and perfectly managed future system for collecting, washing, drying, sorting, and delivering a wide range of reusable packaging. As an example, setting up a 98% return rate as a critical assumption for takeaway packaging is not only wishful thinking but also pre-empting results set in advance.

**Basically, the Eunomia study considers an almost perfect system for reusable items, while recyclable paper packaging is assessed considering the current system with even worse input data (for recycling rate and production for example). This is an asymmetric approach.** For instance, the Ramboll study used identical End of Life scenarios and recycling rates for both systems.

Secondly, please find a few technical comments to this Eunomia study:

- The study is limited to takeaway, is hypothetical and predictive. It is not an LCA, is not ISO compliant, and is not third-party reviewed.
- No explanation for calculations have been provided, no primary data seems to be used, and limited sensitivity analyses are made.
- The paper cup taken as a benchmark is made of paper lined with PLA, which is not the standard for the market and has no reason to be so in 2030.
- For paper in general, the study uses quite old EcoInvent 3.7.1 2013 data (which are even less relevant to PLA-coated cups).
- The washing phase is centralized only and doesn't consider an in-store washing, opposite to what is witnessed today in France.
- **The study only applies decarbonized energy to reuse, failing to apply renewable energy sources to paper-based packaging in the key production, converting, and distribution phases. A similar biased, one-sided approach is used throughout the study where reuse is seen to benefit from the technological development where paper-based products are excluded from innovation.**
- The study calculates recycling rates of only 10% for paper packaging but 75% for single-use “containers,” while “90% for incineration, and 10% for landfill is considered for packaging not reused nor recycled,” meaning that reusable packaging would be not recycled but incinerated and landfilled.
- The water consumption is completely missed in the study, whereas in the Ramboll LCA it has a major environmental impact due to the washing-drying and transport back phases needed for reusable packaging.
- This work relies on a claimed ideological aim: *“Some of the key assumptions mentioned above are driven by aspects of behavior that require a mindset change that needs to be ingrained into societal norms. This study demonstrates the art of the possible, but this cannot happen without thinking beyond simply swapping one packaging type for another.”*

**Considering the above, the paper by Zero Waste Europe, Eunomia, and Tomra shouldn't be called a study but rather an opinion or position paper: its “results” can't be compared with both ISO 14040/14044 and third party reviewed Ramboll LCA's.**

Also, Eunomia's close role as a partner with Zero Waste Europe and the reuse industry puts the Impact Assessment of the European Commission in a bad light. It would be deeply concerning if European decision-makers rely on the material produced by this organization, which publicly takes a position in the ongoing legislative process.

**We urge policymakers to ignore uncosted, untested, and biased speculative solutions but instead base their decisions on third-party reviewed and validated studies that use primary data and analyse real-world functioning products and systems. We believe that is the best way of ensuring that Europe's commitments to evidence-based policymaking are achieved.**