

Key findings of the JRC study “Exploring the environmental performance of alternative food packaging products in the European Union” and their implications on reuse targets and bans on HORECA sector (art. 22 + Annex V and art. 26) in PPWR

The study, available [here](#), evaluates the environmental impacts of both single use and multiple use packaging products, including packaging used in the hotel, restaurant and catering sector, such as cups, trays, beverage containers. In addition, the research assesses the environmental performance of single use and multiple use packaging in a dine-in restaurant case study.

Key takeaways for the HORECA sector are:

Take-away packaging - Art 26 – paras 2 and 3 (paras 6 and 7 of the latest Presidency compromise)

- The impact on climate change of single-use paper-based packaging is always lower than that of reusable packaging, regardless of whether outdated 2011 data on paperboard production, or more recent and accurate data provided by industry, are used.
- In the take-away context, paper-based single-use packaging has a better impact on water use and an overall better environmental impact when more recent and accurate data on carton manufacturing are used (this data is now included in the JRC sensitivity analysis as “Alt. 2”) (figure 1 in the report).



This clearly supports a full removal of mandatory reuse targets on paper-based food and beverage packaging for takeaway. The European Parliament position already requests such a removal.

Scenario 1 - Performances of 3 different Cartonboard production Datasets (Benchmark, Alternative 1 and 2)

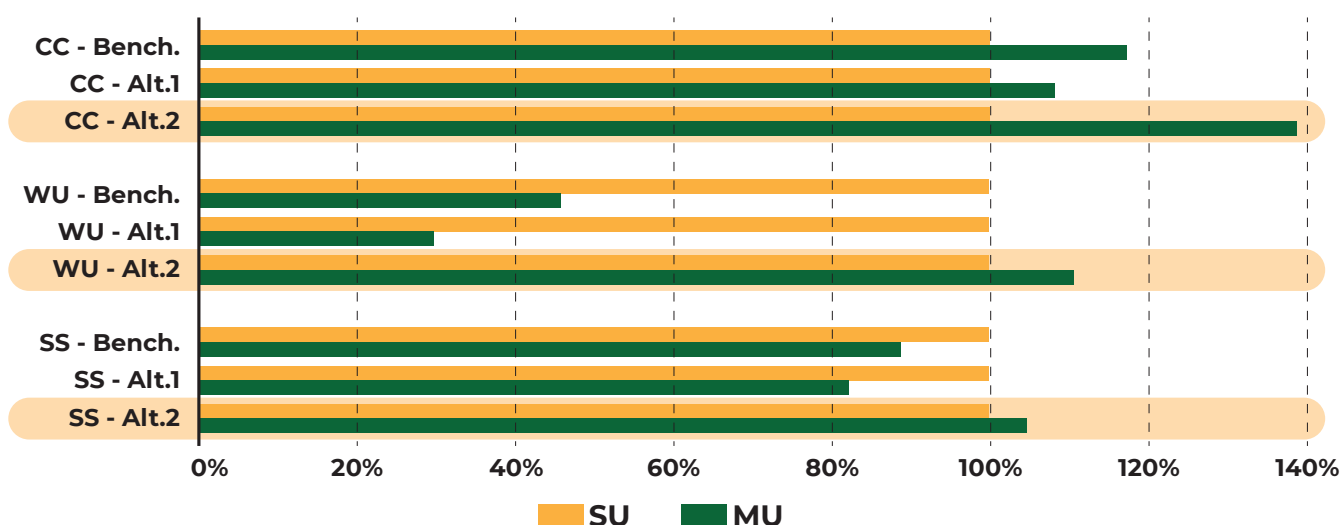


Figure 1. Results of the analysis of cartonboard impacts for the Single Use (SU) and Multiple Use (MU) packaging products. SU impacts are set to 100% for each impact category considered.

Source: JRC analysis. Note: CC = Climate Change; WU = Water Use; SS = Single Score. The ‘Benchmark dataset’ (Bench.) used in the analysis refers to a dataset retrieved during the stakeholder consultations; the ‘Alternative 1’ dataset refers to the EF3.1 dataset, the ‘Alternative 2’ dataset refer to a dataset retrieved during the stakeholder consultation. For further details see Section 2.5.1 and Annex 2.

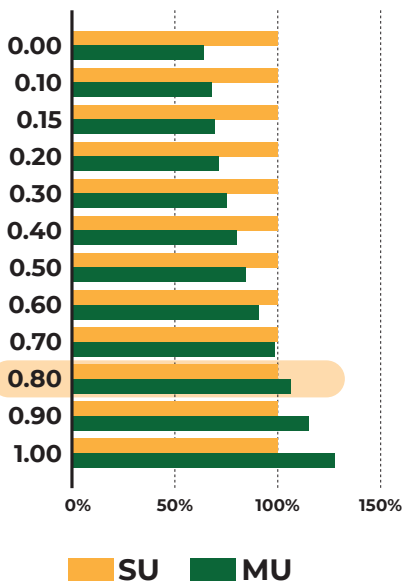
In-store HORECA packaging (art22)

- In relation to immediate consumption (dine-in), a sensitivity analysis, taking into account different recycling rates of Single-Use paper packaging has been carried out.
- The JRC report shows that even with outdated 2011 data, the climate impact of paper-based packaging is lower than reuse when reaching a 80% or 70% recycling rate for paper-based packaging in restaurants.
- Taking into account the more updated carton manufacturing data provided to the JRC and shown in the “Alt2” scenario, even a 50% recycling rate is sufficient to make single-use packaging better in terms of climate impact than reusable packaging in dine-in.

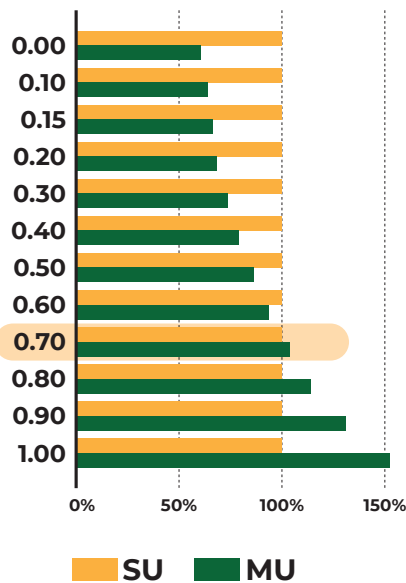


This clearly supports the Amendments to art. 22 and Annex V as voted by the European Parliament, which aim to delete the bans on single-use packaging for HORECA (point 3 of Annex V) or introduce a horizontal derogation if the HORECA operator can collect for recycling 85% of single-use paper-based packaging.

Restaurant Climate Change BreakEven point analysis R2 cartonboard - Benchmark



Restaurant Climate Change BreakEven point analysis R2 cartonboard - Alternative 1



Restaurant Climate Change BreakEven point analysis R2 cartonboard - Alternative 2

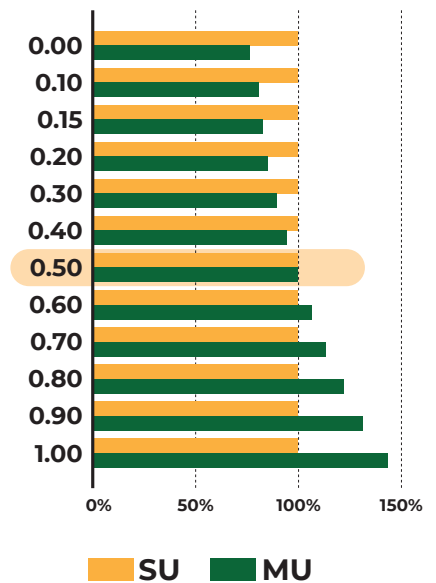


Figure 2. Results for the additional analysis Break-Even (BE) points for the ‘Restaurant Scenario’, assessing the effects of varying the end-of-life recycling rate (R2) for Single Use (SU) carton cups and trays. The end-of-life recycling rate of PP in Multiple Use packaging products is kept constant and equal to the benchmark value (41%). All other parameters are kept constant.

Source: JRC analysis. In this figure, “Benchmark” refers to the cartonboard production dataset used for the benchmark analysis and retrieved during the stakeholder consultation. The “Alternative 1” dataset refers to the EF3.1 cartonboard production dataset, while the “Alternative 2” dataset refer to an alternative cartonboard production dataset retrieved during the stakeholder consultation. Further details are provided in Section 2.5.1 and Annex 2.