

Brussels, December 2018

The container glass industry welcomes the opportunity to contribute to the future PEF development as a way to better measure environmental information along the product supply chain.

The European Container Glass manufacturing industry has 160 glass manufacturing plants in the EU and maintains 125.000 jobs operating in a circular economy business model with over 70% of all our products sold in the EU destined to go back to our factories to make new food grade packaging. FEVE has been an active member of the PEF pilot phase for food and beverages.

PEF on food products and packaging

We welcome the Product Environmental Footprint (PEF) as a tool to simplify an already very complex system of calculating environmental impacts on products. However, we would like to highlight the specificities of food and beverage products in the context of Product Environmental Footprinting. With no less than 11 pilots, 2 of which have been discontinued, and 1 which is yet to be finalized, food & beverage products are a category of products with their own very distinct challenges when it comes to assessing environmental performance.

Capturing and measuring all the inputs and outputs related to the full life cycle of a product and then correlating these to the different environmental impact categories is a big challenge. But when it comes to food, environmental impacts need to be assessed also against a wide range of product functions such as impact on human health, preservation of taste and organoleptic properties, shelf life and prevention of food waste etc... All these functions are also part of the sustainability of food but are not captured by the PEF. Finding the right balance between the different aspects of food sustainability is a challenging area for consumers to make the **right informed** choice between products at the point of purchase. For all these reasons the Functional Unit is highly problematic and challenging for all the food sectors.

The PEF has demonstrated that these factors are not sufficiently taken into account, and the European Commission has acknowledged that the quality and duration aspects of food products are not well captured in the description of the food products' functional unit.¹ This

¹ See table 1 of the PEF Guidance Document:

http://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR_guidance_v6.3.pdf

is also true for packaging, which plays a key role in preserving and protecting the original attributes of a product. Several food pilots have recognised the limitations in the PEF methodology to perform comparison between packaging materials.

Shortcomings in PEF methodologies and LCA that prevent comparative assertions

Life Cycle Assessment (LCA) is not a static nor final methodology, it requires constant scientific and operational improvement. We are concerned that the PEF process will prevent much needed research and methodological innovation in LCA, by standardising processes into policy or legislation.

There are still a lot of issues to be addressed before making LCA and PEF robust tools for comparison purposes:

1. There are several environmental impacts not yet addressed (mainly because difficult to model) in their methodologies (infinite recyclability, avoidance of food waste, biodiversity, toxicity, direct/indirect land use, microbiological pollution, littering, food chain contamination by microplastics, direct health effects from products...).
2. The data sets used in LCA or PEF are often not accurate enough, incomplete or not fit for purpose
3. Several assumptions are made arbitrarily (e.g. definition of over simplistic functional unit, allocation of multi-input or multi-output processes, allocation of recycling or reuse processes, cut-off of delayed emissions, aggregation of environmental impacts...).
4. No clear methodology is proposed to quantify the huge uncertainties that result from the three limitations mentioned just above. Such a quantification of uncertainties is however crucial to make meaningful comparisons. If product A has an environmental impact of 100 ± 25 and if product B has an environmental impact of 115 ± 10 , it is not possible to infer which product is the best one. And the order of magnitude of uncertainties in LCA is very often in the range quoted in this basic example.

All of this makes comparisons between products/services/organisations extremely fragile and dubious. **It should therefore be acknowledged that the PEF is based on a methodology that is not yet robust enough to make such comparative assertions. It should rather be used to measure the environmental performance of a product and its improvement over time.**

This has implications where, in the consultation, it is asked about the importance of whether it is best to only concentrate on a single relevant environmental impact (e.g. climate change) or whether to cover 80% of the impacts or whether just to compare a product to the performance of an average product. If LCA contains gaps, only focussing on one impact or only 80% (even though 80% is much better than only one impact) will still ignore the other aspects and lead to a biased comparison. In the case of packaging for example the endless recyclability of a material in a closed loop or the avoidance of food waste are missing from LCA. Some impacts could be even more insidious like marine littering and impact on the environment, on sea-life, fisheries, the oceans and seas habitats.

Moving forward

The PEF aims to simplify the calculation of the environmental impacts of products. Although it may help to harmonise environmental declarations, we call on the Commission:

- to support methodological innovation in LCA and PEF,
- to address the specific concerns on the PEF methodology raised in the food pilots.
- to refrain from any policy based on products comparison as long as the above mentioned gaps are not solved.

We are ready to work with the Commission to mind the gaps for a robust LCA tool that can be the basis of a reliable PEF methodology for businesses and consumers.

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About FEVE

FEVE is the association of European manufacturers of glass containers. The glass packaging industry generates 125 000 direct and indirect jobs thanks to 160 Container glass production sites in Europe producing a wide range of glass packaging products for food and beverages, perfumery, cosmetics and pharmacy for European and global customers. FEVE members have plants in 23 European Member States. Container glass is one of Europe's best recycled products. See more on www.feve.org.