

The 8 things Europe should know before introducing reusable packaging

Brussels, 26 October 2023 - With a plenary vote foreseen for 20 November, Europe's Packaging and Packaging Waste Regulation (PPWR) is nearing the final negotiating stages in the Parliament. Its core proposal to introduce reusable packaging however is yet to pass a reality check to assess whether or not it comes at a more sustainable price for the environment. Our use-case scenarios reveal estimated increases in resources and emissions costs, as well as inefficiencies in storage and transport.

The European Commission presented its packaging proposal in November 2022, aiming to slash unnecessary packaging and promote reuse and recycling. Under the draft law, 10% of all goods shipped within the EU will have to be transported in reusable packaging by 2030, with targets up to 90% for large appliances.

Any packaging for large household appliances has one purpose: protect the product from physical damage and moisture in warehouses and during shipping, ensuring that it is in good working conditions when it arrives at consumers homes.

Reusability models in packaging have been flagged as a solution to minimise waste. Its introduction would represent a system change for the producer, retailer and consumer requiring the development of new reverse logistics, product designs, investments in new production steps or even complete lines. Which makes it of critical importance to understand its cost and environmental impact.

1. The sustainability of reusable packaging must be tested against real-life scenarios to assess cost-benefits. The European Parliament's industry committee (ITRE) vote last July marked a major turning point in recognising that reusable packaging should only be an option when it delivers the best overall environmental outcome. It is, in fact, only by testing the environmental benefits of reusable solutions against real-life conditions, that we can determine whether or not it comes at a more sustainable price for the environment. At this stage however, no impact assessment has been carried out to assess costs and benefits.

2. Reusable packaging would require a standardised choice of boxes, which would increase overpackaging at best. Household products come in a variety of shapes and sizes. So the same package can only be reused for the same product in the same model and from the same brand. Let's take the case of a fridge. The same model of a fridge with an integrated handle will take up less volume than a fridge with an external handle. Such considerations determine the packaging design to ensure secure transportation. Because reusable packaging would include a standardised



choice of boxes, overpackaging would increase along with additional costs and increased CO2 emissions due to inefficiencies in loading and transport.

3. There is no such a difference between transport and sales packaging for our sector. From the production line to your doorstep, home appliances maintain their original packaging. Due to their size and weight, the packaging is carefully designed to ensure the product can withstand mechanical and climatic conditions that products may encounter during transportation and storage, before being delivered to the final consumer. Transport and sales packaging both serve the same purpose in our sector. For this reason, the definition of transport packaging should be reviewed in the proposed legislation to indicate packaging designed to facilitate the handling and transport of more than one sales unit.

4. Packaging is an essential part of product design. Home appliance engineers and designers collaborate to ensure that packaging not only protects the product during transport but also meets sustainability targets, reduces waste, and complies with applicable legislation. Size, shape, and structure of the packaging are optimised to ensure efficient logistics and storage, while minimising material usage. On top of environmental considerations, each layer added represents a scaling cost for companies and it is therefore carefully assessed to serve a specific purpose.

5. Packaging is extensively tested to replicate mechanical and climatic conditions products may encounter during transport. These include crush tests on all edges, drop tests from different heights, shunting, stacking, compression, vibration and humidity tests among others. This allows experts to identify appropriate protection levels and assess the amount of packaging materials needed to protect the product, based on the outcome of the testing. Europe's proposed reusability model in packaging has been flagged as a solution to minimise waste. However, resource efficient solutions checked against real-life circumstances are already in place for our sector.

6. Reusable packaging would lead to +10 to 40% emissions. In a reusability setup, packaging needs to be collected and returned after each rotation, adding more emissions costs. The packaging of a washing machine shipped from a factory in Germany to a retailer or consumer in Malta, would need to be collected and make its way back to Germany, generating emissions along the way. According to a [study by McKinsey](#), CO2 emissions could grow by 10 to 40%, this way exceeding emissions of single-use products.

7. Reusable packaging would lead to increased use of resources. After unboxing by the consumer, the package needs to be collected, inspected, cleaned and repaired for reuse before being shipped back to the manufacturing centre, with an increased use of resources including water, energy and CO2 emissions.





8. Not all parts in reusable packaging can be reused. When the package arrives at retailers or consumers homes, some parts may get damaged in the unboxing and can no longer be used. Examples include wrappings and straps, which are normally scratched from the box and are technically impossible to reuse.

The European Parliament's Environment committee (ENVI) is set to vote on 24 October. The plenary vote will then follow on 20 November. The new draft legislation has an opportunity to provide a European response to a global issue by promoting a harmonised internal market while recognising the challenges and limitations that must be addressed to ensure and scale its success.

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