REVIEW OF THE REQUIREMENTS FOR PACKAGING AND OTHER MEASURES TO PREVENT PACKAGING WASTE: COMMENTS TO THE DOCUMENT ARES(2020)3041578 "INCEPTION IMPACT ASSESSMENT"

INTRODUCTION

The European Steel Association – EUROFER- welcomes the work done so far by the EU Commission to reduce packaging waste, promote recycling and to analyse potential packaging waste prevention measures. The Packaging and Packaging Waste Directive (PPWD) actively worked in the past to reduce the negative impacts of packaging on the environment. But now a review is needed in order to make it aligned with the goals of the European Green Deal (GD) and of the new Circular Economy Action Plan (CEAP) towards waste prevention, design for re-use of and recyclability of packaging, inter alia, by reducing the complexity of packaging. This paper wants to present comments and opinions of the EU steel sector concerning packaging products and in relation to: (1) waste generation; (2) weight & recyclability; (3) products & sustainability; (4) end-of-life & recycling; (5) appropriate measures in relation to the Impact Assessment.

Packaging Waste generation

During the last two decades, the generation of packaging waste (PW) continued to increase due to demographic changes, market trends and packaging design. It should be highlighted that the share of PW going to landfill or incineration decreased and were limited to certain packaging types. This means that the packaging material staying in the loop increased, allowing the generation of secondary raw materials and substituting thus primary raw materials. However, analysing the different packaging materials and their end-of-life fate, it can be identified that the fraction of materials exiting the loop (landfilling and incineration) are majorly composed by:

- packaging materials that lose their inherent properties after their recycling, and
- packaging materials that are composed by multiple parts that cannot be separated and thus recycled.

On the contrary, materials that preserve their inherent properties after many recycling processes (i.e. multiple recyclable and theoretically infinitely recyclable[1]), like all steel products, are returned to the material cycle at the end of their life cycle and help to replace natural primary resources. For instance, steel for packaging (steel and tinplate) showed a very high recycling rate within the EU market, notwithstanding the separate collection schemes across EU MSs have margins of improvement which can be small or very large according to the MS. Therefore, a larger use of materials with such characteristics, called 'permanent materials'[2], will ensure a continuous increasing of the PW recovered and recycled.

Light weighting & recyclability

Nowadays, due to the actual EU goals imposed by the GD and new CEAP – e.g. design for recycling, reducing complexity of packaging and re-use –, it makes sense to support the use of

[1] This kind of material, thanks to their characteristics, can be recycled again and again without losing their inherent properties (multiple recycling). Moreover, thanks to the existence of a material stewardship (mature recycling value chain), they are collected, treated and recycled. This type of materials can considered as permanently available to society and industry needs.

[2] "*A material is defined as permanent if its inherent properties do not change during use and through solid-liquid transformation, it can revert to its initial state. This is the case when the material consists of basic components, which are either chemical elements or robust chemical compounds, making repeated use and recycling possible without change of inherent material properties*", report "Permanent Material a scientific background" prepared by Carbotech AG, Basel Swiss, 2014.

EUROFER AISBL • Avenue de Cortenbergh, 172 • B-1000 Brussels • Belgium
+32 3 738 79 20 • mail@eurofer.be • www.eurofer.eu • EU Transparency Register: ID 93038071152-83

multiple recyclable (permanent) materials, whose properties and performance can be properly designed to satisfy final use requirements. The packaging design has always sought in the past decades to reduce the weight of packaging solutions for being more resource efficient, for reducing waste and impacts and for easing transport and logistic. Therefore, recyclability and weight reduction should not be in contrast but optimised and integrated, in order to reduce trade-offs. For instance, steel packaging solutions (e.g. cans) have been engineered along the decades in order to reduce their thickness and improving their performance. As illustrative example, '3-piece food cans' decreased their thickness by 50% from 1970s to 2010s[3]. During a similar timeframe, steel cans showed a progressive and continuous improvement of their recycling rates: steel cans recycling rates passed from around 25% in 1991 to 82.5% in 2018. It is thus possible through a proper design and material choice to integrate recyclability and weight optimisation. Reduction of the trade-offs and the optimisation of design options towards multiple objectives is at the core of the circular economy.

Packaging products & sustainability

When developing potential measures to avoid PW, it should also be pointed out that packaging is always to be regarded as a mean in order to bring the goods to consumers, safely and without loss. Packaging indeed has the great potential to reduce losses (including food losses), ensure food safety, extend the shelf life of products and optimize distribution and storage. Moreover, steel packaging for chemical-technical filling goods such as barrels also help to protect the environment from the filling goods, since they meet strict safety requirements and safe transport is not possible without them.

Thus, the design of a packaging product should not be carried out in isolation from its content; the couple packaging-packed product should be considered. Therefore, according to the specific situation recyclable, disposable or re-usable solutions make sense. For instance, during this Covid-crisis, not solved yet, a meaningful juxtaposition of these packaging options works well. For instance, reusable options are useful only if it makes ecologically, sanitary and economically sense; disposable options are mandatory for destroying possible contamination; recyclable options can be safely used when the recycling process, such as for steel packaging, occurs at very high temperature destroying thus every possible source of contamination.

The assessment of the impacts associated to packaging is a complex process that requires the industry involvement and experience. Firstly, this should analyse all the relevant effects (impacts) to the environment, targeting an optimal outcome for which the trade-offs among the different impacts are all minimised (e.g. greenhouse gas emissions, resource efficiency, pollution of soil, air and water or health protection). Then, this assessment should follow a holistic approach in which sustainability is at the core of the process: environmental impacts; material stewardship and operating conditions; expected performance in conjunction with the contained product; waste management. It is important to evaluate the sustainability of the different packaging options; but, for ensuring an optimal outcome, industry led and voluntary LCA integrated with sustainable principles should be promoted and supported due to the complexity of the task.

Packaging End-of-life & recycling

When defining and analysing potential PW prevention measures, it is worth to bear in mind the wider scope of waste prevention in general: to ensure recyclability and re-usability of the packaging solutions, aiming at 'nothing goes waste'[4]. In particular, as well as to incentivise the use of permanent materials, it is fundamental to strengthen and optimise the recycling value chains where needed. For instance, promoting optimized separate collection, both from household PW streams and industrial commercial ones, can ensure a cleaner material recovered

[3] ESTEP-EUROFER Workshop, 19.10.2016, Brussels – Presentation by Thyssen Krupp "Steel Packaging Solutions for Europe"

[4] 'Nothing goes waste' is associated to the outcome that waste disposal, landfill or incineration is not a viable and attractive option and all PW materials find their way back into the economic loop.

from waste streams. In this way, a high-quality input can be ensured to the recycling operations, generating increased recycling rates and enabling more resource efficiency. Moreover, there is no doubt that it makes sense to increase the coherency among the waste prevention strategies, collection schemes and waste procedures in all Member States, in order to ensure wider and larger collection and recovery of PW.

It is necessary to align measures with material properties and existing recycling structures and systems. The recycling flows and value chains have been developed and still work according to specific material features or characteristics of specific packaging solutions. It is then worth to take into account the relationship between material flows and recycling chains when developing certain measures for preventing waste going to landfill or incineration. When there is already a well-established, well-functioning and well-engineered recycling market that has been proven to collect and recover packaging materials and to guarantee that these material remains in circulation, this should be supported and improved through the related EU policy.

For instance, steel for packaging can be magnetically separated from other waste easily and properly treated and cleaned before recycling (including bottom ashes from incineration), differently from multi-layer composite packaging that is difficult to recycle. Moreover, the market of ferrous scrap generated by PW collection and recovery is characterised by an inelastic demand in which the demand already exceeds the supply. This ensures that the material stays in the circular loop, without additional and unnecessary stimuli.

Possible measures to contribute to the waste prevention goals of the inception impacts assessment

EUROFER welcomes PW prevention measures that take into account the wider scope of a circular and resource efficient economy, ensuring a net decrease in carbon emissions. It is worth to look at design for high-quality recycling, guaranteeing high-quality input in the recycling operations. Therefore, please find hereafter some measures EUROFER supports for preventing PW going landfilling or incineration.

EPR Schemes

- to improve the coherence and alignment of the EPR schemes across EU MSs;
- to integrate eco-modulation fees into the different EPR schemes;
- the promotion of the re-use schemes has to be made only when the option is ecologically and economically feasible and when the surrounding conditions can ensure their smooth and efficient functioning.

Design, Recycling & Targets

- to foster the use of packaging materials that preserve their inherent properties independently from the number of life cycles (recycling processes) that they will experience;
- the design of packaging solutions should take into account EoL Recycling and not recycling content; EoL Recycling metric will assure material availability for the future;
- not only weight optimisation (reduction) but also the recyclability should be taken into account by packaging design;
- the introduction of the reduction targets should focus first to phase out of non-recyclable and complex packaging materials.

Waste Management

- To harmonise and improve the waste management across the EU MSs aiming at realising EU circularity objectives through the following measures:
    - the separate collection schemes should be harmonised as much as possible;

    - the separate collection requirements need to be optimised in order to segregate different materials and/or packaging types from the very beginning;
- the waste prevention measures of the different MSs should be fully harmonised, or at least aligned as much as possible;
- the waste management schemes should work for securing more material recovery from household waste via increased the landfill taxation of such waste type.