

EuRIC position paper on essential requirements for packaging (With recommendations relevant to the modulation of fees paid to EPR Systems)

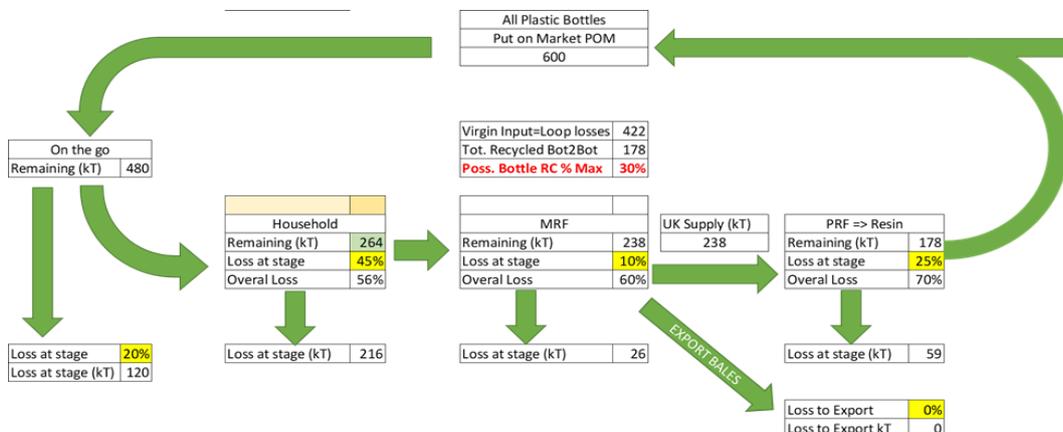
EuRIC represents, through its Member Federations, active recycling companies across a broad range of products and materials –packaging / ELVs / WEEE / metal / paper / plastic etc. Our members have developed and improved the processing technologies and installed plant infrastructure that exists across Europe during the past 25 years. This extensive knowhow allows the industry to bridge-the-gap between end-of-life waste items and fully-recycled materials for use back into the circular economy. The views and opinions of our members must be listened to by the regulator and legislation designers as Europe makes the transition from a ‘linear consumption; waste disposal’ economic model, to a resource efficient, multi-lifecycle and sustainable manufacturing industry.

1. Key factors impacting on the plastic packaging recycling system

The collection, separation, material recycling and resource recovery of complex waste streams, such as consumer packaging, cars and electrical goods represent a **multi-stage system**. The overall yield of output product from this recycling chain’s depends on several key factors that impact upon the efficiency of the system as a whole:

- a. The **quality** and consistency of the **waste feedstock** that becomes the **input** to the recycling processes;
- b. The status of the technology being used to carry out the sorting and separation processes, in terms of how **advanced** and **innovative** the type of equipment is and its suitability for the waste stream in question.
- c. The **skill** and **capability** of the **people** designing, operating and managing these process plants.
- d. The **demand** for the **output** recycled products based upon **quality** and **price** in comparison to virgin raw materials.

Poorly designed products, inefficient collection and sorting systems, low quality focus and unacceptably high losses at each system stage prevent satisfactory progress towards the targeted levels of recycling being set in current legislation. It is hence instrumental to ensure that essential requirements in the revised Packaging and Packaging Waste Directive (PPWD) effectively improve packaging products recyclability and recycled content.



The PPWD and Single-Use-Plastic (SUP) Directive have set high and challenging targets for the recycling of materials and recycled content in new products in the period up to 2025 and beyond to 2030. Levels of 55% of all plastic packaging being ‘fully recycled’ (i.e. measured at the point in the system where plastic enters thermal extrusion stage) and overall collection targets of 90% for most types of plastics beverage bottles. These target levels can only be achieved with a complete overhaul of the existing systems, with a strict focus on quality of input waste feedstocks and a switch-over by manufacturing industry to the principles of design for recycling in all consumer products.

2. Essential requirements to improve packaging design

Manufacturers and retailers of consumer packaging have a crucial part to play towards enabling an efficient materials recycling system operating at the desired future high levels of output and quality. The availability of recycled materials for use back into new packaging needs to increase in order to meet the projected ‘near future’ demands for high-quality recyclates.

EuRIC therefore calls for the following key factors to be incorporated as essential requirements for packaging products placed on the market and to serve as a basis for eco-modulation of fees paid by producers to EPR systems:

1) Suitability for automated sorting

- **Easy-to-dismantle components** for each packaging type. Enabling simple separation of individual component parts during the size-reduction and sorting steps at re-processors (e.g. perforated sleeves used to label bottles; NOT direct printing on the pack).
- **Marking for Negative Sortation** – when the need for hygienic and safe food protection overrides the ability to select and use a ‘simple pack format’ (e.g. some multi-layer barrier film wraps), make sure that marking systems are used **on all non-recyclable** packaging items which enable their easy recognition and ‘negative sorting’ on sensor-based equipment. This will allow for the ‘unwanted’ and ‘unrecyclable’ pack formats to be easily removed from the bulk packaging stream in the re-processing steps of the system. Thus, driving up both quality and useful yield of mono-material recycled plastic output.
- **Compatibility with automated material recognition.** The packaging design should not overlap different materials as this practice induces optical sorting machines to sorting mistakes. E.g. plastic sleeves used to label plastic bottles should be made of the same resin as the bottle itself.

2) Suitability for in-real-life high added-value material recycling

- **Minimum number of materials used** in each packed item to deliver the required functionality of the packaging (e.g. food protection in supply chain).
- **No or minimal additives and colours used** in the primary polymer item – avoid devaluing the pure natural polymers by adding pigments, fillers, opacity agents etc. as far as is possible without compromising in performance. Purity means value for recyclates. E.g. Opaque PET has significantly affected French high-quality and high-value PET recycling process. These materials should support significantly higher EPR fees.
- **Labelling and printing:** using methods that enable good messaging to consumers, but which protect and provide ‘careful stewardship’ of the core plastic material. (e.g. clear plastic yoghurt pots with wrap-around, perforated cardboard labelling systems allowing

consumers to strip the pack prior to putting-out for recycling). Avoid the use of incompatible adhesives and printing inks as far as possible.

- **Rewarding packaging products free of hazardous substances:** 80% of a product's environmental impacts are determined at design stage. As part of an EU's integrated product policy and in order to improve the interface between waste and chemicals legislation, it is instrumental that hazardous substances rendering recycling more difficult should be phased out at design stage.
- **Availability of in-real-life (not laboratory) industrial process for material recovery** Packaging made of materials for which no industrial process is available should support significantly higher EPR fees. As a basic principle, recyclability must be assessed in working industrial conditions not in theoretical laboratory and the recyclability assessment must be a collaborative procedure, including packaging producers, retailers, waste collectors and recyclers. For example, **biodegradable plastics do not exist**. Firstly, industrial composting plants can recover compostable plastics (e.g. polylactic acid (PLA) plastic packaging) (i) only under strict conditions of temperature and humidity and (ii) only if they do not exceed a certain percentage of the total organic material. Secondly, although certain plastics could eventually be compostable, they may pose serious threats for sorting and recycling plants, because their different chemical structure has a very negative impact on the quality of recycled materials from other plastics, especially PET and PE. Conversely, bio-based plastics such as bio-PE or bio-PET that have exactly the same chemical structure as the oil-based plastics can be recycled alongside existing materials.

3) Transversal criteria

- **Level Playing Field** – A sufficient degree of harmonisation across Member State in the local implementation of packaging EPR systems to make sure that pan-European branded items are 'scored recyclable' in a similar manner for the whole European community.
- **Prioritising effective waste treatment** operations which are coherent with the circular economy legal framework. In recent years, technologies have emerged to make the supply chain for chemicals (plastics) more circular, including chemical recycling. There are indications that, although the feasibility for such technologies alone to operate at an industrial scale is still unproven, the operating costs could be unsustainable for the citizens and companies. The right approach should favour investment in proven waste treatment options like thermal treatment and mechanical recycling and consider chemical recycling as a complementary solution where the other methods are not viable.

3. EPR – Metrics for Fee Modulation

EuRIC fully supports the principles of modulating the scale of producer fees to be paid into Member State EPR schemes based upon some agreed metrics of sustainability. This approach is instrumental to bridge EPR systems with eco-design for more circular products and to ensure that front-runners are rewarded while product design that disregard the end-of-life phase is penalised.

While the proposed criteria listed are '*taking into account their durability, reparability, re-usability and recyclability*' (*Revised waste framework Directive 2018/851*) address the three most relevant criteria for plastics packaging, they unfortunately omit **recycled content**.

Recycled content is as important as ‘durability linked to re-usability, and recyclability’ since it enables to truly close the materials’ loop and will be even more relevant with the implementation of the SUP Directive setting for the first time recycled content targets.

Those retailers and manufacturers who can make huge shifts in their packaging design philosophies and then deliver easy-to-recycle packs which consumers can sort correctly and then enable high yield and high-quality system output, must be rewarded proportionately for their efforts. Consequently, eco-modulation of fees based on essential requirements for packaging products must be **effective, proportionate** and **dissuasive** so as to efficiently enforce a carrot and stick approach in packaging product design.

4. Governance of the System Rules and Criteria Selection

EuRIC and its members are calling for the early establishment of a high-level body to take over the control and management of this very important part of the transition towards a circular economy. The EU Council and Parliament need to be giving the mandate to an industry-wide panel who will take ultimate responsibility for the definition, specification and design of the ‘packaging sustainability’ evaluation criteria. The controlling body should include at least representatives of packaging producers (or their eco-organism), packaging waste collecting and sorting companies and/or public authorities, and packaging waste recycling companies. A special attention should be given to voting rights in order to make sure that recyclability rating cannot be adopted through packaging producers’ votes only. The controlling body will have the authority to set and define:

- i. Which factors will be added to the list of criteria for evaluation;
- ii. What metrics will be used to quantify each of the selected criteria;
- iii. The ‘degree of GAIN’ that will be applied against each individual measured element of a full packaging assessment set of results, in order to then ‘increase or decrease’ the level of fees paid by organisations in relation to each assessed packaging type / format. (e.g. recyclability may be allocated a high-gain factor to estimate percentage fee reduction; durability may be given a different ‘gain factor’).
- iv. Publish guidelines and examples for common packaging formats about exactly what the ‘correct application of evaluation criteria’ will mean for the level of modulated fees paid.

At national level, the institutions which govern eco-modulation of fees should respect similar principles regarding their composition and voting rights.

Through its Member Recycling Federations from 20 EU and EFTA countries, EuRIC represents today over:

- ✓ 5,500 companies generating an aggregated annual turnover of about 95 billion €, including large companies and SMEs, involved in the recycling and trade of various resource streams;
- ✓ 300,000 local jobs which cannot be outsourced to third EU countries;
- ✓ Million tons of waste recycled per year (paper, metals, plastics, glass and beyond).

Recyclers play a key role in a circular economy. By turning wastes into resources, recycling is the link which reintroduces recycled materials into the value chains again and again.