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CPP Position Paper
Fee Modulation System in EPR Schemes for Packaging

The **Circular Plastics Platform (the “CPP”)** - constituted as a think-tank on eco-design, materials standards and market outlets for plastics by the leading Producer Responsibility Organisations (PROs) for packaging representing the obliged industry in Austria, France, Germany, Ireland, Poland, Portugal, and in the United Kingdom (the “G7”) - is interested in contributing to the proposal to harmonise the criteria to modulate the fees paid by the producers under extended producers’ responsibility systems to scale up high-quality recycling and to develop a well-functioning market for secondary raw-materials in Europe.

The CPP is glad to share its experience and its recommendations on this issue regarding packaging in this preliminary briefing note.

We hope that you find our input useful in the further development of a circular economy in Europe.

Should you have any questions on any of the issues raised in our position, please feel free to contact us.

SUMMARY

1. Preliminary Principles
2. Discussion & Key Findings

1. Preliminary principles

The concept of fee modulation in EPR schemes has been put forward by the Commission as part of the Circular Economy Package. The intention is to differentiate the fees depending notably on the recyclability of the product or packaging to incentivise eco-design.

This concept has been discussed for many years and has been implemented in some existing EPR systems, e.g. by Eco-Emballages in France, but is not yet common.

This paper uses experience of systems to date to suggest how a system of fee modulation might be developed in view of a harmonised expansion across Europe.

The **preliminary principles** for developing such a system are the following:

1. **The factors to be assessed should be common across different systems and different countries because otherwise international producers would face different incentives in different areas. This could lead to potential conflicts (for example with a particular feature being incentivised in one country but not in others) in addition to much greater administrative and logistical effort and undermining the policy intention.**
2. **The change of the legal base of the PPWD might further increase Member States disparities as they might adopt criteria to modulate the fees that could differ.**
3. **For countries with competing EPR schemes, the principles of fee modulation must be common for all competitors to avoid “cherry picking”. The working principles should therefore be defined by the relevant authorities and mandatory across all schemes, e.g. like fee categories in Austria and UK.**
4. **The functionalities of packaging such as the protection of the packed goods from production to final consumption, as well as the legal constraints (health, safety, etc.) packaging must comply with, must always be taken into account in setting adequate requirements. It is worth noting that packaging often has a much smaller environmental foot-print than the products they contain.**
5. **Common costs must remain fairly allocated to all materials in line with the principles on which collective schemes are based¹.**
6. **Assessment factors for cost differentiation should be regularly reviewed to take account of**

¹ In distributing the total cost of the system among the tons of materials collected and processed, it is important indeed to recognize that each packaging has to bear part of the “common cost” of the running the system, i.e. both overhead costs and operational costs for each material. Collection from households is the biggest cost factor, however, it also determines the success and participation rate of consumers. Costs for setting up and running a sorting plant also need to be distributed among the materials fairly – e.g. it is not appropriate to just allocate the cost for the overband magnet to steel packaging, but none of the costs for the conveyor belts, sorting drums etc. as only these make it possible to access the steel packaging contained in the mix.

developments in packaging materials, sorting and processing technology, etc.

- 7. Last but not least, any fee modulation should only be based on clearly identifiable and quantifiable parameters. Reporting should be feasible for producers, i.e. without extra administrative or costs burden.**

On this basis, and further to intensive discussions within the CPP to share experiences gained in our respective countries, the following key findings are addressed in the following chapter.

2. Discussion & key findings

REMINDER

Fees can be modulated:

- On the one hand, through a fixed fee per material and/or per unit (*primary form of fee modulation*),
- On the other hand, through a bonus and a penalty scheme (*secondary form of fee modulation*).

In any case, fees need to be sufficient to finance the operations of the respective EPR scheme. That means that the primary form of modulation shall be predominant as it can be established upon the tons of packaging put on the market the year before.

Conversely, a bonus and penalty scheme shall not be predominant in the economic model of an EPR scheme as it is indeed impossible to forecast its impact precisely enough, as producers' decision making process to shift to a new packaging (i.e. different design and/or different packaging material(s)) is influenced by more than just the EPR cost. However, the bonus/malus has to be significant enough to motivate improvement.

HAVING SAID THAT, THERE ARE SEVERAL OPTIONS TO MODULATE A FEE THAT CAN BE ALTERNATIVE AND/OR CUMULATIVE:

A. Primary form of fee modulation: the modulation of the fixed fee

▶ Topic 1: EPR fees already are set per material weight and/or per unit.

Most EPR schemes apply **material-weight based fees** in view to incentivising packaging weight reduction. The fees for paper, glass and steel are usually lower than those for plastics or composite packaging, mirroring the balanced cost allocation to materials.

⇒ PET bottles have lost 40% of their weight compared in France between 1994-2016, and the weight of glass bottles has been reduced in average of 23% over the same period.

In a few cases, EPR schemes apply **unit based fees**, either per sales unit (one bottle = 1 unit) or per packaging compound (1 bottle = 3 units, as there is a label, the bottle and its cap).

⇒ This constitutes a further incentive to reducing the use of material, such as by removing the carton around a toothpaste tube.

Where EPR schemes cover all packaging streams, **differentiated fees sometimes exist for household and for commercial and industrial packaging.**

⇒ In Austria, fee categories are defined by law and are binding for both producers and EPR schemes. The fee structure differentiates between household and commercial packaging by size and with exact percentages per material for 47 product categories, based on a comprehensive market study.

Finding#1: a weight-based fee already provides an incentive to producers for reducing the material used because the lighter the packaging is, the lower their fee is. More work is needed though in ensuring the harmonization of material groups and definitions (e.g. household/commercial packaging, plastic types, composites, etc.). A unit-based fee is less widely used. Where EPR schemes cover all packaging streams, differentiated fees also sometimes exist for household and for commercial and industrial packaging.

- ▶ **Topic 2:** the draft article 8a of the Waste Framework Directive (WFD) as proposed by the Commission and the Parliament raises the question of the relevance to modulate fees according to the real end-of-life costs of a packaging.

A real end-of-life cost criteria leads to take into account the real costs of the selective collection, the sorting and the management of a given material.

The real end-of-life cost of a material varies between Member States, as it is closely linked to the national waste management organisations in place, which are diverse in particular as regards to the selective collection (door-to-door or bring back banks), the density and the size of sorting centers (1 for 1M inhabitants in Germany vs 1 for 300,000 inhabitants in France), and the complexity of the collected material (some states only collect plastic bottles, others all plastic packaging).

Finding#2: due to national specificities in terms of waste management organisations (selective collection organisation; sorting organisation), as well as due to the diverse scope and maturity of the schemes, applicable fees in a Member State reflect cost differences for a given material.

Using the real end-of-life cost as the sole basis for pricing the EPR cost could give unintended incentives – for example, if a non-recyclable packaging has to cover only the cost of being landfilled, it would gain an advantage against recyclable packaging that has to cover the cost of sorting and recycling. Therefore, the assessment should include both economic and environmental costs.

Consequently, the waste hierarchy as provided for under article 4 of the WFD (particularly respecting the order of recycle, recover, landfill) has to be preferred over the real end-of-life cost principle to enhance a circular economy.

This still respects the principles laid within the same article, that allow a balanced-reasoning (e.g. to determine whether reuse or recycling has the best overall environmental outcome for a given packaging in given circumstances), i.e.:

- Specific waste streams may require a departure from the hierarchy where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste, for example, solid-fuel recovery can show better performance for some plastic resins from a life-cycle approach;
- Member States shall take into account the general environmental protection principles of precaution and sustainability, technical feasibility and economic viability, protection of resources as well as the overall environmental, human health, economic and social impacts.

Finding#3: For a fee to successfully incentivise circularity, it is key to look for alignment with the waste hierarchy set under art. 4 of the WFD and the underlying principles (LCA approach; technical feasibility, economic viability, and protection of resources). The principle of end-of-life economic costs as a stand-alone criterion for modulation as proposed by some institutions in the draft article 8a of the WFD shows indeed flaws to achieve environmental goals. Since recycling is often the most expensive treatment, such a criterion could have the adverse effect to hamper recycling by deterring producers from designing their packaging for better recycling.

FOLLOWING THE WASTE HIERARCHY:

The waste hierarchy according to article 4 of the WFD has been drawn up taking life-cycle thinking (LCT) implicitly into account. Following the waste hierarchy should therefore lead to waste being

dealt with in the most resource-efficient and environmentally sound way. As the WFD only promotes the use of LCT when departing from the waste hierarchy for specific waste streams, this approach has special relevance for packaging and packaging waste.

Packaging fulfills important technical functions that protect the packed goods along the value chain from damage or deterioration and – overall and applying LCT on the functional unit of packed goods and packaging – often significantly reduce resource consumption and environmental impact.

In many cases (e.g. food), packaging today are high tech developments, optimized for specific use, and protecting food from damage and spoilage. The beneficial effects packaging has on resource protection and product waste minimization shall not be penalized through an isolated perspective on the packaging itself.

► Topic 3: discussion of a modulation taking into account the reusability of a packaging.

Prevention being first in the waste hierarchy, the reuse of packaging which have not become waste could be considered as a modulation criteria. Reuse is indeed typical of a prevention action when it comes to packaging¹.

However, to our knowledge, it is not the case yet in any country. This could be explained on several grounds:

- Reuse is more developed for commercial and industrial packaging (e.g. crates and pallets managed through reverse logistics systems) than for household packaging. Modulating fees according to reusability where EPR only covers household packaging does not seem to be relevant.
- Its relevancy can also be questioned regarding the fact that when packaging is reused, EPR fees apply once only as the said packaging becomes a waste once only, which in itself constitutes an incentive to reuse (on top of savings on materials and production). Moreover, in some Member States like Austria reusable packaging is exempted from EPR fees according to §6 Austrian Packaging Ordinance².
- Most Member States chose to focus on supporting recycling when implementing EPR more than 20 years ago. If reusability had to become a criterion in these countries, extra investments would be needed to install an additional value-chain for packaging like beverages packaging which are already taken in charge by the recycling scheme. Costs would thus rise for the producers (change of industrial process) and ultimately for the consumers, without ascertained environmental gain. Moreover, such development would happen at a time when investments are most needed to recycle more plastics, notably thanks to the development of new technologies and industrial processes (e.g. modernisation of sorting centres).
- Finally, in markets with traditional reuse systems, such as the refillable bottles for beer and mineral water in Germany, these systems – with the focus on refillable glass bottles – are run in closed loop systems, with a clearly separated logistics, a deposit fee, and separate recycling processes for damaged packaging. Present LCAs show that results for the environmental impact of reuse vs recycling vary and are highly dependent on packaging material, distribution model

¹ The following topics develop hypotheses of criteria in accordance with the waste hierarchy from top to bottom. The preparation for reuse that comes second in the waste hierarchy is not developed herein as there are still debates whether it shall apply for product or for waste, or both (e.g. see the CEP's debates).

² Source: http://www.ara.at/fileadmin/_migrated/content_uploads/Verpackungsverordnung_2014_01.pdf.

and recycling performance.

Such a criterion hence seems difficult to implement widely across the Union as it would not fit with the already existing systems which are most of the time nevertheless performant.

Finding#4: in compliance with the Waste Hierarchy, reusability is the first criteria to scrutinize as it constitutes a way to prevent the use of virgin material. Yet, reusability is likely to be difficult grounds for a European modulation criteria as it may have adverse effects where Member States have been encouraging recycling for decades. Such a shift in priorities implies huge logistical settings and high costs which must be justified by a clear environmental gain. It would also divert necessary investments from developing optimized plastics recycling.

- ▶ [Topic 4](#): further discussion on prevention through repairability and durability criteria.

Other prevention criteria discussed in the Circular Economy Package are repairability and durability. To date, no applicability of these criteria to household packaging has been identified. Therefore, a harmonisation of the fee modulation on the basis of these criteria seems unlikely to be feasible.

Finding#5: repairability and durability criteria have no application for household packaging and are therefore irrelevant as a criterion for the harmonisation of the fee modulation within the Union.

- ▶ [Topic 5](#): next to prevention comes recycling. Fees could in some cases be differentiated taking into account recyclability.

See Finding#3 on the contradiction of the real end-of-life cost principle with recyclability.

Despite this contradiction, an alternative to incentivise recyclability without departing from the real end-of-life cost principle would be to set a bonus for recyclability under certain conditions (see point B. for discussion).

More generally speaking, modulating fees to encourage recyclability will not suffice to increase the competitiveness of secondary-raw materials like plastics. The following measures should also be considered in support:

- Financial incentives should no longer be included in legislation that favour less resource-efficient solutions, such as energy recovery processes;
- Incentivise green procurement policies;
- Design of fiscal policy to foster the consumption of products with a better environmental footprint;
- Member States that lack the necessary infrastructure should be supported in developing the necessary capacity to properly collect, treat and recycle plastics waste, e.g. by temporarily easing restrictions on cross-border transport of plastic waste;
- Landfilling of recyclable materials should be at least minimised by 2030;
- Encouraging implementation of pay-as-you-throw systems in the whole European territory by 2025.

Finding#6: as stated in Finding#3, recyclability can be encouraged through the fee modulation following the waste hierarchy, which then requires a departure from the actual end-of-life costs-principle. An alternative to incentivise recyclability without departing from the real end-of-life cost principle would be to set a bonus for recyclability under certain conditions as further developed in point B. Yet, modulating fees to encourage recyclability will not suffice to increase the competitiveness of secondary-raw materials like plastics. Other policy measures are equally crucial in support (tax, pay-as-you-throw, etc.).

- ▶ **Topic 6:** discussion on other differentiation criteria suggested during the European Parliament’s discussions

Two other criteria were discussed at the European Parliament: hazardous substances and recycled content.

The CPP concluded the following:

- **Hazardous substances:** EPR does not deal with the composition of products which is covered by the essential requirements but with their end-of-life management. The “presence of hazardous substances” is thus outside its scope. Yet, PROs remain vigilant on the health issues this may also raise. As a result, PROs collaborate where possible to help establish hard facts.

Should a risk be confirmed, the CPP proposes to discuss of a quality material standard taking it into account during its discussions to come on European standards as this would cover all packaging wherever they originate from.

- **Recycled content:** A binding target for use of recycled content in packaging has the following risks:
 - Difficulty in tracing the actual recycled content in the final product.
 - Disadvantage for product groups where recycled material is not allowed in contact with the product, e.g. food/near food.
 - Threat of cross-subsidising the use of post-production recyclates in post-consumer household packaging. In the post-production segment, high-value recyclates are already produced at market prices. Subsidizing its use in post-consumer household packaging would not provide incentives to increase recycling of this packaging itself. Producers should thus not be given an additional bonus when they use recyclates from their packaging production, as this would do nothing to increase the use of recyclates from post-consumer packaging.
 - The use of recycled materials in packaging should not negatively impact the recyclability of this packaging.
 - Attention shall be paid not to create discrimination between companies regarding recycled materials for which supply may be erratic, like for recycled PET.

Finally, if the absence of hazardous substances and the use of recycled content were to become criteria for packaging, they should be imposed through a more appropriate tool than EPR such as new essential requirements, or a reduced sales tax on recyclates to motivate producers to use recycled content for all packaging.

Finding#7: hazardous substances and recycled content are outside of the scope of EPR which deals with the end-of-life of a packaging. Other tools could be used to ensure their enforcement for all packaging like the essential requirements, or to encourage the use of recycled content by reducing sales taxes on recyclates.

B. Secondary form of modulation: application of a bonus and penalty scheme

▶ [Topic 7: learnings from the French bonus and penalty experience](#)

The 5-year French experience of such a scheme shows that it is a complementary tool and does not suffice alone to incentivise eco-designing.

Fee modulation (secondary but also primary) must indeed be combined with accompanying services to enable the obliged companies to, actually, eco-design their packaging, such as a good practices platform, or diagnosis tools, as well as with other policy tools outside of EPR's scope.

The fee modulation is thus not a panacea and must be thought as part of a whole to be efficient.

In competitive markets, such complex calculations might furthermore become inapplicable unless they become common requirements for all licensed schemes. Competing PROs should thus abide to common modulation criteria to ensure equal treatment of producers.

Finding#8: fee modulation must be considered as part of a whole with eco-design services and other incentive tools to be efficient (catalogues of good practices; eco-design diagnostics, etc.).

▶ [Topic 8: focus on the French penalty scheme](#)

Discussions took place within the CPP regarding the relevancy for a PRO to impose a penalty to a company, in particular, where the markets are competitive.

PROs would favor a bonus system vs a penalty system ("no punitive ecology") as being more efficient.

Yet, the CPP agreed that harmonised recommendations should be made to the obliged producers through a "not-recommended" list. PVC and the use of composite plastics were identified as the first items to look at. Research has been done in several countries on "disruptors" in the recycling chain, e.g. in Germany with a standardized catalogue for recyclability (Recyclclass and Certification of Recyclability through cyclos-HTP), and through the French guide on recyclability co-published by an expert committee called COTREP and Eco-Emballages. In the interest of harmonization, PROs are discussing how to make these activities converge on a European level.

Finding#9: PROs would favor a bonus system vs a penalty system ("no punitive ecology") as being more efficient. Yet, a not-recommended list applicable on the whole Union territory would help the obliged industry to better design its products. The CPP is leading further work to establish such a list. Furthermore, research has been done in several countries on "disruptors" in the recycling chain. These definitions should be harmonized on a European level.

▶ [Topic 9: possible harmonised criteria for bonus](#)

Incentives should focus on plastics to increase its recycling. This must include impacts assessments

at all steps of the plastic value chain:

- Identification by end-users as sortable;
- Separate collection;
- Detection (in sorting);
- Separation (in sorting);
- Recycling;
- Quality and yield of recycled materials.

This in mind and further a critical review of the extensive French bonus list, the CPP agreed that the following 3 criteria could be reproduced in the Union territory given present technological constraints and limitations:

- Switching from multi-material plastic packaging to mono-materials;
- Replacing of the black carbon dye in the outer layer of a plastic packaging by another colour, including a dark one without carbon;
- Removal or substitution of harmful/disruptive labels, caps, handles or other parts (e.g. PET label on PE bottle).

Further research will result in additional recommendations. They will strictly comply with the preliminary principles stated herein before. Great attention will notably be paid to ensure easy and actually feasible compliance for producers.

Finding#10: incentives should focus on plastics to increase recycling. Three criteria were identified as possibly reproduceable over the European territory:

- ***Switching from multi-material plastic trays to mono-materials;***
- ***Replacing of the black carbon dye in the outer layer of a plastic packaging by another colour, including a dark one without carbon;***
- ***Design packaging to reduce product residue when empty;***
- ***Removal or substitution of harmful/disruptive labels, caps, handles, finishing outside coats, or other parts (e.g. PETG sleeve on PET bottle).***