

To:

MEPs ENVI, ITRE, IMCO, AGRI

CC: DG ENVI, DG GROW

13 April 2023

PPWR Artikel 7: Enable more flexible use of recyclates through mass balance and credit-based methods

Dear Member of the European Parliament,

In its proposal for an EU Packaging and Packaging Waste Regulation (PPWR) of 30 November 2022, the European Commission proposed minimum percentages of post-consumer recyclates (PCR) between 10% and 35% *per unit of packaging* from 2030 exclusively for the plastic part in packaging. Through mandatory recycled content quotas, the Commission wants to create a secured demand for plastic recyclates that is independent of the virgin material price and thus more investment security for plastic recyclers. This is welcomed. However, the concrete proposal entails considerable risks for the security of the packaging value chains, especially affecting small producers, and the environment.

The requirement for meeting the targets *per unit of packaging* increases the economic risks of the proposal in an unnecessary way. The amount of PCR used in non-PET packaging will have to increase at least fivefold to reach the quotas, making the amount of separately collected and sorted plastic packaging waste in the EU a bottleneck and compliance with the targets extremely challenging. The "per unit" requirement particularly disadvantages SMEs which have more difficult access to recyclates as well as manufacturers and distributors of packaging formats that require certain PCR qualities that cannot be obtained on the market or are very difficult to obtain. In particular, except for PET, no PCR has yet been approved for food contact applications. The "safety nets" proposed by the Commission in Articles 7(9) and (10) PPWR are not sufficient to prevent the disruption of supply chains, e.g. for food, cosmetics and other packaged products, in the event of a shortage of plastic recyclates.

In order to reduce these risks, the use of recyclates should not necessarily apply *per unit of packaging*, but should be designed more flexibly. To this end, the possibility of a balance should be created by allowing the additional use of recyclates in other products of the same type of plastic, which can be demonstrated by **mass balances** and **credit-based methods** which are currently being discussed at European level. This can effectively reduce the risks without weakening the overall demand security for post-consumer recyclates.

We would be grateful if you would take up our recommendations during the deliberations of the PPWR. Concrete amendments to Article 7 are proposed on page 3 of the appendix.

Yours sincerely

The undersigned organisations

Appendix

BDSI – Bundesverband der Deutschen Süßwarenindustrie e.V.
(Association of the German Confectionery Industry)



Bundesvereinigung der Deutschen Ernährungsindustrie e.V. (BVE)
(Federation of German Food and Drink Industries)



bvse-Bundesverband Sekundärrohstoffe und Entsorgung e.V.
(German Association for Secondary Raw Materials and Waste Disposal)



Elipso – Les entreprises de l’emballage plastique et souple
(The French Plastic and Flexible Packaging Companies)



European Plastics Converters Aisbl



Gesamtverband Kunststoffverarbeitende Industrie e.V. (GKV)
(German Association of the Plastics Converters)



Handelsverband Deutschland - HDE - e.V.
(The German Retail Federation)



ICPP – International Confederation of Plastics Packaging Manufacturers



IK Industrievereinigung Kunststoffverpackungen e.V.
(German Association for Plastics Packaging and Films)



VDMA e.V. – Kunststoff- und Gummimaschinen
(VDMA Plastics and Rubber Machinery)



Wuppertal Institut für Klima, Umwelt, Energie gGmbH
(Wuppertal Institute for Climate, Environment, Energy)



Appendix: Rationale for the proposal and recommended amendments

Some packaging can use more, others less PCR

The potential uptake of recycled material in different packaging formats varies considerably. In the area of both, contact-sensitive and non-contact-sensitive plastic packaging, there are packaging formats for which no suitable recyclates are currently available on the market. This applies, for instance, for the important area of food packaging (except PET), for which post-consumer recyclates have not been approved so far and - in view of EFSA's very cautious assessment practice - will most likely not be approved even by 2030. Suitable PCR grades are also hardly available for other contact-sensitive packaging, such as for packaging for animal feed, cosmetics or hazardous goods. But also some non-contact-sensitive packaging formats, e.g. transparent mono-material film packaging for hygiene products, face major challenges. Although such packaging is perfectly designed for recycling, it is hardly possible to recover transparent PCR from the household collection because of its mixture with other packaging, making the fulfilment of a 35% PCR minimum quota excessively difficult. In contrast, there are packaging formats capable of using more than 80% PCR produced from household packaging waste collection with current energy-efficient technologies, like e.g. paint buckets, flower pots and other packaging. **Balancing of PCR content would reduce the risks of supply bottlenecks for certain grades of PCR.**

Chemical recycling must not disturb the energy-efficient cascading use of recyclates

The Commission assumes in its impact assessment that the required qualities for contact-sensitive packaging will be provided via the development of chemical recycling processes such as pyrolysis. However, these processes are still in the technological development stage and could not yet be comprehensively evaluated neither economically nor ecologically (see JRC 2023). In contrast to mechanical recycling processes, which enable a long-lasting cascading use of the polymers in various applications, the plastic polymer chains are thermally split in pyrolysis in order to synthesise new plastic or other petrochemical products from the fragments. These technologies could in future fill a gap in the circular economy of plastics if they succeed in processing waste otherwise sent to energy recovery or landfill. Due to the higher energy demand and the greater process-related material losses – which highly depend on the characteristics of the waste inputs – these processes only make sense if the quality of the plastic waste no longer allows for an energy-efficient cascading use of the plastic, e.g. due to high degradation, mixture or contamination of the waste. However, due to technological constraints and economic reasons, it is very likely that chemical recycling processes will use as a feedstock polyolefin packaging waste that could as well be mechanically recycled, if the proposed “per unit” requirement applies. This would likely result in chemical recycling coming at the expense of a cascading use of packaging waste, leading to reduced availability of PCR for non-contact sensitive applications and overall higher energy demand and CO₂ emissions. **This risk can be mitigated by deleting the “per unit” requirement and allowing for a more technology- and application-open use of PCR.**

Safeguard small and medium-sized producers

A disproportionate burden from the “per unit” requirement also arises for smaller packaging manufacturers and distributors. Firstly, small companies will have more difficult access to recyclates because they cannot be purchased as commodities on the market like virgin plastics. As suitable plastic waste for the recycling processes is scarce, many big players are currently trying to secure their future access to plastic recyclates through strategic partnerships and own investments in waste management. This is to be appreciated, but much more difficult to do for smaller companies. It is also to be expected that some brand owners will strive to exceed the legal requirements for

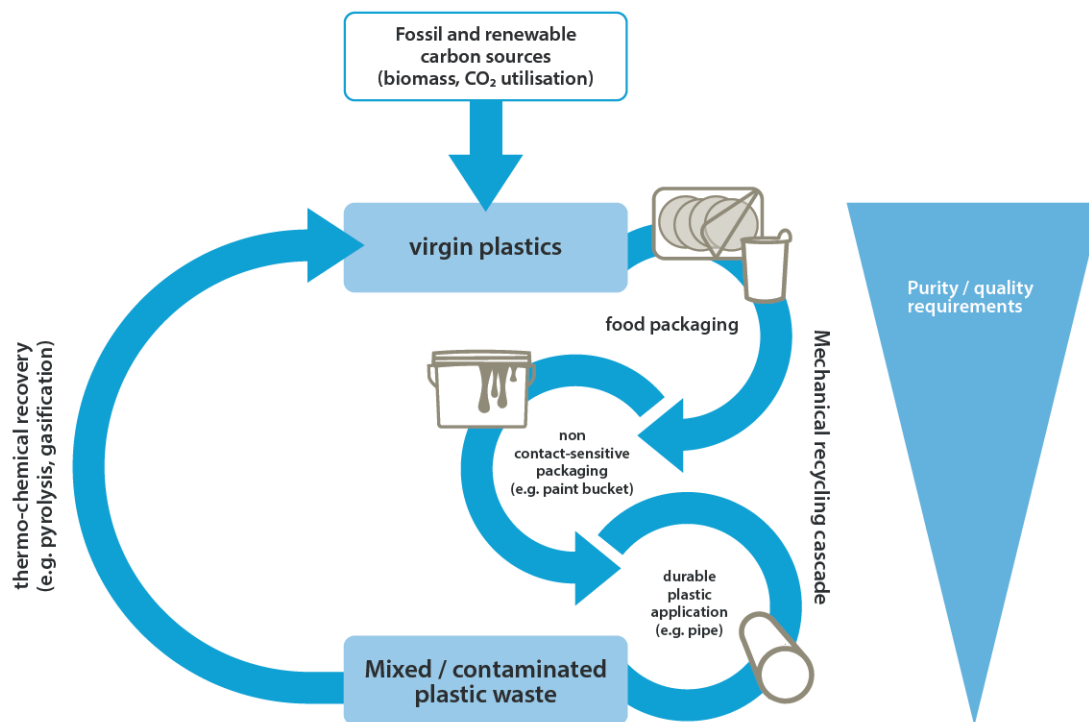


Figure: The cascading use enables a long-lasting and energy-efficient use of materials that has proved its worth for all types of materials.

promotional reasons, as can already be seen in the PET beverage bottle sector. This will lead to fierce competition for access to secondary raw materials, which smaller companies can easily fall victim to. Secondly, small producers may alternate between food and other packaging on the same production line. Due to the risk of cross-contamination, after processing PCR they would have to “rinse” their lines by pushing through food-grade approved plastics before they can start producing food packaging again. This would increase production waste and be economically as well ecologically unreasonable. **The possibility of purchasing PCR credits from other producers would help SMEs that have difficult market access.**

Articles 7(9) and (10) PPWR are not sufficient to prevent the disruption of supply chains

Given the high political importance of the quotas, it is highly questionable that the Commission will provide for derogations from the quotas by 1 January 2028 in the likely event that no suitable recycling technologies have been authorised and sufficiently installed in practice (except for PET). The “safety net” proposed by the Commission in Article 7(10) in the case of a lack of availability or excessive price of specific recycled plastics is not sufficient to prevent the disruption of supply chains, because the safety net is to be woven only *after* the shortage situation has already occurred. In addition, the amendment of the quotas is bound to “adverse effects on human or animal health, security of food supply or the environment”, leaving out economic risks for individual companies and for other supply chains.

“Per unit” requirement not strictly verifiable

As the Commission itself pointed out in the impact assessment, there is no analytical method to reliably measure the proportion of recycled plastics in an individual packaging unit (see Part 2, p. 547). The fulfilment of the quotas can therefore only be verified with help of audits along the supply

chain (*chain-of-custody approach*). Furthermore, the acceptance of mass balances, in which the proportion of secondary raw materials in the raw material mix of a plant is accounted for and "credited" to the different products via allocation procedures, is indispensable for the recognition of recyclates from thermo-chemical recycling. **The fulfilment of the PCR quotas can therefore only be proven by accounting mass flows but not strictly "per unit"**.

More flexible use of recyclates reduces economic and ecological risks

In order to reduce the economic and ecological risks and to create a level-playing field for all recycling technologies, the use of recyclates should not necessarily apply *per unit of packaging*, but should be designed more flexibly. To this end, the possibility of a balance should be created by allowing the additional use of recyclates in other products of the same type of plastic, which can be demonstrated by mass balances and credit-based methods suitable for balances at different levels: **Mass balances** should apply to proof compliance with quotas at a site level. This would allow manufacturers and distributors to use the total mass of a type of plastic packaging they put on the market in a calendar year as an alternative reference for calculating the *average* recycled content (as regulated, for example, in Germany in paragraph 30a(2) of the Packaging Act to implement Article 6(5) of the Single-Use Plastic Products Directives (SUPD)). Due to the scarcity of recyclates and seasonally fluctuating prices, this would allow companies to react flexibly to price peaks for recyclates. In addition, **credit-based methods** should be applied to allow for balances between different sites or companies.

Any kind of balance should only be possible through the use of the **same polymer type** in order to foster the recycling and design-for-recycling of *all* polymer types used in packaging. It should however allow for an **application and technology open use of the PCR** in order to minimize economic and ecological risks. Furthermore, compensation should only be used as an alternative means for achieving legal compliance but not allowing for claiming PCR content in the respective packaging.

The demand security for recyclates intended by the EU Commission would not be reduced by either of these measures - the quantities and types of material demanded would remain the same on average over the year as a whole. The security for investments in the recycling of all packaging polymers would thus continue to be guaranteed.

Recommended amendments of the PPWR proposal

We therefore recommend the following amendments of the PPWR proposal:

- Article 7(1): From 1 January 2030, the plastic part in packaging shall contain the following minimum percentage of recycled content recovered from post-consumer plastic waste, ~~per unit of packaging~~: ...
- Article 7(2): From 1 January 2040, the plastic part in packaging shall contain the following minimum percentage of recycled content recovered from post-consumer plastic waste, ~~per unit of packaging~~: ...
- Article 7(7): By 31 December 2026, the Commission is ~~empowered to~~ **shall** adopt implementing acts establishing the methodology for the calculation and verification of the percentage of recycled content recovered from post-consumer plastic waste, ~~per unit of plastic packaging~~ **including a mass balance and credit-based approach**, and the format for the technical documentation referred to in Annex VII. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 59(3). **The requirements set in paragraphs 1 and 2 may also be fulfilled by the use of recyclates of the equivalent amount and polymer type in other products.**