

Brussels, July 14th.

Subject: Joint statement calling for a transparent and reliable policy framework defining recycled content in plastic

Dear ladies and gentlemen

We, the signatories of this letter – civil society organisations and responsible companies operating in relevant sectors – are writing to you to highlight the importance of prioritising robust and transparent chain of custody models for calculating recycled content in the European Commission's implementing decision that establishes rules for the application of Directive (EU) 2019/904. We believe it is necessary to rectify the decision in order to ensure the highest quality and transparency in the determination of recycled content.

The decision on the methodology for defining single-use plastic recycled content will create a precedent with far-reaching implications and it is essential that all of these are taken into consideration as it is finalised. These rules will either help achieve genuine circularity or undermine the transition by rewarding practices that lock us into using virgin feedstock and misleading claims. They will either ensure that product-level claims are trustworthy and supported by robust and transparent corporate practices, or undermine consumers' trust in green claims and encourage unsustainable practices by maintaining the status quo.

It is crucial that the right decisions are taken to reduce the environmental impact of plastic, enhance plastic circularity, ensure consumer protection, respect the level playing field between recycling technologies, and avoid creating disadvantages for less environmentally harmful recycling processes.

We are concerned that in its current form, the draft implementing decision fails to clearly specify which chain of custody models are admissible for calculating recycled content, and leaves the door open for mass balance approaches other than proportional allocation at batch-level in the case of non-mechanically recycled PET.

After avoiding material use in the first place and developing reuse models, one of the key enabling factors to make the shift towards a circular economy is to scale up an efficient recycling system supported by recycling and recycled content targets, and by a product design enabling safe and easy recycling from the outset. The circular economy model we should be aiming to build is based on transparency, fairness and social justice. In this light, the decisions on methodology taken in this implementing act will have far-reaching implications beyond the specific application envisaged in the above mentioned act, which must be taken into account as it is finalised. We

believe that failure to lay down appropriate chain of custody rules at this point would fall short of the European goals to achieve carbon neutrality by 2050 and would slow progress towards making the circular economy the new norm. For recycling to reach its full potential, recycled content claims must be based on transparent, fair and reliable chain of custody models.

Therefore, we recommend that the implementing decision prioritises the utilisation of segregation and controlled-blending models, whenever they are applicable. These models allow for the highest level of physical and chemical traceability. Additionally, when segregation and controlled-blending are not applicable, we suggest implementing mass balance with proportional allocation at the batch level.

1. The implementing decision should not create unfair advantages for technologies with higher environmental impacts and lower yield rates.

We are concerned that the implementing decision leaves open the possibility of use of “mass balance” approaches for “non-mechanically recycled PET” in the future (Recital 10). We note that in general, processes such as pyrolysis and gasification for plastics are associated with significant environmental impacts, especially due to high mass losses, high energy requirements and the fate of hazardous substances.¹ One should therefore not categorise these processes as “chemical recycling” but as “chemical recovery”; the latter coming after the former in the waste hierarchy.²

To place an emphasis on chemical recycling in the context of plastic bottle recycling is contrary to the intent of the *Packaging and Packaging Waste Regulation (PPWR)* and sets the wrong priorities. Single-use plastic beverage bottles represent a waste fraction with strong potential to be reduced using reuse systems, and for which high-quality mechanical recycling processes exist, especially where deposit return schemes are established as foreseen in the currently negotiated *PPWR*. Their treatment in pyrolysis and gasification plants should therefore be prevented under any circumstances, in order to avoid displacing these significantly more environmentally favourable disposal outcomes.

Should pyrolysis and gasification technologies nevertheless be considered as sources of recycled content in the future, it is essential that the only chain of custody model permissible for calculating recycled content being produced by these technologies be **proportional allocation**

¹ ZWE, EEB, DUH, ECOS, GAIA, RPa, NABU, [Understanding the Environmental Impacts of Chemical Recycling](#), 2020

² ECOS, DUH, ZWE, [Chemical Recycling and Recovery: Recommendation to categorize thermal decomposition of plastic waste to molecular level feedstock as chemical recovery](#), 2021

at **batch-level**³, since this is the only approach capable of ensuring a proven chemical and physical route between the input feedstock and the final product.

Allowing any less robust, less transparent, non-proportional mass balance chain of custody models will provide an unfair advantage for pyrolysis and gasification versus **technologies meeting criteria to apply segregation and controlled-blending models**. First, permitting such approaches would also enable companies to freely allocate recycled content to higher-priced materials/products, allowing for the possibility of additional income generation that is not available for those companies (e.g. mechanical recyclers) that are supporting claims using transparent, robust and traceable methodologies, such as segregation and controlled-blending.

Secondly, the use of non-proportional mass balance allocation models also prevents an assessment of the “dilution” factor – which is the amount of virgin feedstock required for each unit of output – and in doing so disguises the actual recycling yield of each technology. This could lead to the reporting of misleading recycling rates. For example, in the case of pyrolysis, the use of non-proportional allocation rules can result in claims of recycling rates of up to 80%, whereas the actual yield of recycled content can be maximum 10% only. The yield rate is a highly relevant metric for comparing the use of different technologies and should be transparently available so as to encourage investment in recycling processes that can generate higher yields and not to lock-in investment in technologies heavily dependent on virgin feedstock. We like to note that especially regarding pyrolysis of PET, mass yield is evaluated as an irrelevant quantity⁴.

2. The implementing decision should account for the likelihood that decisions taken regarding what types of chain of custody models are permissible will have knock-on implications for claims made to consumers on the proportion of recycled content in individual products.

The implementing act is needed for Member States to report the amount of recycled content in their national territory. However, it is also relevant for the claims made at product level to consumers, as it is highly likely that industry will argue that whichever chain of custody models are permitted pursuant to this implementing decision are permissible to support product-level claims to consumers pursuant to the proposed *PPWR*.

Consumers should be able to rely on claims made about recycled content on individual products that accurately reflect the proportion of recycled content in the plastic used to make that specific

³ Important principles for such a batch level approach are summarized under ECOS, RPa, ZWE, [Determining recycled content with the mass balance approach](#), 2021. This approach can be categorised as rolling-average

⁴ JRC Technical Report, [Environmental and economic assessment of plastic waste recycling](#), 2023

product. **For this reason, any product-level claims to consumers made using mass balance approaches other than proportional allocation with a batch-level assessment, segregation and controlled-blending should not be permitted.** Indeed, in an investigation of the clothing companies H&M and Decathlon for misleading green claims which concluded in the companies agreeing to binding commitments to alter several commercial practices, the [Netherlands Authority for Consumers and Markets \(ACM\)](#) highlighted that one of the most important issues they had identified was that the companies gave the impression that individual products were manufactured with “sustainable cotton”, whereas it was *“impossible to guarantee that an individual product”* actually contained sustainably-sourced cotton.

Use of non-proportional allocation rules will give rise to equivalent issues made with regards to recycled content in plastics. As well as potentially breaching consumer protection law, product-level claims made on the basis of flexible mass balance approaches risk loss of faith in recycling and strain on the credibility of actors involved. The risk of this occurring can be mitigated through banning any claims at the product-level when there is no certainty that the product in question really contains recycled content.

To conclude, we urge the European Commission to reflect the following principles in the final implementing act

- Use proportional allocation to evenly allocate the recycled content to output products when using mass balance (instead of allocating it arbitrarily);
- Use ‘batch level’ mass balance to determine recycled content, so that it is clear how much recycled material is in the final product;
- Implement regulation to ensure that mechanical remains the primary recycling option for maximum CO2 reduction, circularity score and highest environmental compatibility.

Yours sincerely,





Bund für
Umwelt und
Naturschutz
Deutschland

