

Position Paper Circular Plastics Targets

Plastics Europe supports the EU Green Deal objective of a climate neutral European economy by 2050. To contribute to that objective, the plastics industry requires, alongside higher material circularity, a direct GHG emissions reduction intervention.

In this perspective, the EU policy framework should support and incentivise the availability and use of all kinds of circular feedstock as input to the chemical industry, including recycled materials, sustainably sourced biomass, and materials based on carbon capture and utilisation, in order to help reducing the dependence on fossil feedstocks and considerably lowering the GHG emissions of the plastics system.

Plastics Europe welcome the European Commission's aspirational target of at least 20% of carbon used in chemicals and plastics products to come from sustainable non-fossil sources by 2030, as expressed in the Communication on Sustainable Carbon Cycles. We believe that this ambition should be translated in regulatory measures, such as PPWR, which incentivise the use of different circular feedstock sources.

In the context of the revision of Packaging and Packaging Waste proposal, **Plastics Europe call on policymakers to support, alongside the use of recycled plastics from all technologies, the use of bio-based, bio-attributed or CCU¹-based plastics to produce plastics packaging, through the inclusion of a circular plastics² target of 5% by 2030**, on top of the current recycled content targets set in the proposal. This circular plastics target would acknowledge the contribution that all circular feedstocks make to the EU's sustainability goals and would support their simultaneous development acting as market driver to scale up investments and innovation in these technologies. It also allows economic operators to choose the most appropriate combination of the different types of feedstocks to achieve this target. The target should be set as an average of the plastic packaging³ placed on the market at the level of the economic operator.

Achieving such a target requires several conditions to be met, allowing the development of a sufficient supply of circular plastics, an adequate methodology to measure the progress towards the target as well as criteria to ensure the environmental benefits. We therefore call on policymakers to acknowledge the following:

¹ Carbon Capture and Utilisation

² "Circular plastics" means a group of plastics fully or partially produced from circular feedstocks.

Circular feedstocks describe feedstocks linked to system circularity, where a connection from end-of-life (e.g. waste) to start-of-life (new product) can be created. That can be achieved via different loops (biological and technical) of a Circular Economy. Circular feedstocks include bio-based, recycled and carbon-captured base feedstocks. The additional 5% circular content target could be fulfilled by the utilisation of at least one or a combination of several circular feedstocks

³ The target should be calculated as an average of plastic packaging placed on the market per economic operator per type of packaging stated in Article 7 paragraph 1 and 2 in the PPWR proposal.

Measurement methodology

The European Commission needs to swiftly develop secondary legislation aimed at defining the methodology to account for the use of bio-based, bio-attributed and CCU-based and attributed plastics in packaging, consistently with the evaluation of the recycled plastic content. In particular, in addition to ‘segregated’ or “controlled blending” chain-of-custody models, ‘mass-balance with credit method’ should be allowed for the evaluation of bio-attributed, CCU-attributed and recycled-attributed content. Mass balance is a transparent and auditable method to trace a defined material characteristic along the value-chain from material suppliers to consumers; its acceptance is key to enable the quick development of the use of biomass, CCU-based or chemically recycled feedstock in existing large-scale efficient industrial production units. To meet the 2030 circular plastics target, legal certainty on the method is needed in 2023 to ensure sufficient time to plan, finance, secure permits, and construct the related necessary infrastructure.

Access to circular feedstock

- **Bio-based feedstock**

European access to sustainable biomass is a key factor for the future development of bio-based and bio-attributed plastics. This will partly rely on the development of a level playing field with energy products. While the use of biomass in bio-based and bio-attributed plastics has proven to be beneficial, the EU legislation currently provides incentives only to the use of biomass for the energy sector, while no supportive legislation exists for the use of biomass in the materials sector⁴. Bottlenecks concerning the competitive availability of biomass for plastics should be addressed, including through the application of a cascading principle⁵ for all carbon containing feedstock aiming at optimum value creation and minimised climate impact.

- **Recycled feedstock**

- Design for both functionality and recycling: The development of technology neutral Design for Recycling (DfR) guidelines would reinforce a definition of recyclability that reflects the industries ambitions for the development of new packaging systems, new materials, detection, sorting and recycling technologies to achieve the required high quality of materials and recycling rates. Such guidelines/criteria should be regularly reviewed and updated, when necessary, with the involvement of industry technical experts with the knowledge to assess actual packaging recyclability against installed and state-of-the-art technologies and infrastructures for the sorting and recycling of waste.
- Collection, sorting and recycling: Improved separate collection and sorting of all packaging waste across the EU is key to securing the flow of high-quality secondary material available for recycling which is needed to meet higher recycling rates and circular content targets. Additionally, collection, sorting and recycling of post-consumer waste of industrial or commercial origins must be also considered as its

⁴ Bio-based plastics sustainable sourcing and content (European Commission – August 2022)

⁵ Communication from the EU Commission ‘EU Policy Framework on bio-based, biodegradable and compostable plastics’, 30 Novembre 2022

diversity, in type, composition and level of contamination strongly depends on its disposing entity⁶. Successful implementation of these systems will greatly depend on an EU harmonised policy and regulatory framework that will promote collection, sorting and recycling that are underpinned by stimulus investment measures and the confidence to deliver the required accompanying infrastructure.

- **Extended Producer Responsibility, driver of circularity:** EPR should incentivise the opportunity to secure an easy and open supply of high-quality recycled material for producers of plastics or plastic products. An EU cross-harmonised approach to EPR is required ensuring the unbureaucratic and easy access to recycled materials to promote the uptake of the recycling outputs. EPR should equally apply to products manufactured in Europe and to imported products from outside Europe.
- **CCU-based feedstock**
The development and scaling of CCU should be incentivised, including through consistent carbon accounting that recognises both biogenic and fossil CO₂ captured from industrial installations, as well as through the financial support of research and investment for the scaling-up of CCU technologies.

Furthermore, it is essential to **ensure that the use of circular plastics have genuine sustainability benefits**, based on a full Life Cycle Analysis (LCA). We therefore recommend the following boundary conditions for circular plastics to count towards the circular plastic target:

- **Environmental footprint**
 - Plastics made from bio-based or CCU-based feedstock should have a reduced carbon footprint, compared to fossil-based equivalent products, based on a methodology that credits the storage of biogenic and atmospheric or emission-based carbon in the feedstock
 - It is key to ensure that the combination of recycling technologies applied to the different waste streams provides the best environmental footprint such as GHG overall, in particular versus a situation where energy recovery or incineration is the alternative option. In particular, Lifecycle GHG emissions of chemically recycled plastics, including credit from avoided incineration, should be lower than the lifecycle GHG emissions of the equivalent material in primary form manufactured from fossil fuel feedstock
- **EU sustainability criteria for biomass**
Bio-based feedstock used to produce plastics should be sustainably sourced and comply with harmonised EU sustainability criteria. We support the same criteria applied to forest and agricultural biomass used for renewable fuels in the Renewable Energy Directive and its current revision- (2021/0218 (COD))
 - Agricultural or forest biomass is not obtained from land with high biodiversity value, in or after January 2008

⁶ Non-household end-use plastics: the 'forgotten' plastics for the circular economy;
<https://www.sciencedirect.com/science/article/pii/S2211339821000125>

- Agricultural or forest biomass is not obtained from land with high carbon stock, in or after January 2008
- Agricultural or forest biomass is not obtained from land that was peatland in or after January 2008
- Revised criteria on harvesting, notably on maintenance of soil quality and biodiversity
- In addition to the above requirements, in line with the circular economy principles, Plastics Europe supports the development of the use of second and third generation bio-based feedstock (e.g. organic waste and by-product), thereby diversifying the source of biogenic carbon
- **Complementarity between recycling technologies**
Plastic waste comes in many different types, quantities, and qualities and applications for recycled plastics require different quality and performance levels. All types of recycling technologies complement each other on waste side (input) and on product side (output). Chemical recycling is therefore a relevant technology where mechanical recycling is not technically feasible or economically viable for a given combination of type of waste and targeted quality of recycled plastics, for example where end-application requires virgin-like quality of recycled plastics.

Finally, whereas all types of circular plastics contribute to the same target, they should not be confused by the final consumer. Claims and labels on the recycled, recycled-attributed, bio-based, bio-attributed, CCU-based and CCU-attributed content at product level, should therefore be reliable and clear, be checked by accredited verifiers to improve transparent communication towards consumers.

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Plastics Europe is the pan-European association of plastics manufacturers with offices across Europe. For over 100 years, science and innovation has been the DNA that cuts across our industry. With close to 100 members producing over 90% of all polymers across Europe, we are the catalyst for the industry with a responsibility to openly engage with stakeholders and deliver solutions which are safe, circular and sustainable. We are committed to implementing long-lasting positive change.

