Taxonomy Regulation
– Delegated Act on transition to a Circular Economy

Plastics Europe feedback on the technical screening criteria (TSC) for determining the conditions under which an economic activity qualifies as contributing substantially to the transition to a circular economy

Plastics Europe supports the EU's ambition to accelerate the transition towards a climate-neutral and circular economy in the context of the Paris Agreement and welcome the efforts of the European Commission and of the Platform on Sustainable Finance to develop an EU-wide harmonised Taxonomy to foster investments in sustainable activities. In this regard, we call on the European Commission to consider the following feedback on the TSC included in the draft Taxonomy Delegated Act on transition to a Circular Economy:

I. Manufacture of plastic packaging goods (Annex II, p. 2)

Choice of feedstock

Plastics Europe supports measures that incentivize the use of recycled content in plastics packaging and accelerate a more circular economy for plastics packaging in Europe. To that end, Plastics Europe's member companies have already planned to increase considerably their investments in chemical recycling technologies with an estimated investment of up to 2.6 billion euros by 2025, rising to 7.2 billion euros in 2030 with respective production of 1.2Mt and 2.8 Mt[1] of recycled plastics.

The 65% (50% for contact sensitive) target included in the draft Delegated Act is an ambitious measure which will foster the uptake of plastics recyclates in plastic packaging and increase the use of renewable resources to produce plastics. However, there are still challenges related to the availability of recycled material, its variable quality, the efficiency of collection and sorting systems, and the inevitable material losses occurring during recycling processes. To maximize the potential of the 65% and 50% targets and to leverage its contribution to a circular economy, we would recommend **a combined target allowing all sources of feedstock** (mechanically and chemically recycled content, bio-based content and Carbon Capture and Utilisation) **to count towards the 65% and 50% targets.**

Explicitly allowing for the combination of all the feedstock options mentioned would mitigate the current reduced availability of bio-feedstock to produce plastics and the need for CCU technologies to be fully developed and to operate at scale. Indeed, considering the objective of the EU Taxonomy to address best-in-class technologies and products, the criteria should include CCU (as already

[1] Assuming the "fuels-use exempted" mass balance attribution rule applies.

identified in the Recommendations from the Platform on Sustainable Finance) to allow for appropriate financial and policy incentives which would unlock industry investments in the development of CCU technologies and should allow for the use of bio-based feedstock including a clear and predictable framework enabling the cost-competitive supply of sustainable feedstock for the plastics industry in Europe.

The use of bio-based feedstock should not only be limited to bio-waste. We call on the European Commission to consider bio-based feedstock of all forms in line with the EU Bioeconomy Strategy, including agricultural and forest biomass. The latter should comply with strict sustainability criteria to be developed by the European Commission based on the criteria already set out in the Renewable Energy Directive. The surface required to grow sufficient feedstock for today's bioplastics production is 0.015 per cent of the global agricultural area of a total of 5 billion hectares[2]. Furthermore, according to the European Commission study on Bio-based plastics - Sustainable sourcing and content "*At present, BBP are predominantly produced from cultivated crops; still they currently consume less than 0.04% of global biomass demand*".

A significant enabler for the calculation of the targets foreseen in the Delegated Act would be the **legal recognition and application of a workable and trusted mass-balance approach** in compliance with ISO 22095. The application of the mass balance approach would also support the important investments planned by the industry that allow chemical recycling, use of bio-based feedstock[3] and CCU to be deployed at scale in Europe.

Design of the product

When it comes to criteria for **"recyclable packaging",** Plastics Europe supports a format, technology, and material neutral definition. The definition should allow for a balanced technological assessment of the existing infrastructure while considering future technological developments.

Recyclability criteria should not be based on the so called closed-loop recycling only, as it is demonstrated that both open loop and closed loop recycling bring environmental benefits[4] and both are needed to achieve the circularity of the plastics system.

An open loop approach to recycling should be ensured in order to:

- allow for plastic waste from the non-packaging sector to be used to provide high quality and virgin quality plastic recyclates for the packaging sector
- allow recyclates from one packaging format to be used in another.

The definition proposed on **recyclability at scale** currently lacks the flexibility needed to include future developments in materials, technologies and applications. Furthermore, the recyclability at

[2] European Bioplastics, Fact&Figures2022
[3] Use of bio-based feedstock for production of biobased plastics should be calculated either with carbon-14 dating method or with mass balance.
[4] https://www.sciencedirect.com/science/article/pii/S0921344915300100

scale criteria under the Taxonomy Regulation should be consistent with the work the EU Institutions are carrying out on the Packaging and Packaging Waste Regulation proposal and on the JRC Study on plastics waste recycling. The recyclability criteria under the Delegated Act do not make any reference to the definitions (recyclability, design for recycling, mechanical and chemical recycling) which are being developed in these contexts. It is, thus, unclear how such requirements will work in practice if defined differently across EU legislation.

Regarding **additives** that could contaminate recycling streams once packaging becomes waste, we suggest that recyclability criteria explicitly enable the use of latest generation technologies – like chemical recycling – that are able to recycle these additives or the contaminated recycling stream. In addition, the use of certain additives should be assessed holistically and allowed where there are no other substitutes that allow the same required performance in terms of, for example, durability.

Criteria on the **restriction of substances of concern** should be coherent with the current existing – or under development – chemical and product specific legislation to ensure consistency and legal certainty for example in the application of test methods, interpretation of results and in the classification and labelling of substances. Since the Taxonomy framework is a "living" exercise, a future update of the criteria on substances of concern can be envisaged if conditional on the revision of REACH, CLP and product-specific legislation (Proposal for an Ecodesign for Sustainable Product Regulation).

Compostables

Biodegradable and compostable plastics should not be restricted to the four listed applications as they can play an important role in the transition towards a more circular economy for plastics and can constitute valuable resources when the right waste management options are in place. They divert biowaste away from landfills and incineration and can result in an invaluable soil amendment (compost).

In order to be considered biodegradable and/or compostable, the packaging should comply with appropriate standards such as ISO 18606 or EN 13432 and EN 14995. Furthermore, compostable packaging should be considered sustainable under the Taxonomy TSC whereas it does not negatively affect the recyclability of other packaging waste streams as it can be either recycled or separated from the other waste streams before being treated via organic recycling.

Do not significant harm (DNSH) criteria

The activity, to be considered as substantially contributing to circular economy, should also do no significant harm in relation to all the other taxonomy environmental objectives.

Plastics Europe supports a DNSH criterion on climate change mitigation aimed at favouring activities that allow GHG emissions reduction compared to manufacture of plastics in primary form.

As shown by the SYSTEMIQ study on Reshaping Plastics, chemical recycling can give rise to a step change in system circularity and plays a key role – together with mechanical recycling, design for

recycling, use of alternative feedstocks – to reduce GHG emissions and contribute achieving net zero by 2050.

We would, however, stress the need for the following improvements:

- The Taxonomy criterion fails to take into account the **contribution that chemical recycling brings to the climate**, as end of life treatment, compared to other end of life scenarios such as waste incineration. For this reason, Plastics Europe calls on the European Commission to include in the DNSH criteria that the life cycle assessment to calculate GHG emissions includes also the intended end of life treatment/scenario enabling to account for the emissions saved by avoiding incineration of waste. We therefore suggest adding in the text of the criterion "*taking into consideration the GHG emissions savings derived by avoiding incineration or landfilling*".
- To fully capture the benefits of using bio-based feedstock for the production of plastics, an LCA analysis should also take into consideration the **temporary storage of biogenic carbon.**

II. Manufacture of circular electrical and electronic equipment (Annex II, p. 7)

The inclusion of Chlorine-based plastics such as PVC in the list of "hazardous substances which should be proactively substituted" is unjustified. PVC is an inert polymer (1) which meets the OECD definition as a Polymer of Low Concern (2) and its exclusion would be discriminatory.[5][6]

III. Construction of new buildings (Annex II, p. 32)

Plastics Europe encourage the increased use of recycled or biobased/renewable plastics in construction products as long as the quality, durability and long-lasting performance of the final product are ensured.

Since recycled content in construction products must comply with stringent technical requirements, its use in certain buildings' components might not be technically permitted or subject to a maximum value. In view of the above we believe that the overall target of 50% on non-primary raw material under the Delegated Act should be adjusted and should be achievable with a flexible combination of recycled, reused, bio-based plastics or plastics deriving from CCU technologies.

[5] European Commission (2004) "Life Cycle Assessment of PVC and of principal competing materials". European Commission, pp. 82.
[6] OECD (2009) "Data Analysis of the Identification of Correlations Between Polymer Characteristics and Potential for Health or Ecotoxicological Concern.". Organisation for Economic Co-operation and Development (ENV/JM/MONO(2009)1), pp. 11.

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.