

# The Renewable Carbon Initiative's position on the Commission Proposal for a Packaging and Packaging Waste Regulation

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## Introduction

In November 2022, the Commission adopted the Proposal for a Regulation of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC. The proposed regulation includes several rules that would – if implemented – push for a much stronger circular economy in the packaging sector, due to higher re-use and refill quotas, higher use of recycled materials and increased composting of hard-to-recycle products. The Renewable Carbon Initiative (RCI) welcomes this proposal and wants to offer several suggestions to strengthen it further and get implementation closer to the market realities of Europe.

## RCI supports a strong circular economy as a key lever for the net-zero transition

As a proponent of an accelerated shift from using fossil resources to renewable carbon sources in the European industry, the Renewable Carbon Initiative promotes recycling, biomass and carbon capture and utilisation (CCU) as sustainable carbon sources for sectors that cannot be decarbonised due to their very nature – which includes all products made from organic chemistry, also packaging. All three carbon sources – we call them *renewable carbon* – should receive support to enable a truly circular carbon economy that does not require any additional, virgin fossil feedstocks from the ground.

## What we ask for

### 1. Set ambitious targets for all types of renewable content

We are convinced that today's most pressing task is to reduce our use of virgin fossil carbon. Increasing recycled content in products is a very important step in this direction, but bio-based and CO<sub>2</sub>-based materials offer the same opportunity, and together, all three can keep carbon in an infinite circle. The Renewable Carbon Initiative welcomed the European Commission's aspirational target of at least 20% sustainable, non-fossil carbon to be used in chemicals and plastics by 2030, as expressed in the Communication on Sustainable Carbon Cycles. We called for follow-up and implementation of this vision through regulatory measures, such as the PPWR, to incentivise the use of different renewable carbon sources in addition to recycled materials. The PPWR proposal should therefore seize the opportunity to boost the potential of biomass and direct carbon capture and utilisation in contributing to a sustainable packaging industry. These materials can offer similar GHG reductions as recycled packaging and they offer flexibility for producers in implementing

sustainable solutions, thus accelerating the EU's green transition and decreasing dependency on fossil feedstocks in the packaging sector. Sustainability criteria for biomass can be drawn from existing legal frameworks such as the Renewable Energy Directive, which are also accepted by the Taxonomy technical screening criteria for the production of plastics from renewable resources and which are applied in practice already through a multitude of voluntary certification schemes for bio-based plastics.

**We therefore ask the Commission, the European Parliament and the Council to include in the proposal a complementary renewable content target promoting the use of bio- and CO<sub>2</sub>-based feedstocks in packaging.**

## 2. Keep Article 8 as it is – scientific evidence shows that these products offer true environmental benefits from being compostable

Article 8 of the Commission proposal requires that certain types of tea and coffee packaging, sticky labels attached to fruit and vegetables as well as very lightweight plastic carrier bags shall be compostable in industrially controlled conditions in bio-waste treatment facilities. This provision follows scientific evidence that has shown that for certain types of packaging, biodegradation or composting offers true environmental benefits.<sup>1,2,3</sup> This applies to packaging where the separation of the product from other organic waste is not possible, where material recycling is not possible or economically feasible, where due to high moisture content thermal recycling makes little sense, where the use of compostable materials prevents microplastics from entering the environment or where the product offers secondary benefits such as increased collection rates of bio-waste.

**The products listed in Article 8 fulfil these criteria. Making them compostable will bring environmental benefits and should therefore be promoted. We therefore strongly urge policy makers to respect the science and keep the article as it is – it would be a great step towards a more sustainable packaging landscape in Europe.**

At the same time, the establishment of composting infrastructures should be further strengthened in the Member States. We also call for a further definition of “recyclability” in the upcoming delegated acts that acknowledges these advantages and recognises also that biodegradable and compostable thermoplastics are technically mechanically recyclable.

## 3. Support the market uptake of all state-of-the-art recycling technologies

To actually achieve the ambitious recycling quotas and recycled content targets, technologies will have to evolve. Mechanical recycling technologies no-doubtedly provide important and valuable solutions for dealing with plastic waste. They have been well established, operate at scale and show lower GHG emissions than chemical recycling<sup>4</sup>. However, they also have significant limitations. These especially relate to the polymers they cover, acceptable contamination and to only covering the polymer loop. Advanced recycling technologies, such as depolymerisation (thermochemical, solvolysis, enzymolysis), gasification, pyrolysis and others offer opportunities to valorise waste streams that cannot be recycled by conventional technologies and are able to close the monomer and molecular loops.

The new technologies would profit strongly from higher political support and we call on policy makers to create dependable framework conditions. As one urgent step, acceptable mass balance methods for tracing recycled and renewable materials through the value chains need to be determined by policy makers to provide market security. **The methodology for calculating and verifying the percentage of recycled content**

**recovered from post-consumer waste and contained in packaging should account for the mass balance chain of custody models (Article 7, par. 7 & 8). Furthermore, the definition of end-of-waste criteria being developed by the JRC should also include chemical recycling technologies in its scope (currently, they are excluded).**

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<sup>1</sup> Hann, S. et al. 2020: Relevance of Biodegradable and Compostable Consumer Plastic Products and Packaging in a Circular Economy. March 2020. <https://op.europa.eu/de/publication-detail/-/publication/3fde3279-77af-11ea-a07e-01aa75ed71a1>

<sup>2</sup> Group of Chief Scientific Advisors 2020: Biodegradability of Plastics in the Open Environment. December 2020. <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/0c0d6267-433a-11eb-b27b-01aa75ed71a1>

<sup>3</sup> Bauchmüller, V. et al 2020: BioSinn – Products for Which Biodegradation Makes Sense. <https://renewable-carbon.eu/publications/product/biosinn-products-for-which-biodegradation-makes-sense-pdf/>

<sup>4</sup> Garcia-Gutierrez, P. et al. 2023: Environmental and economic assessment of plastic waste recycling, EUR 31423 EN, Publications Office of the European Union, Luxembourg, 2023. <https://publications.jrc.ec.europa.eu/repository/handle/JRC132067>

Disclaimer: RCI members are a diverse group of companies, institutions and associations addressing the challenges of the transition to renewable carbon with different approaches. The opinions expressed in this position paper may not reflect the exact individual policies and views of all RCI members.

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