

EuropaBio recommendations for the Circular Economy Act (November 2025)

Biotechnologies play an essential role for the delivery of EU goals for competitive, healthy, resilient and sustainable economies and societies. Biotech is a driver of high value and disruptive innovation and circularity, for example by using alternative feedstocks such as CO₂ in addition to secondary materials. It is also unique as it enables the production of biologically active and structurally complex molecules that conventional chemistry cannot generally manufacture or produce efficiently. This makes biotechnology applications indispensable in health, agri-food, chemicals, manufacturing of consumer goods and more throughout our industrial and social ecosystems. It is a hallmark of success, demonstrating EU growth and benefit through innovation. The EU must therefore urgently prioritise their scale-up and access to EU and global markets, as this will be vital for the EU to stay in the global race of clean and disruptive technologies.

Biotechnology and bioeconomy are key cross sectoral circularity enablers that rely on renewable raw materials, enhancing resource efficiency while adding value in the process.

The Circular Economy Act must foster a holistic, coherent and supportive policy framework for biotechnologies. Policy coherence should particularly be ensured with the Bioeconomy Strategy as their synergy could boost the achievement of EU circularity objectives. Other initiatives such as the Biotech Act, Competitiveness Compass, the Clean Industrial Deal, Critical Raw Materials Act, and Eco-design for Sustainable Products Regulation should also align with the Circular Economy Act.

The Circular Economy Act must further leverage biotechnology's potential to support circularity by:

1. Removing regulatory barriers
2. Fostering enabling ecosystems and market uptake

1. Removing regulatory barriers

Many existing frameworks were not designed with biobased and bioprocesses such as biotech in mind, leading to inconsistencies and barriers that slow down innovation and, in some cases, lead to waste generation. The EU needs to modernise its regulatory frameworks to create coherent, innovative and circularity-friendly pathways for biotech products without compromising high EU standards.

The Circular Economy Act should move beyond a sole focus on secondary raw materials and support instead integrated processing of biomass into multiple outputs, enabling circular value chains. Industry must retain **flexibility to use the most sustainable feedstocks**, including primary biomass. As shown in the nova-Institut's [study](#)¹ which was commissioned by EUBA², this approach benefits food security, biodiversity, agriculture, and climate goals.

Align legislation with circularity principles. Both technical and regulatory barriers are currently impacting the economic viability of processes using bio-based secondary feedstocks. EU legislation and their implementation need to be aligned with circularity principles. For example, Regulation 1829/2003 on GM food and feed is detrimental to circularity as it hampers the use of safe by-products which have a nutritional value and even in some cases can generate more waste.

Simplify permitting procedures for biorefineries. The Circular Economy Act should promote biotechnologies and infrastructure that convert waste into valuable resources for new products. Biorefineries, where industrial biotechnology helps convert renewable feedstocks (which can include municipal solid waste, agricultural and forestry waste) into everyday products, are at the centre of the circular economy.

2. Fostering enabling ecosystems and market uptake

The Circular Economy Act's mix of interventions should also include **market pull measures**. While bio-based content targets could be part of this mix, they should not be a primary measure for policymakers and should be set carefully as they could have unintended effects. Market pull measure should also include an expansion of the **scope and implementable criteria for public procurement** of circular goods to include bio-based products and biotech applications outside of healthcare.

Public-private partnerships such as CBE-JU, and mechanisms from across programmes over the long term (e.g., IPCEI, centres of excellence hubs) must be deployed to accelerating the deployment of circular ecosystems

Strategic partnerships with partner countries should be established to remove trade barriers, enable regulatory cooperation, and safeguard innovation to improve the resilience of supply chains for biotech, including raw materials, feedstock, and intermediates for biotechnology use.

¹ <https://renewable-carbon.eu/publications/product/benefits-of-using-first-generation-biomass-for-food-fuels-chemicals-and-derived-materials-in-europe-pdf/>

² <https://www.bioeconomyalliance.eu/>