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**Circular
Bio-based
Europe**
Joint Undertaking



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EU Bioeconomy Strategy Actionable policy recommendations

Roberto Ferrigno
European Bioeconomy Bureau
ferrigno@bioeconomybureau.eu



**The European
Investment Bank**

**Scaling Up
Europe's Bio-
Based Industries**



The European Investment Bank

Scaling Up Europe's Bio-Based Industries

The European bioeconomy is vital for achieving **sustainability** and **carbon neutrality**, with significant potential for job creation and innovation.

Valued at **€2.3 trillion**, representing **8.0% of the workforce**.

Integral to achieving climate goals and the **Sustainable Development Goals** (SDGs).

Focuses on **sustainability**, **economic growth**, and **climate action**.

Addresses challenges like **food security** and **resource management**.

A strong bioeconomy supports the **green transition** and **environmental sustainability**.

Barriers to Growth in Bio-Based Industries

The study identifies key challenges hindering the growth of Europe's bio-based industries.

Markets & Regulations

Unfocused regulations and fragmented markets disadvantage European projects.

Insufficient early-stage capital

Especially for pilot and demonstration plants

Lack of market competitiveness

Bio-based products often cost more than fossil-based alternatives.

Offtake contracts

Difficulty in securing offtake contracts limits investor interest.



Investment Gaps and Funding Challenges

Funding gaps

The study highlights specific funding gaps in the bio-based industry and the need for targeted financial instruments.

Two main gaps

Identifies two main funding gaps: from pilot to demonstration plants and from demonstration to industrial facilities.

Market demand

Innovative bio-based products are often more expensive to produce, raising concerns about market demand.

The role of the ECBF

The European Circular Bioeconomy Fund (ECBF) aims to address these funding challenges.

Recommendations for Financing Bio-Based Projects



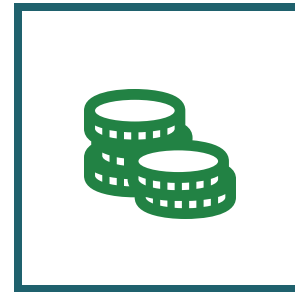
Deployment Group

Establish a Deployment Group focused on finance and investments in the bioeconomy.



Booster programme

Develop a European bioeconomy booster programme to support promising projects.



Venture debt investments

Enable the EIB to provide venture debt investments under InvestEU.



Expand the ECBF model

Expand the ECBF model for high-risk investment in early-stage ventures.

The Commission communication

The Commission communication

- The EU bioeconomy is valued at up to EUR 2.7 trillion in 2023, employing 17.1 million people (8% of EU jobs).
- R&D investment in bioeconomy sectors reached EUR 23.2 billion, accounting for 9% of all R&D investments in the EU.
- The strategy emphasizes the need to accelerate the transition from bioeconomy potential to market deployment by addressing barriers and increasing investments.
- Regulatory complexity hinders market entry for bio-based products, leading to delays and increased costs.
- The Commission plans to simplify regulations and accelerate product authorisations through the **EU Biotech Acts**.
- A **European Bioeconomy Regulators and Innovators' Forum** will be established to streamline risk assessments and approvals.
- Bioeconomy sectors face two '**valleys of death**' in scaling: from demonstration to commercial production and from market entry to industrial scale.

Developing Lead Markets for Bio-Based Solutions

Lead markets for bio-based materials

Identifying and strengthening lead markets for bio-based materials can unlock private investment and enable scale-up.

Priority sectors

Priority sectors include **bio-based plastics, textiles, and chemicals**, which have high potential for growth.

Efficient biomass use

Efficient biomass use is crucial, directing it towards **higher-value applications** while maintaining ecosystem services.

Public procurement

Public procurement can create early demand for **innovative bio-based solutions**, supported by the Commission's guidelines.

Bio-based Europe Alliance

The **Bio-based Europe Alliance** aims to ensure predictable demand for bio-based materials, targeting EUR 10 billion by 2030.

Efficient Use of Biomass Resources

Promoting Bio-Based Construction Materials

Enhancing Bio-Based Fertilizers and Plant Protection

- Measures will be proposed to support the use of **bio-pesticides** and assess the safe use of **aquaculture sludge**.

Scaling Up Bio-Based Technologies

- The **EU ETS review** will explore pathways to recognize biogenic permanent removals.
- The Commission will support biorefineries through blended-finance instruments and facilitate the development of **Industrial Symbiosis Valleys**.

Ensuring Sustainable Biomass Supply

- The EU aims to maintain self-sufficiency in biomass while ensuring sustainability and ecosystem health.
- **The EU is approximately 90% self-sufficient in biomass supply.**
- Circularity is emphasized to reduce pressure on primary production systems and improve resource efficiency.
- The Commission will promote local circular uses of by-products and support biogas production.
- Sustainable biomass potential will be assessed to balance production with ecosystem restoration.

Efficient Use of Biomass Resources



The strategy promotes the **efficient use of biomass** to maximize value and minimize environmental impact.

Biomass should be directed towards **higher-value products**, with residual streams used for energy where necessary.

The **CAP Strategic Plans and National Energy and Climate Plans** will support efficient biomass use.

The **Renewable Energy Directive** will be evaluated to assess its impact on biodiversity and sustainable feedstock availability.

EU Bioeconomy Strategy

**Legislative Levers
(2025–2030)**

EU Policy Landscape

Shaping the Circular & Bio-Based Economy



Industrial Decarbonisation Accelerator Act (IDAA)

Streamlines permitting processes for clean technologies and actively create markets for low-carbon products (Q4?)



CBE JU funding & Flagships

Funding to be increased (2026)



Chemicals Industry Action Plan

It positions bio-based chemicals as strategic and proposes measures (incentives, market support) that intersect with bioeconomy goals.

[Critical Chemicals Alliance](#)



IPCEIs for biomanufacturing

(State Aid) (2026)



Ecodesign & Digital Product Passport (ESPR/DPP)



Circular Economy Act (CEA)

EPR, end of waste, organic waste collection, enhanced recycling, waste shipments....(2026)



Packaging and Packaging Waste Regulation

Under the PPWR, the Commission will:

- I) support the recognition and uptake of bio-based plastics and novel materials, in complementarity with recycled content targets, ensuring a coherent approach across applications;
- II) assess whether EU-wide definitions could support certification and scaling of biobased polymers.

**Circular
Economy Act**

What to expect?

Circular Economy Act – What to expect?

“

The forthcoming Circular Economy Act is not an isolated initiative but part of a broader “winter package” to accelerate Europe’s transition to sustainability and competitiveness. Target-setting alone is insufficient. We need to focus on what truly transforms EU’s economy therefore we urge stakeholders to contribute practical, implementation-focused input during ongoing consultations.

”

Luis Planas Herrera

from the cabinet of Commissioner Jessika Roswall

Circular Economy Act – What to expect?

Collective responsibility

Circularity must involve all sectors and Member States; it is both an environmental and an industrial imperative.

Legislative coherence

The Act will need to align with related frameworks such as the **Ecodesign for Sustainable Products Regulation (ESPR)** and the upcoming **Industrial Accelerator Act**, ensuring that product and production standards work in tandem.

Trade realism

The Commission recognises that Europe faces a “**plastic recycling crisis**” and must act to safeguard its recycling industry while avoiding protectionism that could undermine competitiveness.

Governance and harmonisation

The CEA will aim to remove internal market barriers by **harmonising definitions** like “waste” and “end-of-waste,” fostering a single European circular market.

Economic security and resilience

The circular economy should be seen as a tool to **reduce dependence on external suppliers of critical raw materials** and to strengthen the EU’s industrial autonomy.



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Thank you.

www.prosperbioplastics.eu
info@prosperbioplastics.eu

