



The Bio-based Industries Consortium (BIC)

A governance model at private level promoting industries sector partnership

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The Bio-based Industries Consortium (BIC) is a non-profit organisation connecting industry, academia, regions and citizens to transform bio-based feedstocks into novel sustainable products and applications, and create circular bioeconomy ecosystems through investments, innovation and know-how.

300+

industry (full) members

large companies and SMEs

240+

associate members

research organisations, academia and trade associations



1 CBE JU	2 Business
<ul style="list-style-type: none"> ⌚ BIC represents the private sector in a public-private partnership with the European Commission called the Circular Bio-based Europe Joint Undertaking 	<ul style="list-style-type: none"> ⌚ Facilitating connections and providing market intelligence through activities including networking events and commissioned reports/studies
3 Finance	4 Society
<ul style="list-style-type: none"> ⌚ Mobilising public and private finance and investors through services such as a regional funding platform and a pitching event 	<ul style="list-style-type: none"> ⌚ Increasing awareness, knowledge, acceptance and education through activities such as a student competition (BISC-E) and positive impact stories on the BIC Investment Portal



BIC also carries out specific activities to achieve a favourable policy, regulatory and financing framework for the bio-based industries, such as representing our members interest vis-à-vis the EU Institutions.

BIC membership

65 Large companies

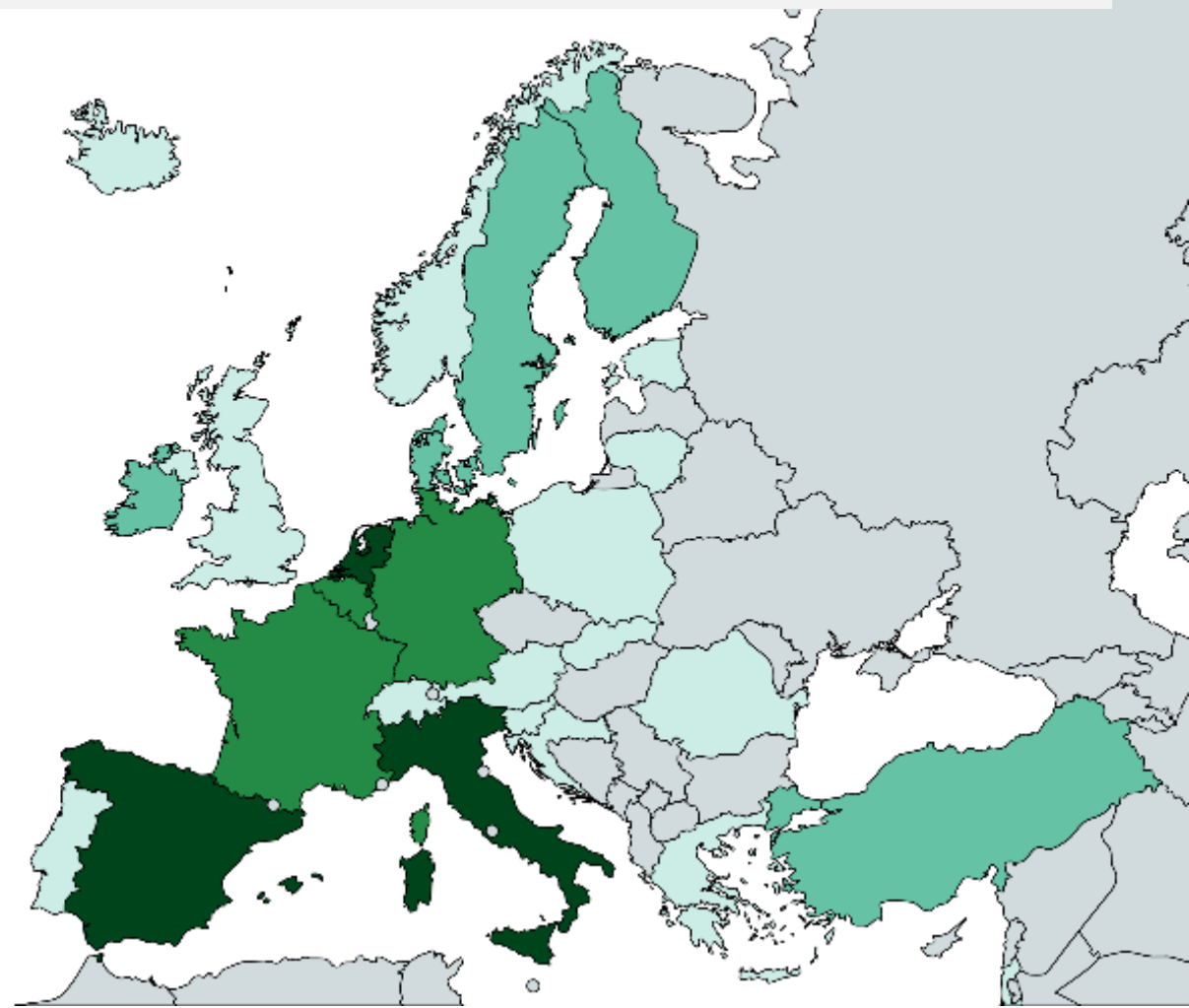
140 SMEs
of which 47
microenterprises

15 Clusters
representing 100+ SMEs

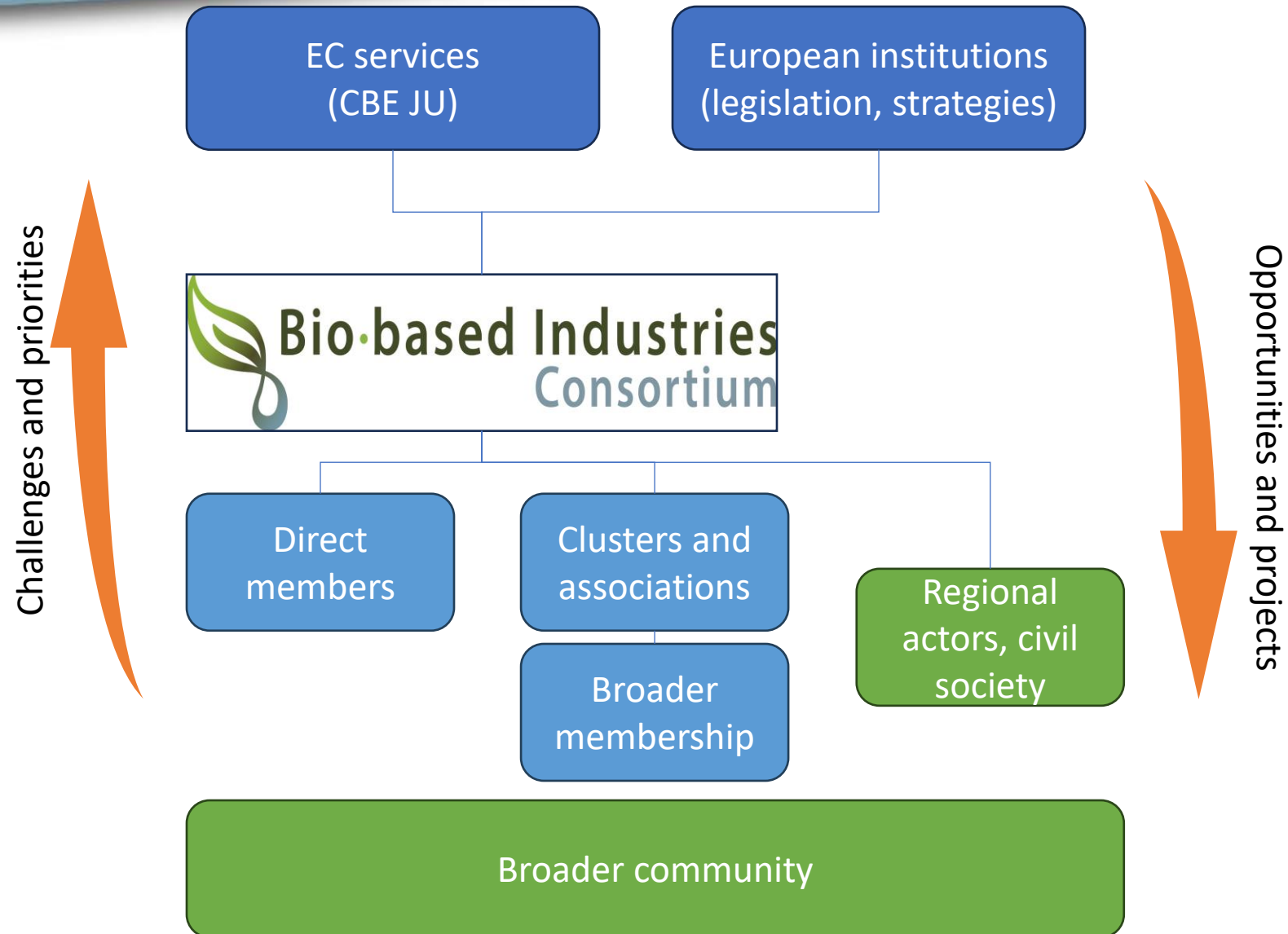
240 Associate members
Universities, RTOs,
associations, regions



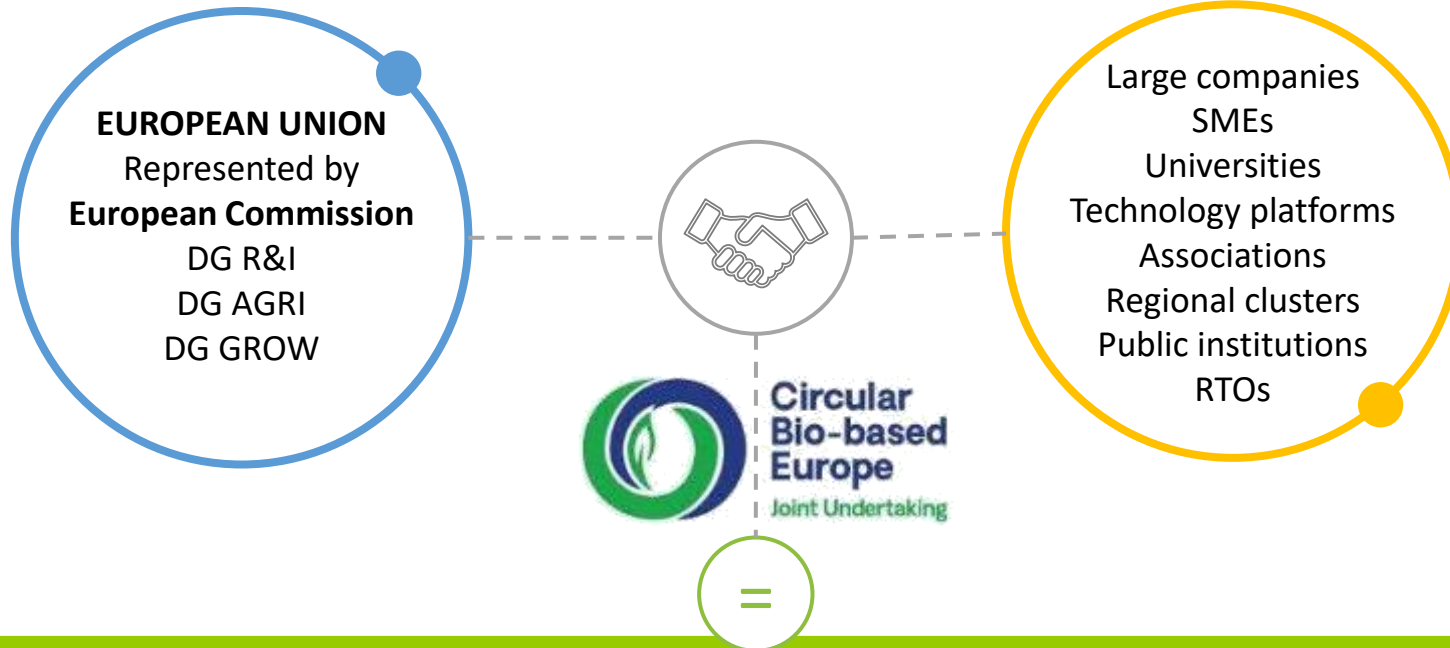
Map showing the European headquarters of industry members. We have members from North America, South America and Middle East



BIC as an intermediary for bioeconomy stakeholders



CBE JU



CIRCULAR BIO-BASED EUROPE JOINT UNDERTAKING (CBE JU)

What is CBE?

- Institutionalised Partnership under Horizon Europe
- Funding Research and Innovation projects up to TRL 8 (*unicum!*)
- 6 annual calls for proposals, from 2022 to 2027
- Budget: € **1 billion of public funding** + € 1 billion industry investment

Advisory bodies: States Representatives Group; Scientific Committee; Deployment groups

BBI+CBE JU Flagship and Demo plants

On the map

CBE JU is funding first-of-their-kind biorefineries and demonstration plants to help expand the European circular bio-based economy.

Select what you want to see:



Demonstration plant



Flagship biorefinery



CBE JU governance - BIC's role

Advancing competitive, sustainable circular bio-based industries in Europe



Public-private partnership



Formulate the Strategic Research & Innovation Agenda (SRIA) with the EC



Develop with EC the Annual Work Programmes



Play an active role in CBE governance



Cooperate with CBE JU advisory bodies and Programme Office

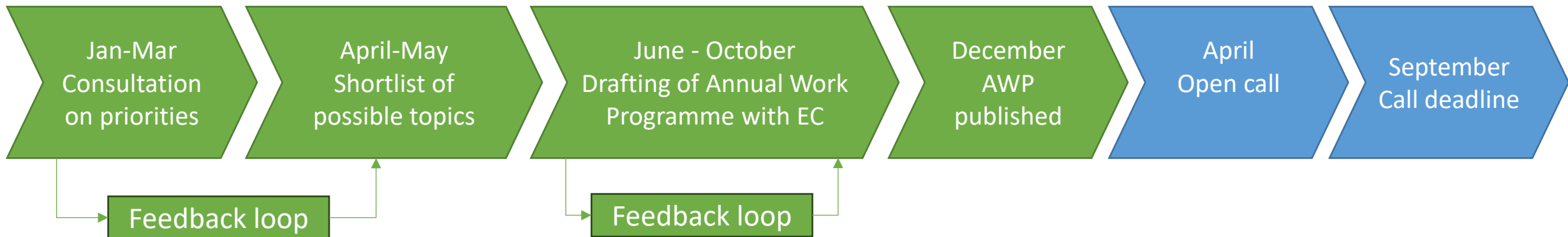
CBE JU governance – the role of BIC members

BIC Industry Members and Associate Members both involved in respective **Working Groups**.

The Working Groups:

- Identify industrially relevant technical challenges to be addressed by CBE AWP (short term and medium-long term) at RIA, IA, FLAG level
- Identify cross-cutting priorities to be addressed by CBE AWP in CSAs
- Review draft topic content and contribute with topic-specific input in the framework of AWP preparation

Every calendar year is dedicated to the formulation of the AWP for the following year.



The BIC Trend Report and Manifesto 2024



1.

The EU must act to maximize the potential of the bioeconomy for a circular, climate-neutral and green economy

The bioeconomy can play a fundamental role in **defossilising the materials and chemicals sector** and in creating sustainable carbon cycles.

This **opportunity is currently underutilised** and could be increased by using (carbon from) a diverse range of renewable feedstock, including biomass, bio-waste, recycled bio-based materials and CO₂. To reduce the use of new virgin fossil feedstock, the current EU policy focus on recycling of fossil-based carbon is not sufficient.

The bioeconomy enables a truly circular and climate neutral economy by ensuring that the renewable **carbon is kept in the loop** over the entire product life cycle – and can be recycled again or returned to the soil.

The bioeconomy is **continuously innovating** to manufacture and recycle products more efficiently, thereby growing the green economy in the EU.

2.

The EU must ensure the reliable supply of sustainably sourced biomass by providing a coherent, long-term policy framework for the circular bioeconomy

Biorefineries efficiently transform and valorise biomass into food, feed, products, and energy. They are at the core of the bioeconomy, delivering sustainable solutions, jobs and rural development, in line with society's needs.

Investing in and building new modern/innovative biorefineries is a long-term and capital-intensive undertaking. Their profitability is bound to their capacity to serve different markets across food, feed, and industrial sectors simultaneously, and to efficiently create value from all fractions of different renewable feedstocks.

The bioeconomy nurtures and preserves healthy and resilient ecosystems, which are crucial for the EU's transition to a climate-neutral economy and for safeguarding biodiversity. Virgin feedstock, by-products, recycled streams, and waste are all crucial feedstocks for the development of bioeconomy. They are complementary pathways to defossilising the EU economy.

3.

The EU must create and expand market opportunities for bio-based products to spur innovation, sustainable growth and secure strategic autonomy

The bioeconomy supplies bio-based products which are largely sourced, manufactured, used and recycled in Europe. Growing the market for bio-based products enhances Europe's strategic autonomy.

For the bio-based industry to be able to meet European consumers' demands for a sustainable lifestyle and associated products, the EU regulatory framework should promote and accelerate the market entry of sustainable innovations and boost the necessary investments.

The EU must develop its own bold bioeconomy action plan to respond to investments and incentives in the US, China and elsewhere.

The EU Biotech and Biomanufacturing Initiative

Some key recommendations from BIC

Accelerate Europe's bio-manufacturing capability from lab scale to pilot/demo; and flagships to commercial markets

1. **Improve approval process** and remedy regulatory hurdles to bring new biobased products faster to market, e.g. perform a “Bio-Fitness Check” to improve the clarity and efficiency of the regulatory process by identifying areas of ambiguity, gaps, or uncertainties,
2. **Make Europe a powerhouse for up-scaling bio-based innovation:** support, co-fund and **de-risk biomanufacturing infrastructure** (pilot, demo, flagship) and improve access to finance for biorefineries (De-risk and leverage existing and new investments in the bio-based industries. Examine opportunities and bottlenecks for state aid rules applied for the bio-based industries, ...)
3. Set up a plan how to enable regions and rural development (DG REGIO, together with other DGs), e.g. a **Regional Innovation Engine program**, in particular for accelerating biorefineries currently at DEMO and FLAG level to commercial level.

The EU Biotech and Biomanufacturing Initiative

Some key recommendations from BIC

Increase supply of sustainable biomass for biomanufacturing in Europe

1. **Apply scientifically sound sustainability criteria for using biomass**, and change EIB eligibility rules to allow for the use of primary biomass
2. Focus policies on the end-product, not on the processes used to produce them, and **make policies technology neutral** across production methods
3. Stimulate development and **use of underutilized sources of biomass** such as from waste, residues, aquatic, etc. Develop programs for biowaste collection and infrastructure for valorizing the use of biowaste. Currently only 16% of biowaste potential is utilized in Europe
4. Create **level playing field** between use of biomass for materials and use for energy/fuels

The EU Biotech and Biomanufacturing Initiative

Some key recommendations from BIC

De-fossilize products and materials beyond renewable energy, recognize that use of virgin fossil resources is not an option

1. Assess financial and **market creation incentives** stimulating defossilization (fossil free carbon), e.g. reduced VAT rates, bio-based label & green public procurement, make 'renewable carbon' a criteria for sustainable financing e.g. in EU taxonomy
2. Set **concrete targets** for the use of fossil free content (bio-based or CO₂) in products and materials and **create market-opportunities** for bio-based consumer products, e.g. establish a regulatory framework for the 20% target for plastics and chemicals by 2030 from sustainable carbon sources.
Match the ambition of the US in setting bold goals e.g. "In 20 years, produce at least 30% of the U.S. chemical demand via sustainable and cost-effective biomanufacturing pathway" or in China (14th five-year plan , 2035 vision) on the ramping-up of the bioeconomy

Better recognize renewable carbon as a key element for the green transition

1. Make 'renewable carbon' a criteria for sustainable financing e.g. in EU taxonomy
2. Adjust **PEF methodology** to reflect the difference in biogenic carbon versus fossil carbon

A few early reflections on the Draghi report

“ Europe must profoundly refocus its collective efforts on closing the innovation gap with the US and China, especially in advanced technologies.”

Mario Draghi




In the case of the bio-based industries and bioeconomy, the EU is strong when it comes to innovation, but the US and China are catching up. Let's keep the EU in lead position.

If you combine the results of three recent and important EU reports*, the bioeconomy is the one of the few sectors that can deliver on all.




* Letta on the single market, Strohschneider on agriculture and Draghi on competitiveness.

The third area for action is increasing security and reducing dependencies. Europe needs a coordinated strategy covering the entire value chain, from raw materials to final products.



... the bioeconomy can help through its shorter supply chain and material substitution, including for critical raw materials like lithium or cobalt.

 Bioeconomy is never mentioned in the report – only bioenergy, biofuels and biomedical!

 However, bioeconomy is instrumental to deliver on practically all the strategic economic objectives – competitiveness, resilience, autonomy... **and** on circularity and sustainability

We need to make sure that this is not missed by key policymakers!

An exciting period ahead of us...

- Biotech and Biomanufacturing Initiative implementation
- Revision of the Bioeconomy Strategy
- Role of bioeconomy in the new EC & Draghi plan implementation
- Definition of FP10/Horizon X including new partnerships



1

Simplified regulatory framework and faster access to market

- Launch a study analysing how biotech legislation could be further streamlined. This study could lay the foundations for a possible EU Biotech Act.



2

Better support for scale-up and ease of navigating regulations

- Establish an EU Biotech Hub to help companies navigate through the regulatory framework and identify support to scale up, by end 2024.



Encourage more investments

3 4

- Launch a study to identify barriers and ways to support the consolidation of investment funding, by mid-2025.
- Advocate for the inclusion of biotech and biomanufacturing as part of the European Innovation Council accelerator Work Programme 2025.



Enable fair comparison with fossil-based products

5

- Further develop methodologies to ensure a fair comparison between fossil-based and bio-based products, in 2025, including the review of the Product Environmental Footprint.



6

Accelerate the uptake of AI in biotechnology together with stakeholders

- Support structured exchanges with businesses and industry in biotech and biomanufacturing in the context of the GenAI4EU initiative.
- Raise awareness of facilitated access to the EuroHPC supercomputers for AI startups and the science and innovation community.
- Support the development of advanced generative AI models for healthcare, leveraging data, existing tools and using EuroHPC supercomputing capacities.



7

Foster a larger market for biotechnology and biomanufacturing

- Deepen cooperation with international partners, such as the US, on biotechnology research, under the Science and Technology Agreements, by end 2024.



Review the EU Bioeconomy Strategy by end 2025

8

- By taking into account the current societal, demographic and environmental challenges, reinforcing the bioeconomy's industrial dimension and its links to biotechnology and biomanufacturing to contribute to a stronger EU economy.

... do you want to be part of it?

JOIN US!

Biconsortium.eu/membership

The bioeconomy is part of the solution to master the green transition

The bioeconomy has a much greater economic potential than the current share of the EU economy. New materials and products with unique properties can create new markets and growth opportunities. The bioeconomy can also contribute to other societal objectives, in particular to climate and environmental objectives by 2050. The circular bioeconomy is part of the solution, it can power a climate-neutral, sustainable, resilient and competitive Europe.

But this cannot happen by itself.

EU policymakers must take action to realise the full potential of the circular bioeconomy to reach the EU's environmental, economic and social goals.



Europe must build on the strength of its bioeconomy. With a turnover EUR 2.5 billion (of which ca. 30% is in the bio-based industries), the sector provides employment to nearly 18 million people. The bioeconomy, with biorefineries at its core, supplies bio-based products which are largely sourced, manufactured, used and recycled in Europe. The science is excellent across academia and universities. Thousands of European companies are active and at the forefront of bio-based innovation.

Thank you!

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Download our trend report and manifesto:
<https://biconsortium.eu/knowledge-hub>

