

**A new EU bioeconomy strategy and action plan:
Calling for tangible action to scale up the circular bioeconomy**

In 2012, the EU Commission proposed its first EU bioeconomy strategy and action plan to pave the way for more innovation, resource-efficiency and competitiveness. Since then, the economic and political context in the EU has changed, with more emphasis on climate change mitigation, circular economy and the UN's Sustainable Development Goals (SDG). Hence, the EU bioeconomy strategy and action plan are to be updated by the European Commission in 2018.

The Bio-based Industries Consortium (BIC) believes the EU should seize this opportunity to aim for an ambitious and action-oriented update, taking into account the following:

1. **Don't stop the innovation train:** The Bio-based Industries Joint Undertaking (BBI JU or "BBI 1.0") has been a success story for the EU's competitiveness by accelerating R&D and innovation, enabling a double-digit growth in 2016, €5 billion of future industry investment and hundreds of thousands of extra jobs¹. To maintain the EU leadership role in the bioeconomy, continued investment and a second round of the Joint Undertaking - BBI 2.0. - are necessary. Stopping now would mean losing out on investments already made.
2. **The EU should champion the bioeconomy:** The bioeconomy helps the EU lead in delivering on its circular economy and low-carbon economy goals, as well as on most of the UN Sustainable Development Goals. More ambition and coherence in EU policy-making are required for innovation and bioeconomy business to prosper and to keep knowledge and investments in Europe.
3. **Make the EU Bioeconomy Strategy tangible for consumers and businesses and capable of delivering concrete consumer benefits:** Promote bio-based products and raise public awareness in order to create an EU internal market for sustainable alternatives to fossil-based products.

¹ <https://www.bbi-europe.eu/news/bio-based-industries-europe-building-double-digit-growth>

The EU is a global leader in the bioeconomy and few sectors match the rise of Europe's bio-based industries. Together these sectors represent 9% of the EU's workforce and are worth EUR 2.2 trillion in turnover. The advantage of the bioeconomy lies in the fact that it provides new food, feed and materials, but also can replace fossil carbon-based chemicals, materials, fuels and energy. At the same time, the bioeconomy delivers on growth and jobs, including in regions and rural areas.

The Bio-based Industries Consortium (BIC) represents the private sector in a public-private partnership (PPP) with the EU, represented by the European Commission, known as the Bio-based Industries Joint Undertaking (BBI JU or "BBI 1.0"). This is one of the pillars of the European Commission Bioeconomy Strategy from 2012.

New context, new bioeconomy strategy

The European Commission proposed in 2012 a bioeconomy strategy and action plan in order to pave the way for more innovation, resource-efficiency and competitiveness, fostering the shift to a post-petroleum society. A key focus was to bring new low carbon technologies onto the market. Such a strategic approach was necessary to maintain the EU leadership role in the bioeconomy and to cross over the innovation valley of death - by bridging the gap from research to the marketplace.

However, since 2012 the political and economic context has changed significantly. Not only have other global regions increased their efforts to leverage their local bioeconomies, but also the EU is committed to new political objectives including, amongst others, the Juncker Priorities, UN Sustainable Development Goals (SDGs), the Paris Climate Agreement, the circular economy, energy union and the future of farming.

The bioeconomy contributes to most UN SDGs and also to the Paris Climate Agreement by decoupling the economy from fossil resources and contributing to climate change mitigation by providing low-carbon solutions.

The bioeconomy is the “green motor” of the circular economy

The bioeconomy is circular by nature, using all fractions of renewable resources and keeping the carbon recycled within the life cycle of the product. Whilst the circular economy focuses on “maintaining the value of products, materials and resources in the economy for as long as possible”, many of the bioeconomy’s elements go beyond this objective, including aspects focused on product functionality (new chemical building blocks, new processing routes, new functionalities and properties of products).²

The EU bioeconomy and the BBI 1.0: A success story

The EU is a leader in the bioeconomy and the public-private partnership Bio-based Industries Joint Undertaking (“BBI 1.0”) is one of its flagship projects, supporting the development of European industrial bio-based infrastructures and value chains.

² nova paper #9 (2018) “Circular Bioeconomy” –Concepts, Opportunities and Limitations

Since 2014, 65 projects of which 20 are DEMOs (Demonstration) and 6 are FLAGSHIPS (full scale) biorefineries have been initiated, with a total of 729 participants from 30 countries for a total grant of € 415 million. 36,7% of beneficiaries are SMEs. Expected outputs by 2020 from Calls published in 2014 and 2015 are, amongst others, 82 new bio-based value chains, 46 new bio-based building blocks, 106 new bio-based materials (ranging from breakthrough primary & secondary chemicals, fertilisers, fibres, plastics, bioactive ingredients and proteins) and 47 bio-based consumer products – demonstrating the breadth of the economic opportunity with the bio-based sector. Already today, the projections show a ratio of more than €4 of private investment for each €1 of public money.

BIC policy asks

Although the bioeconomy innovation train is ‘on track’, going ‘full speed’ requires more ambition and commitment from the EU, and should be reflected in the update of the EU Bioeconomy strategy and action plan.

1. Don’t stop the innovation train

The EU is in a global competition with other regions like the US and China to develop bioeconomies by leveraging local industrial, research and renewable resources. The bioeconomy is also about cohesion, supporting rural and regional development and providing additional jobs and income to farmers, landowners and local communities. Attractive conditions for the growth of the EU bioeconomy will be needed in order to keep knowledge, jobs and private investments in Europe. Continued R&D funding for bio-based industries will be key for de-risking projects towards commercialisation, and for providing a leverage to private investments.

Key recommendations for going ‘full speed’ on the Bioeconomy train:

- **Support the continuation of the BBI, a BBI 2.0**, under the new EU R&D framework programme FP9.³
- Provide ambitious financial instruments to foster **new collaborations and value chains** across industries and academia, in particular for integrated biorefineries which are capital intensive (as high as EUR 750 million) and contain high technological and market risks.

³ BIC position paper on FP9:
http://biconsortium.eu/sites/biconsortium.eu/files/documents/BIC_Call_to_Foster_Europes_sustainable_bioeconomy_revolution.pdf

- **Improve synergies with, and access to financial instruments.** That includes sustainable financing tool and structural funds (ESIF) for rural development projects.
- Create **additional financing instruments such as loans**, loan guarantees through EIB.
- Leverage the potential for growing the **bioeconomy in cities and urban areas**, given that some bio-based production facilities can make use of municipal waste.

2. The EU should champion the bioeconomy

Given the cross-cutting nature of the bioeconomy across many EU policy areas⁴, the EU should champion the bioeconomy. This requires a predictable and stable EU policy framework for and long-term commitment to the bio-based industry sector, in particular on the implementation of UN SDG's.

Concretely, we see the need for:

- A coherent policy approach regarding **regulations impacting bio-based products and markets and the use of new technologies**. Regulators should ensure that any, legislative developments be assessed for possible unintended barriers towards innovative bio-based products.
- Fully exploit the **synergies with the circular economy and the Common Agricultural Policy (CAP)**, including smarter use of by-products from agri-food and forestry as well as bio-waste (including urban mixed waste streams and wastewater sludge) and CO₂.
- Better coordination among **bioeconomy strategies of EU Member States and regions**.⁵
- A comprehensive data assessment and generation of knowledge on biomass supply and demand.
- Dissemination of national best practices where the bioeconomy is part of university curriculum.

3. Making the Bioeconomy Strategy tangible for consumers and business

Bio-based products are an attractive alternative to fossil-based products in terms of improved performance, potential for delivering new properties and improved environmental footprint.

⁴ EU Communication (2017) „Future of Farming“, EU Communication (2017) „Industrial Policy“

⁵ Out of 210 analysed territorial units (EU regions and countries), 207 have included bioeconomy-related aspects (European Commission (2017), study on Bioeconomy development in EU regions, February 2017)

To make these benefits tangible for EU consumers and businesses, more efforts are required to promote bio-based products:

- Implement the public procurement recommendations from the EU Expert Group for bio-based products⁶ - to create broader demand across the public sector.
- Analyse existing legislative and regulatory best-practices in EU regions (as well as in the US) that promote bio-based products.
- Promote a level playing field for bio-based industries vis-a'-vis fossil uses and non-renewable products.
- Facilitate market uptake of innovative bio-based products through appropriate framework conditions at EU and national level to transition from the innovation phase into commercial deployment quickly.
- Invest in promotional, communication and educational tools, enabling bio-based products to be better evaluated by purchasers and consumers.
- Address existing challenges for bio-based products in accessing a fragmented EU internal market, with different regulations in 28 Member States.
- Assess the potential and challenges for bio-based products to be CE-marked⁷ - or considered under any specific label.

⁶ http://ec.europa.eu/growth/content/15-recommendations-increased-uptake-bio-based-products-public-procurement-0_nn

⁷ https://ec.europa.eu/growth/single-market/ce-marking_en