

BIC calls for a continued partnership with the European Commission under the new EU Research & Innovation Framework programme (FP9)

Fostering Europe's sustainable bioeconomy revolution

This paper aims at providing a first contribution to the on-going debate on FP9.

The Bio-based Industries Consortium (BIC) represents the private sector in a public-private partnership with the EU, represented by the European Commission, known as the Bio-based Industries Joint Undertaking (BBI JU)¹

BIC asks for a continuation of the current BBI JU (a “**BBI 2.0.**”) because:

- 1. Funding from the BBI JU is crucial in order to turn research into innovation and deployment in Europe and thus to develop a competitive European bioeconomy.**
- 2. BBI JU brings together different sectors² and entire value chains, mobilising the relevant stakeholders, ranging from SMEs to large companies, from resource & technology providers to brand owners.**

The BBI JU is about joining of forces to make the quality of lives of Europeans better, get a cleaner environment, create jobs and boost our competitiveness. Only if the best brains from academia, industry, SMEs, research institutes and other organisations come together the huge challenges that Europe is facing can be tackled. The BBI wants to harness innovative technologies to convert Europe's untapped renewable resources and waste into greener everyday products such as food, feed, chemicals, materials, consumer products and fuels.

The BBI JU is an important pillar of Europe's bioeconomy strategy, playing a key role in creating markets for bio-based products and enabling a sustainable bio-based circular economy. A commitment to the bioeconomy will undoubtedly be a useful tool for the Internal Market, exportable to the rest of the world, which will bring clear benefits to more than 500 million European consumers.

¹ Established in June 2014 as one of the pillars of the European Commission Bioeconomy Strategy and operating under operating Horizon 2020. Of the total €3.7 billion BBI JU budget, almost 75% is being invested by BIC members, in total €2.7 billion from 2014-2020.

² BIC is host to a unique mix of sectors that currently covers agriculture, agro-food, technology providers, forestry/pulp and paper, chemicals and energy.

A BBI 2.0. contributes to international and European objectives such as the Sustainable Development Goals and the Paris Agreement as well as the Juncker Priorities, EU Circular Economy initiatives, the bio-economy strategy, EU industrial policy, the Energy Union and the up-coming reform of the Common Agricultural Policy.

A significant budget under the FP9 for a BBI 2.0 would allow to continue the success of the existing BBI JU.

1. Funding from the BBI JU is crucial in order to turn research into innovation and deployment in Europe and thus to develop a competitive European bioeconomy.

The BBI JU is a **key milestone** in the development of an innovative European bioeconomy supporting the **deployment** of EU research, building on Europe's excellent knowledge base in **biotechnology and (bio)chemistry** for the development and upscaling of technologies for the commercialization of innovative bio-based products.

After 3 years of existence, **BBI JU runs over 65 projects** in 30 countries for a total grant of **€ 414 million public funding and € 1.95 billion of announced private investment** in the European bioeconomy.

The deployment and realization of innovative bioeconomy-related projects (such as the construction of new biorefineries) is often still **risky in financial terms**. At the same time, **commercial scale plants are needed to overcome bottlenecks and showcase that interesting returns on investments are possible**. Furthermore, **research into bioeconomy-relevant topics, demonstration projects** should also be supported in order to build a solid basis for large-scale industrial projects.

A continuation of funding is therefore essential to meet the BBI JU objectives by 2030 (see Annex).

2. BBI JU brings together different sectors and entire value chains, mobilising the relevant stakeholders, ranging from SMEs to large companies, from resource & technology providers to brand owners.

"The main positive effects of BBI JU in terms of competitiveness of BBI technologies come via encouragement and support of value chain driven cooperation across sectors ('**the structuring effect**') and via innovation driven mobilization of key stakeholders ('**the mobilizing effect**')³"

The BBI JU has created **unique opportunities** for public and private researchers to collaborate, access new knowledge and secure financing of projects. BBI JU instigates **multidisciplinary research & development**, and stimulates **new cross-sector interconnections**, organizing partners along new bio-based value chains, ranging from agriculture, energy, aquatic sector to automotive and construction; food & feed additives, forestry, health, home & personal care, pulp & paper, packaging, pharmaceutical, textiles.

³ Interim Evaluation of the BBI JU (2014-2016), <http://ec.europa.eu/research/evaluations/pdf/bbi.pdf>

From the primary biomass production (agriculture, forestry and aquatic), to the valorization of bio-waste and organic side streams, and to the commercial production and marketing of innovative bio-based products, **all stakeholders in the value chain benefit**. Currently, **36% of beneficiaries are SME** (Horizon 2020 target for e.g. the Societal Challenges being 20%) and the cooperation between SMEs, large companies and academia has been fruitful by integrating of complementary technologies and investments.

Overall, BBI JU actions should continue in the direction of de-risking, by bringing new bio-based value chains to market and by continuing the involvement of brand owners, end-users and sectors at the interface with customers and consumers⁴.

⁴ Interim Evaluation of the BBI JU (2014-2016), <http://ec.europa.eu/research/evaluations/pdf/bbi.pdf>

Annex: Facts and Figures

Facts

- Total cumulative jobs represented in the EU bio-based economy (EU 28, 2014): 3.3 million
- BIC membership (2017): 200 industry members and 150 associate members

BBI JU 2030 goals

- Industrialization of rural areas by creating a **rural infrastructure** for biomass production, mobilisation and processing in biorefineries;
- Create **700.000 jobs** on all levels of which 80% in rural and currently underdeveloped areas;
- Diversify & grow **farmers' revenues**;
- **Reduce greenhouse gas emissions (GHG)** of new BBI JU bio-based products on average by at least 50% compared to their fossil alternatives;
- Boost mobilisation and valorisation of 25% of unused sources (by-products, biowaste), pursue **'zero-waste' bio-based operations** with subsequent closure of biocycles;
- **Replace 30% of fossil-based chemicals & materials production** in Europe;
- **Meet 6% of Europe's transport energy demand** by sustainable advanced biofuels;
- **Reduce EU dependency on imports** of fossil-based raw materials, protein, phosphate and potash.
- To ensure that EU is at the forefront of technology in the development of an efficient Circular Economy.

Figure: Value Chain - From Biomass to Consumer Products

