



# **European bioeconomy policy: Stocktaking and future developments**

***Summary of stakeholder feedback analysis***

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Research and  
Innovation

## Bioeconomy Strategy Summary of stakeholder feedback analysis

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### **SCOPE**

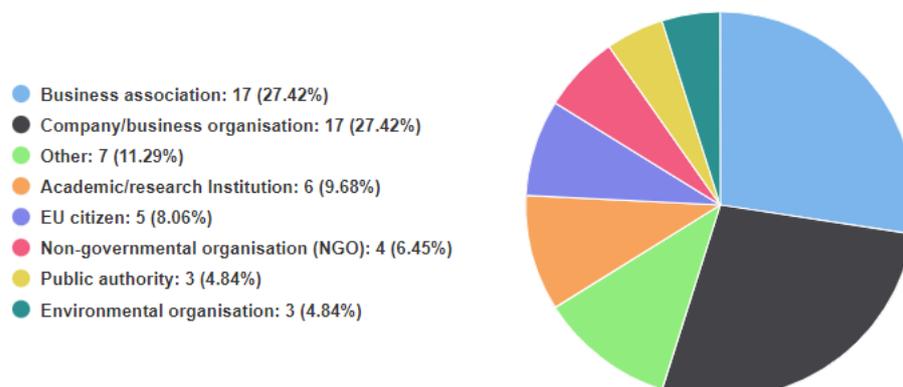
In November 2019, the Council of the European Union adopted conclusions on the 2018 updated Bioeconomy Strategy "[A sustainable Bioeconomy for Europe: strengthening the connection between economy, society and the environment](#)". While underlining the key importance of bioeconomy for the achievement of EU's environmental and climate goals through sustainability and circularity, the Council stressed the importance of assessing the progress of the strategy and called for the delivery of a progress report by 2022.

As key parts of the policy-making process, stakeholders were invited to provide their feedback on the 2018 strategy during an open consultation of the roadmap towards the progress report on the European Commission website.

The online consultation was open from 12/07/2021 to 31/08/2021.

### **FEEDBACK DATA**

Sixty-two feedbacks were provided on the roadmap - including some feedbacks provided twice by the same or similar stakeholder - with the following distribution:



The majority of respondents were located in Belgium. Other countries such as Germany, France, Spain and Finland were well represented.

### **MAIN POINTS RAISED BY STAKEHOLDERS**

#### ***Governance***

- The need to have **more cooperation and coordination** on bioeconomy **at international and European level** was emphasised by several stakeholders. This would provide enabling governance frameworks for bioeconomy development. Special attention should be given to Central and Eastern European countries for supporting their bioeconomy policies and development needs, including via the BIOEAST initiative.
- **Coordination between all governance levels and regional approaches** were asked to be fostered, especially since:  
"Member States have heterogeneous bio-resources, different climate conditions, and regional specialisation."

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- The importance of **participatory and inclusive processes** was stressed several times. Science-policy-society interfaces should be developed and take into account all aspects of sustainability.  
“A holistic transformation process that addresses all people and reaches the center of society requires a systemic approach in which economy, society and ecology are given equal consideration. Governance must therefore closely coordinate all these concerns.”

### **Policy coherence and regulatory frameworks**

- How the bioeconomy **relates to the Green deal and other related initiatives and policies** is unquestioned but it should be made more explicit.  
“The Bioeconomy Strategy has the unique opportunity to boost the other two equally important pillars –social and economic – thereby ensuring a necessary equilibrium among all three pillars of sustainable development in the future-fit carbon neutral Europe.”
- There is a need for **more policy coherence and a more coherent EU regulatory framework**. The cross-policy relevance of bioeconomy should be better acknowledged, which would allow to deepen synergies.
  - In particular, this concerns policy areas such as Sustainable Finance Taxonomy, Circular Economy Action plan, Chemicals Strategy, Biodiversity Strategy, Farm to Fork Strategy, Industrial Strategy, EU Climate Law etc.
  - The role of primary sectors should be better emphasised.  
Indeed, as for agriculture and forestry, “their commitment and contribution is often forgotten in the debate on the development and implementation of a more bio-based society. A great step in this direction is the inclusion of bioeconomy as one of the main strategic objectives of the future CAP, which should be reflected in the national strategic plans.”
- The implementation of the Bioeconomy Strategy should **exceed the boundaries of the research and innovation domain**.  
“While research, development and innovation will continue to be formidable engines of renewal for the bioeconomy, its current stage calls for a more holistic approach that takes the entire value chain, including the industry’s larger operating environment, into account.”

### **Development and deployment of bioeconomy**

- **More investments in research and innovation** are needed to develop and scale-up solutions, including in the following areas: alternative proteins, bioremediation that relies on the soil microbiome, biopesticides, biofertilisers and biostimulants, microalgae, biodegradable and compostable bio-products, renewable new materials, including organic wastes and residues.  
“Investments in industrial R&D as well as technology demonstrations and pilots are needed to increase material and energy efficiency, develop novel applications, and scale production technologies for an effective diffusion of bioeconomy solutions across industry boundaries.”

- **The partnerships play an essential role at each step of the development and deployment of solutions.**

“It is worth mentioning how the partnership should deal in a balanced and equal way to the large spectrum of technology readiness levels: developing new solutions to technological problems faced by the bio-based sector; providing support to demonstration facilities; and fostering their further scale up closer to the market through small-scale biorefineries.”

“We urge to create more, and broader, partnerships to unite science, farming and communities.”
- **Visibility of bio-based products needs to be enhanced, which could provide a wide range of benefits.**

“Visibility and awareness of bio-based products and their benefits should be promoted to drive demand. The EU could also integrate references to bio-based content in green and public procurement actions.”

“Certification schemes for bio-based products/materials have manifold benefits which should be recognised, e.g. securing sustainable forest management practices or preserving biodiversity.”
- **Ecological and planetary boundaries are better acknowledged in the updated strategy but are still a source of concern for several stakeholders.**

“The development of the bioeconomy must not take place by increasing the stock of cultivated land at the expense of natural spaces. It must be a priority to encourage the use of waste raw materials or by-products as a supply of material flows required by new production processes.”

“Capture and storage of biogenic CO<sub>2</sub> (CCS) must also be included in the roadmap, because the bioeconomy is not completely emission-free. For example, the agricultural sector and many biotechnological production processes also emit greenhouse gases in the long term, which must be offset by Carbon capture and utilisation (CCU) and/or CCS in order to achieve climate neutrality.”
- **The principle of cascading use remains controversial;** some stakeholders mentioned that it should not be implemented in a rigid way to avoid distorting markets.

“A strict interpretation undermines the efficiency of the bioeconomy and ignores local heterogeneous factors.”

“Heavy and stringent regulation such as far-going sustainability criteria and a rigid implementation of the cascading use principle, could put bio-based products and value chains at a competitive disadvantage against more polluting alternatives.”
- **Priorities should be established on the basis of systemic impact assessments.**

“Reliable systemic assessment tools should be implemented, capable to measure environmental, economic and social impacts at local level, applied to integrated value chains taking in mind their evolution potential.”

***Awareness raising and education***

“We need to educate, learn, work, think and consume through a bio-based economy.”

“Bioeconomy should find also its way into ‘everyday’ teaching.”

“Bioeconomy education faces two major challenges. Firstly, it aims to merge very heterogeneous topics and disciplines in a common educational tool [...]. Secondly, it has to make the educational procedure not just a knowledge provider, but also an instrument for problems solving and having a concrete societal impact.”

We need to “ensure the future workforce is equipped to respond to the upcoming needs of all bioeconomy sectors.”

***Specific topics***

Specific topics were also explored by stakeholders, according to their respective areas of expertise, such as:

- Biowaste
- Wood products
- Nutrients recycling and supply
- Biopesticides
- Bio-based plastics
- Textiles
- Plant-based packaging
- Chemicals
- Biotechnology and microbial resources
- Alternative proteins.