



BIOTRANSFORM 1st working group: Governance and financing challenges for circular bioeconomy

10 October 2023
14:00 – 16:00 CEST

PROJECT ACRONYM: BIOTRANSFORM

PROGRAMME: HORIZON Europe

Grant Agreement: No 101081833

TYPE OF ACTION: HORIZON-CSA

START DATE: 1 October 2022

DURATION: 30 months



Funded by
the European Union

Summary of contributions from participants

On October 10th, a working group composed of representatives of regional and local authorities, representatives of EU projects on circular economy, research and technology institutes and bioeconomy clusters came together, online and at ACR+ premises in Brussels, to discuss the main governance and financing challenges to the transition to biobased circular systems.

This meeting was organised in the context of the BIOTRANSFORM project, which aims to provide European policymakers with an adequate assessment and policy development framework, knowledge base and expert support ecosystem to accelerate the transition from linear fossil-based systems to circular biobased systems.

During the meeting, the participants were asked to note down the main governance challenges for the design and implementation of a regional bioeconomy strategy on the one hand, and the main challenges to financing biobased businesses on the other hand. The challenges and solutions were listed by participants under different categories, and follow-up discussions allowed to clarify some of the contributions.

These challenges and solutions were analysed and grouped together by ACR+. The result is presented below.

➤ GOVERNANCE CHALLENGES

Strategy/planning

Barriers to the drafting of a bioeconomy agenda and action plan (setting priorities, targets, policy measures...)

1) Too high-level strategies risk lacking concreteness and thus missing the connection with those that are implementing biocircular economy in practice, and namely the operators.

Potential solutions proposed:

- Conducting a diagnostic of biomass resources in the territory and their actual uses.
- Clearly quantifying the regional targets.

2) Not enough knowledge and understanding on what bioeconomy is, what it encompasses and its benefits, and how to set a strategy.

Potential solution proposed: involve knowledgeable consulting agencies in this area.

3) Difficulty to address such a broad topic that is regulated by many different laws, which can create several barriers when local and regional authorities try to implement solutions.

Stakeholders

All challenges linked to the identification and involvement of stakeholders from different sectors

- 1) Civil society is only partly represented in the public consultations on bioeconomy (i.e., environmental NGOs and big enterprises), while smaller players in the private sector often lack capacity to join collaborative processes necessary for circular bioeconomy strategies.
- 2) The general public lacks knowledge on bioeconomy (what it encompasses, its benefits) and has limited interest in biobased products given their higher prices.
- 3) Difficulty for different sectors to speak to one another and to establish and maintain long term relationships of trust and understanding.

- 4) Difficulty to strike a balance between a top-down approach where specific regulations and strategies are imposed, which saves time in the design phase, or bottom up, which can help accelerate the implementation but is more resource and time consuming.
- 5) Lack of incentives for stakeholders to go circular (e.g., farmers not receiving carbon credit for producing biomass for buildings and energy).

Proposed solutions:

- Relying upon “brokers” or translators that can mediate between parties with different interests and priorities.
- Creating intermediate interface for stakeholder consultation.
- Find common ground of agreement, applying an interdisciplinary and intersectoral approach.

Leadership*Difficulties linked to leadership in drafting and implementing a bioeconomy strategy*

- 1) Fragmented responsibilities spread across national and regional levels make it more difficult to design and agree upon a regional bioeconomy plan.
- 2) Low interest in bioeconomy from political leaders.

Proposed solutions:

- Multidisciplinary approach.
- Defining intermediate roles to connect stakeholders and consult all authorities.
- Informing decision makers in adequate and comprehensive manner about bioeconomy.
- Find points in the strategy that could be relevant to leaders and align them with the political agenda of the elected officials to bring them onboard.

Internal governance*Challenges regarding internal communication and collaboration dynamics between different departments working on bioeconomy.*

- 1) Difficulty for waste and circular economy departments to onboard representatives of different departments (agriculture, economic development), with different priorities and goals on bioeconomy and to convince them of the sustainability of this model.

Potential solutions proposed:

- A change in the semantics depending on the department you are talking to. Speaking about “circular economy” as means rather than an end and trying to find ways and reasons for others to take interest in circular bioeconomy, by linking it to their political agendas or more transversal objectives (such as climate change).
- Involving all departments in the co-creation process from the early stages.

Administration*Barriers posed by bureaucracy and internal administration.*

- 1) Legislation often lags behind innovations and thus does not create a favorable environment for them to scale up and become mainstream.
- 2) Bureaucracy can slow projects down.

Proposed solution: Digitalization.

- 3) Being bioeconomy a very transversal topic, defining strategies or measures that align with all existing relevant regulations might be very challenging.
- 4) Given the transversality of bioeconomy, human and financial resources to support its development and implementation need to be unblocked from different departments, which is often a challenge.
- 5) Lack of support structures and funding for new business activities for bioeconomy.

Targets

Barriers related to setting or complying with policy targets.

- 1) Difficulty in defining measurable targets and realistic goals, which the industry can attain.

Solutions proposed:

- Linking policy targets with scientific evidence.

➤ **FINANCING CHALLENGES**

Business model

Barriers linked to setting a business model that is sustainable throughout time

- 1) Due to the potentially intermittent supply of input of feedstock, the sustainability of many biobased projects cannot yet be ensured.
- 2) The regional scale of circular bioeconomy and the possible fluctuations of bioresources (especially when they are biomass residues) make it difficult to compete with global value-chain with no such limitations on input supply.

Solutions proposed:

- Matching supply and demand at an early stage to ensure business sustainability in the long run.
- Enabling a continuous flow of circular economy material for processing needs.
- Decreasing taxes on labour.
- Taking advantage of increasing public funds for green energy to finance bioeconomy innovations.

Funding

Barriers related to funding for bioeconomy innovations

- 1) Difficulty in finding funding for higher Technological Readiness and thus scale up pilot projects. There exists a gap between funding for research on bioeconomy and for biobased businesses.
- 2) Investors have limited or no trust in bioeconomy business models.
- 3) Dedicated funding for bioeconomy is often absent.

Proposed solutions:

- Stepwise startup funding tools, offering higher funding rates in the beginning, and lowering them over time.
- Taking advantage of increasing public funds for green energy to finance bioeconomy innovations.

Demand

Barriers linked to the demand side for bioeconomy products and innovations

- 1) Difficulty of guaranteeing uniform quality material in the inputs.
- 2) Limited communication and visibility of biobased products and its benefits to consumers hinders demand growth.
- 3) Higher costs of biobased products against standard products are a discouraging factor for consumers.
- 4) Difficulty to find circular products matching the criteria for green product procurement (especially on local markets).

Proposed solutions:

- Establishing mandatory share of secondary resources in products.
- Increasing taxes on primary resources.

Investment costs

Barriers linked to costs for R&D and scaling up

- 1) Difficulty in securing funding and scaling up a biobased business.
- 2) Investors are cautious in investing due to recurring economic/financial crises.
- 3) Difficulty to scale up many types of biosymbiosis.

Proposed solutions:

- Long term policy giving stability to take investment decisions.
- Establishing specific regional investment programmes or teaming up with bigger enterprises.

Conclusions

During the discussion, a key governance challenge that was repeatedly mentioned is the still limited understanding of what bioeconomy is and its benefits, leading to low political interest in this area. Moreover, given the cross sectoral nature of bioeconomy, setting up a regional strategy requires the involvement of several internal departments and the alignment of their priorities and already existing sectoral regulations, which can be a time and resource consuming process that not all regional governments might be ready to undertake.

Regarding financial barriers to bioeconomy, one of the prominent points is that many biobased projects face several challenges in establishing a sustainable business model, among others, due to possible fluctuations in the availability of input biomass, and the low demand of consumers compared to mainstream products. Moreover, scaling up biobased projects can be difficult, due to the limited understanding and trust of investors in new business models and the lack of dedicated public funding.

Following the fruitful working group session on 10 October, ACR+ will select key challenges from the list above to explore them further and propose solutions in the BIOTRANSFORM technical guidelines on governance and financing for public authorities.

