



POLICY BRIEF #2

Introduction

In recent years, the bioeconomy has assumed a significant role in European policies, fostering a socioeconomic transformation.

Catalonia has a strong industrial sector and a unique natural environment, endowing it with significant potential to lead and drive the European transition towards a more sustainable economic model, prioritizing the efficient utilization of biological resources.

In this sense, the Catalan Government is actively engaged in actions and instruments that facilitate this transition, demonstrating a clear commitment to European policies and the fight against climate change. In addition to the Bioeconomy Strategy (EBC2030) approved in 2021, the Catalan Biogas Strategy and the Catalan Digestate Strategy were recently approved in 2024. Both documents share the common goal of facilitating the implementation of bioeconomy sector projects and mitigating barriers by setting clear objectives and actions to be undertaken.

Furthermore, this year, on February 11, 2025, the Agreement GOV/39/2025, which establishes the criteria for classifying biogas business projects as strategic was also approved.

Bioeconomy represents a key opportunity to establish a more sustainable and environmentally respectful socioeconomic model. However,

achieving this requires an appropriate political framework and collaborative efforts from all stakeholders involved to overcome the barriers.

The BioBoost project is an initiative that aims to facilitate the implementation of bioeconomy projects in the region of Catalonia and mobilize an additional investment of €30 million in circular bioeconomy projects in Catalonia, offering a suite of Project Development Assistance (PDA) services through the "Accelerator," tailored to the specific needs of bioeconomy projects.

Given the multidisciplinary nature of BioBoost consortium, the services provided adopt a comprehensive and cross-cutting approach. These services encompass technical and legal aspects, business strategies and financing, as well as facilitation, impact mapping and systemic solutions.

The purpose of this 2nd Policy Brief is to review the 1st Policy Brief and provide an updated overview of the cross-cutting barriers identified during the assistance offered to circular bioeconomy projects within the Consortium's first three years. These barriers have been categorized into four groups: (i) legal and regulatory and barriers, including the most significant hurdles outlined in Deliverables D5.2 and D1.3, which have also been identified during this second reporting period (ii) investment and financial barriers, (iii) technical barriers and (iv) social and facilitation barriers.



By identifying and understanding the barriers and challenges faced by circular bioeconomy projects, we have finally been able to reassess the initial recommendations and put forward an enhanced set of concrete proposals aimed at the EU, local, and regional policymakers.

These recommendations stem from the expertise of each Consortium member and are intended to facilitate the implementation of these types of projects, as well as promote a societal model that prioritizes the efficient and sustainable use of

biological resources, thereby creating value and fostering economic growth.

Finally, a section is included highlighting some synergies identified with other CCRI projects with which BioBoost collaborates and contributes, aiming to scale up circular solutions across Europe. These include the RESOURCE and InvestCEC projects, both funded by Horizon Europe and focused on accelerate private financing of circular economy initiatives in European cities and regions.



Main barriers encountered in the implementation of bioeconomy projects

Throughout these three years of work, BioBoost has identified a consistent set of barriers that pose multifaceted challenges to bioeconomy projects in its implementation in the territory. These barriers are systemic, often interconnected, and require cross-sectorial responses. In this section, based on our experience over these years, we have categorized the key barriers into four groups:

LEGAL AND REGULATORY BARRIERS

This section presents an updated overview of some of the most relevant legal and regulatory barriers initially identified during the first reporting period, which have also been encountered during the assistance provided throughout this second reporting period.

1. COMPLEX AND LENGTHY PERMITTING PROCEDURES AND LACK OF COORDINATION BETWEEN ADMINISTRATIONS

The administrative procedure for obtaining the relevant permits can sometimes represent a significant challenge for bioeconomy projects, primarily due to bureaucratic delays and the involvement of multiple administrative authorities at the national, regional, and local levels. This often results in a fragmented regulatory framework and a lack of procedural efficiency. This barrier not only prolongs project timelines but also increases costs.

For instance, both urban planning and environmental regulations often require similar procedural steps, such as obtaining reports from administrative bodies and conducting public consultations. These processes frequently overlap, leading to duplicated efforts—such as identical reports requested from the same authorities—and redundant public information phases, ultimately causing unnecessary delays in securing the required permits.

OUTDATED AND AMBIGUOUS REGULATORY FRAMEWORK

The regulatory framework governing the bioeconomy sector is often outdated, imprecise and incomplete, which hinders its interpretation and

application. This situation arises, in part, from the ambiguity and obsolete nature of regulations and, on the other hand, from the absence of legislation that establishes unified criteria or guidelines for these innovative projects. This barrier often restricts the growth and deployment of such initiatives and adds uncertainty for investors and project promoters.

A clear example of this barrier can be found in the selection of land for the implementation of bioeconomy projects. In many cases, the applicable municipal urban planning regulations are highly restrictive and do not allow for such projects among the permitted land uses, or the regulations are entirely outdated.

Another example could be the minimum distance currently required by regulations between category 2 or 3 SANDACH (animal by-products not intended for human consumption) biogas plants and livestock farms, which makes site selection within the Catalan territory more difficult.

3. COMPLEX GOVERNANCE MODEL

Governance complexity is a common barrier in projects involving multiple stakeholders. Coordinating diverse interests, responsibilities, and institutional frameworks can significantly slow down decision-making processes. This often leads to difficulties in finding the most suitable legal form to regulate these relationships, especially when dealing



with public-private collaborations, as is often the case in bioeconomy projects.

P BioBoost has supported some of its projects to find the best legal figure to regulate

public-private relationships that would respond to the interests of all parties. Among the legal structures considered are the association, foundation, or cooperative.

INVESTMENT AND FINANCIAL BARRIERS

1. MARKET RISK

High perceived risk and long payback periods represent a significant barrier to the development and scaling of bioeconomy projects, particularly for those at low Technology Readiness Levels (TRLs) or involving complex, multi-actor business models.

These factors, as well as the challenges posed by facilitation barriers, often discourage investors and stakeholders, who may be reluctant to commit resources without clear short-term gains or proven market demand.

2. COMMUNICATION WITH INVESTORS

Bioeconomy projects often face a communication gap between promoters of bioeconomy projects and potential investors. Their value propositions are frequently framed in highly technical language, making it difficult to articulate societal or environmental impacts—particularly when the benefits are systemic or non-financial. As a result, the lack of alignment with investor expectations can become a barrier to financing.

A well-defined communication strategy is essential for the successful development of bioeconomy projects.

3. PREFERENCE FOR FAMILIAR SECTORS AND AVOID THE RISK

The investors of bioeconomy projects prefer classic familiar sectors (e.g., bioenergy) over more innovative and complex bioeconomy models focused on materials reuse, ecological regeneration, or circular value chains. This preference is often driven by a desire to secure investments rather than assume the risks associated with emerging models.

4. BARRIERS RELATED TO PRIMARY SECTOR

The involvement of farmers, foresters, and cooperatives is essential for the circular bioeconomy. However, it also presents challenges, limited awareness and technical knowledge about circular practices and valorization opportunities, as well as access to training and innovation support.

Many producers are cautious about involving external investors, fearing loss of control over land and decisions. As a result, they tend to prefer gradual, self-financed changes, which can slow the implementation of bioeconomy projects.

TECHNICAL BARRIERS

1. LACK OF TECHNOLOGICAL MATURITY IN SOME PROJECTS

Some of the most innovative bioeconomy projects remain at low Technology Readiness Levels (TRLs),

which poses a significant barrier to their further development. This early-stage status discourages investment and delays deployment, reinforcing investor concerns about whether the technology can



perform efficiently and reliably in real-world conditions.

2. INSUFFICIENT INVESTMENT IN R&D

Insufficient investment in R&D limits the advancement of bioeconomy technologies. Without sustained funding, many innovations are unable to reach market maturity or demonstrate potential.

Some potential Bioboosters have been rejected due to this barrier, however, others, such as the wool valorisation plant stands as an example of overcoming it. Specifically, this project will establish the technical, economic, and legal foundations for the deployment of future wool valorisation plants in other regions, fostering the circular bioeconomy.

SOCIAL AND FACILITATION BARRIERS

1. LACK OR LIMITED ACCESS TO INFORMATION FOR THE DEVELOPMENT OF BIOECONOMY PROJECTS

Designing effective and systemic bioeconomy project requires access to detailed, activity-specific information or statistics—such as electricity consumption kWh/year by industrial/agro-industrial activity, livestock droppings data, consumption of gas, petrol, diesel, etc.—to assess feasibility and costs. Although much of this data exists within public administrations, it is often fragmented, inaccessible, or not interoperable.

Many of the projects Bioboost has supported have specifically required assistance in evaluating the market potential of their products (e.g., in the wool sector) or in analyzing potential systemic impacts. This is essential for assessing project costs and viability, as well as for designing an effective business model. Therefore, it is crucial to have access to up-to-date information on the sectors relevant to bioeconomy.

2. LIMITED CAPACITY FOR FACILITATION AND STAKEHOLDER MAPPING

Bioeconomy projects often lack facilitation resources to identify key stakeholders and potential

synergies. This represents an obstacle to creating systemic projects that can be replicated across the territory.

Profession The role of a facilitator is essential, someone who not only understands the sector and the local context but also has access to relevant resources and can support these projects in stakeholder mapping. This has become clear over these years of working closely with the Bioboosters.

3. PUBLIC OPPOSITION

Effective communication is essential for the successful implementation of bioeconomy projects, yet it often presents a significant challenge.

Due to the innovative nature of these initiatives and their impact on emerging sectors, a lack of public awareness or understanding can lead to resistance or opposition.

Q Bioboost has witnessed how the implementation of some Bioboosters has slowed down due to social rejection in certain contexts. This highlights the importance of carefully crafting and preparing the project narrative as a communication tool, tailored to the chosen proposal and the context in which it will be implemented.



Policy recommendations and legal opportunities to facilitate the implementation of bioeconomy projects

Drawing on the experience gained from the Project, as well as the expertise of each Consortium partner, this report presents a set of recommendations that update and expand upon those outlined in Deliverables D5.2 and D1.3, along with some additional proposals for policymakers to address and overcome these barriers, thereby facilitating the implementation of these projects and advancing the transition towards a more sustainable socioeconomic model.

Additionally, and in line with the recommendation made by the European Commission during the first reporting period, some achievements related to the local and regional recommendations outlined on the Deliverable D.1.3 (short-terms wins) are highlighted.

LOCAL AND REGIONAL POLICY RECOMMENDATIONS

1. POLICY RECOMMENDATION NO 1 - TO OVERCOME THE COMPLEX AND LENGTHY PERMITTING PROCEDURES AND TO SUPPORT BIOECONOMY PROJECTS, THE CRITERIA FOR BEING DECLARED THESE PROJECTS AS STRATEGIC BUSINESS PROJECT SHOULD BE MADE MORE FLEXIBLE, AS IT HAS ALREADY BEEN DONE FOR BIOGAS PROJECTS

As outlined in the Deliverable D1.3, Catalonia has adopted Law 18/2020 on the Facilitation of Economic Activity ("Law 18/2020"), which aims to create a more favourable regulatory environment for economic growth, competition, and investment. This law establishes a framework to reduce administrative burdens and promote strategic sectors.

Article 24 of this Law states that the Government of Catalonia should promote the necessary measures to designate certain business projects as strategic, based on their potential contribution to the region's economic development. In line with this, in September 2022, the Government of Catalonia approved a formal agreement defining the criteria for classifying a business project as strategic. These criteria serve as a tool to prioritize and accelerate the implementation of projects with high economic, social, or environmental value. However, the current criteria are very restrictive for bioeconomy projects and, as highlighted in Deliverable D1.3, in order to foster the development and implementation of these initiatives, these requirements should be revised with a view to introducing greater flexibility.

In this context, the Government of Catalonia has recently taken a significant step forward under the framework of the Catalan Biogas Strategy and its 2024–2030 Action Plan. On February 11, 2025, it approved **Agreement GOV/39/2025**, which establishes the criteria for classifying business projects as strategic in the field of biogas production through anaerobic digestion of livestock manure and organic waste in Catalonia. This agreement is designed to accelerate the deployment of biogas projects by giving them strategic status. This means they benefit from faster and more simplified administrative processes, helping them move forward more quickly and efficiently.



- Bioboost has actively participated in the development of the Catalan Biogas Strategy 2024-2030 and the Catalan Digestate Strategy 2024-2030, approved in 2024. As part of its action plan, the Catalan Biogas Strategy included an assessment of the suitability of applying the legal status of a Strategic Business Project—established under Law 18/2020, of 28 December, on the facilitation of economic activity—to biogas plants.
- Bioboost has actively engaged with the different departments involved in the Agreement GOV/39/2025, contributing with its expertise in the sector to the initiative, as well as conveying other identified barriers that bioeconomy projects should face.

It would be recommendable for local and regional policymakers to continue working on adapting these criteria to ensure that other areas of the bioeconomy sector can also benefit from supportive policies and frameworks.

2. <u>POLICY RECOMMENDATION NO 2</u> – TO FACILITATE THE IMPLEMENTATION OF BIOECONOMY PROJECTS IN SECTORS WHERE REGULATION IS EITHER OUTDATED OR HIGHLY AMBIGUOUS OR WHERE LOW TECHNOLOGY READINESS LEVELS (TRLs), MORE REGULATORY SANDBOXES FOR INNOVATIVE BIOECONOMY PROJECTS SHOULD BE ESTABLISHED

The 1st Policy Brief already highlighted the importance of promoting regulatory sandboxes for innovative bioeconomy Projects. Regulatory sandboxes provide a controlled environment in which innovative projects can be tested under regulatory oversight. This approach is particularly valuable for bioeconomy initiatives at low Technology Readiness Levels (TRLs), which often face significant challenges in progressing further. By enabling safe experimentation and reducing regulatory uncertainty, sandboxes can accelerate innovation and overcome some barriers (e.g.: administrative and regulatory, technical and investment). This model is well aligned with the European Union's legislative strategy to promote innovation through flexible and adaptive frameworks.

As indicated in Deliverable D.1.3, we maintain the recommendation to initiate a dialogue with Catalan authorities to explore the creation of regulatory sandboxes in three priority areas:

- Activity Permits: Simplify the permitting process for bioeconomy-related activities by testing more flexible legal regimes (e.g., replacing licenses with simple communications), while reinforcing self-monitoring or administrative controls.
- Waste Legislation: Address the legal classification of certain bioeconomy inputs as "waste," which imposes heavy regulatory burdens. A sandbox could allow temporary exemptions or reclassification to facilitate their use in circular processes.
- Emissions Regulations: Enable the testing of emerging technologies with improved environmental performance by temporarily relaxing emissions limits or requirements, allowing for real-world experimentation.

Promoting regulatory sandboxes in these areas would enable Catalonia to experiment with innovative bio and circular economy solutions in a controlled setting. This would help test legal flexibility, reduce bureaucratic hurdles, and support the development of technologies and business models that currently lack clear regulatory frameworks.

Bioboost is currently following several initiatives in this area that could facilitate the implementation of bioeconomy projects, specifically:



- The procedure of a new regulatory ordinance for the creation of a controlled testing environment in the city of Barcelona. This initiative aims to provide a framework for real-world experimentation, allowing innovative technologies, products, services, or methodologies to be tested within a defined scope and timeframe under regulatory supervision.
- The recent approval (March 2025) by the Ministry for the Ecological Transition and the Demographic Challenge of five pilot projects intended to accelerate innovation and introduce greater flexibility into Spain's electricity system.
- 3. POLICY RECOMMENDATION NO 3 TO SUPPORT INVESTORS AND PROJECT DEVELOPERS IN THE BIOECONOMY SECTOR IN MITIGATING HIGH MARKET RISK, SPECIFIC MEASURES AND INSTRUMENTS SHOULD BE IMPLEMENTED TO REDUCE UNCERTAINTY, THEREBY PROMOTING INVESTMENT IN THE BIOECONOMY SECTOR

To fully unlock the potential of the bioeconomy, it is essential to significantly **boost investment in research and development**, particularly in innovative technologies that drive sustainability, circularity, and waste reduction. Equally important is the provision of targeted **support for both investors** willing to assume the risks associated with financing such initiatives and the **promoters** of bioeconomy projects. In this regard, the role of the public sector is pivotal.

Catalonia, through the Catalan Bioeconomy Strategy (EBC2030), has already allocated over €200 million to support sustainable agricultural, livestock, and forestry practices. However, sustained public funding remains critical, as these initiatives are key to advancing and scaling up the bioeconomy.

Beyond direct public investment, it is also vital to promote **complementary financial instruments**, such as **tax exemptions**, **tax incentives**, **deductions**, **and fiscal incentives** for companies operating in the bioeconomy sector.

From Bioboost we have also been working on **innovative financing solutions** (see our deliverable D4.3) to create risk-sharing financing solutions for bioeconomy projects.

By prioritizing these efforts through strategic funding mechanisms, governments and institutions can accelerate the development of a competitive, low-waste bioeconomy, while simultaneously advance climate goals and revitalizing rural areas.

4. <u>POLICY RECOMMENDATION NO 4</u> – ESTABLISHING ONE-STOP SHOPS WITH CROSS-CUTTING EXPERTISE IS A KEY ENABLER FOR SUCCESSFUL IMPLEMENTATION OF BIOECONOMY PROJECTS

As previously mentioned, bioeconomy projects often face implementation challenges due to a range of barriers (regulatory framework, facilitation issues and social hurdles, etc.), which can significantly slow down or even halt their progress. Therefore, as indicated in Deliverable D.1.3, the establishment of a one-stop shop is both essential and highly recommended, as it would provide cross-cutting support and guidance from qualified professionals, helping these projects navigate complexities and achieve successful implementation.

The BioBoost Accelerator is a pilot example of the value of establishing one-stop shops to support bioeconomy projects. It offers tailored Project Development Assistance (PDA) services designed to meet the specific needs of these initiatives. Drawing on the consortium's multidisciplinary expertise, the Accelerator delivers integrated



support across technical, legal, business, and financial domains, facilitating the effective implementation of bioeconomy projects.

On the other hand, in this context, the Catalan Government has established the **Bioeconomy Hub of Catalonia** (BIOHUBCAT), the flagship initiative of the Shared Agenda of Lleida, the Pyrenees, and Aran regions, aimed at promoting the effective development of the circular bioeconomy in Catalonia. BIOHUBCAT is a one-stop shop dedicated to generating economic value from renewable organic resources in Catalonia. Additionally, it is member of Bioboost External Advisory Committee.

- BioBoost has supported this initiative by working closely with BIOHUBCAT and contributing its expertise to enhance early-stage mentoring and business development support. In doing so, it has played a pivotal role in strengthening the regional bioeconomy ecosystem.
- 5. <u>POLICY RECOMMENDATION NO 5</u> TO OVERCOME THE LACK OF INFORMATION IN THE BIOECONOMY SECTOR, IT IS ESSENTIAL TO ENCOURAGE THE DEVELOPMENT OF TOOLS THAT CAN EVALUATE RESOURCE FLOWS AND IDENTIFY OPPORTUNITIES FOR INDUSTRIAL SYMBIOSIS

Supporting the **development of platforms and tools** that help assess resources and identify potential synergies is essential, especially in rural or semi-rural contexts, where the challenges are major, and there exist a lack of information.

- For example, BioBoost has further developed and applied the SYNER platform a digital tool created by our partner Símbiosy to facilitate the identification and mapping of potential biowaste streams (such as urban and agro-industrial residues) relevant to bioeconomy business opportunities. This platform helps local actors detect possible synergies and will become a key resource to replicate successful industrial symbiosis models across EU territories, especially in rural and semi-rural areas.
- 6. POLICY RECOMMENDATION NO 6 TO TACKLE OUTDATED OR RESTRICTIVE URBAN PLANNING REGULATIONS AND PROMOTE THE BIOECONOMY AT THE TERRITORIAL LEVEL, IT IS ESSENTIAL TO DEVELOP TERRITORIAL URBAN PLANNING CRITERIA OR GUIDELINES THAT FACILITATE THE IMPLEMENTATION OF BIOECONOMY PROJECTS

Bioeconomy projects often face urban planning barriers during the selection of the location, particularly related to permitted land uses. In many cases, the activity is not included in local land use plans due to outdated regulations, overly restrictive planning frameworks, or the need to navigate complex procedures such the development of special plans. These obstacles can cause significant delays in obtaining the necessary permits and even result in the complete blockage of the project. To overcome urbanistic barriers:

It would be recommendable that the Department of Territory of the Government of Catalonia adopt interpretative criteria or guidelines to harmonize permitted land uses and facilitate the implementation of innovative activities. Some progress has already been made in this direction, for instance, through the development of urban planning criteria and procedures for authorizing biomass plants on non-developable land. However, similar efforts should be extended to other areas of the bioeconomy, with the aim of standardizing criteria and promoting the revision of outdated and overly restrictive municipal planning regulations.



- It is also advisable for the Government of Catalonia to **flexibilize and shorten the procedures for developing Special Urban Plans**, as their current complexity and duration significantly hinder the implementation of bioeconomy projects. In practice, the final approval of these plans can take between two and four years, creating legal and administrative bottlenecks that delay investment and project execution.



EU POLICY RECOMMENDATIONS

1. POLICY RECOMMENDATION NO 1 – ADDRESSING THE REGULATORY AND LEGAL BARRIERS THAT EXIST ACROSS MEMBER STATES REQUIRES HARMONIZATION OF STANDARDS AND CRITERIA AT THE EU LEVEL IN THE BIOECONOMY SECTOR.

It is strongly advised that the European Union take a leading role in promoting the harmonization and modernization of policies relevant to bioeconomy. In this regard:

- Waste materials currently utilized within the sector should be reclassified as valuable resources, with the objective of reducing administrative burdens and formally recognizing their contribution to the bioeconomy value chain.
- Moreover, a thorough evaluation should be conducted to identify bioeconomy-related activities that could benefit from streamlined permitting procedures. In this context, the EU could consider adopting a regulatory approach similar to that of Directive 2006/123/EC—partially transposed into Spanish legislation through the Omnibus Law 25/2009 of December 22nd—to introduce harmonization measures that enhance legal clarity and flexibility for bioeconomy initiatives.
- 2. <u>POLICY RECOMMENDATION NO 2</u> STRENGTHENING THE NARRATIVE AROUND BIOECONOMY PROJECTS TO RAISE AWARENESS, OVERCOME SOCIAL BARRIERS, AND PREVENT PUBLIC OPPOSITION

Bioeconomy projects are often highly innovative and can affect sectors that sometimes face social resistance. For example, projects involving the reuse of certain types of waste. At the same time, investors and traditional companies may be reluctant to assume the investment risks associated with the uncertainty of these initiatives.

Therefore, it is essential to **communicate clearly and proactively** about the environmental and social benefits of these projects, such as job creation. These efforts should extend beyond standard communication campaigns and include incentives or mechanisms that encourage societal engagement, while fostering the participation of investors and traditional industries in the transition towards a more sustainable economic model.

3. <u>POLICY RECOMMENDATION NO 3</u> – SUPPORTING INVESTMENT IN THE BIOECONOMY SECTOR FROM THE EUROPEAN UNION IS A KEY DRIVER FOR A GREEN, INNOVATIVE AND SUSTAINABLE TRANSITION

A key recommendation is that the European Union should make continued financial support for the bioeconomy, one of its top priorities. This includes **maintaining and expanding funding** through programs such as Horizon Europe and leveraging financial instruments from the European Investment Bank (EIB). These mechanisms have proven vital in enabling early-stage, high-risk innovation projects that aim to decarbonize and transform critical sectors like agri-food and bio-based industries.

Securing private funding for bioeconomy project implementation remains a significant challenge, largely due to investor uncertainty regarding returns on investment.

Therefore, it is recommended that the European Union continue to develop financing mechanisms that help investors mitigate risk and uncertainty, while promoting grants and support for developers engaged in bioeconomy projects.



Synergies with other CCRI Projects

With the aim of fostering synergies and identifying joint solutions, we have collaborated with other CCRI initiatives focused on the circular economy, specifically InvestCEC and RESOURCE, by sharing experiences and exchanging knowledge. These collaborations have allowed us to identify shared challenges and recognize the need for coordinated common solutions

1. PROJECTS

InvestCEC is a Horizon Europe project that develops a replicable model to support circular economy initiatives in cities and regions by fostering collaboration among entrepreneurs, investors, and policymakers in Germany.

RESOURCE is a Horizon Europe project that provides tailored services to help pilot partners attract private investment, aiming to mobilize €20 million for circular economy project, in Aragon (Spain).

2. SYNERGIES

As outlined in this report, we believe it is important to emphasize our strong alignment with several of the barriers and recommendations identified by InvestCEC in its Deliverable D3.3: Mid-Term Policy Recommendations Brief and by RESOURCE in its Deliverable D2.4: Best Practice Selection. Both projects recognize technical, regulatory, and socio-cultural barriers as key challenges to the implementation of bioeconomy and circular economy initiatives.

For example, and in line with our own findings, both InvestCEC and RESOURCE highlight legal and regulatory barriers as an obstacle. In this regard, InvestCEC identifies a fragmented regulatory framework in its country, noting:

"The challenges created by fragmented regulatory environments, the complexities of the global economy, and the lack of infrastructure for the circular economy. At national and international level, the circular economy is supported by an incomplete patchwork of regulations, with differing policies in different countries" (D.3.3 of InvestCEC).

Furthermore, InvestCEC also draws attention to the strict requirements of public procurement processes, which many circular economy startups struggle to meet due to limited experience, resources, or scale. These requirements often include certifications, financial guarantees, and complex bidding procedures. As a result, their ability to secure contracts is constrained, which in turn hampers their growth potential and reduces their attractiveness to investors. In this regard, BioBoost also considers that public procurement is a tool for transforming the market, fostering innovation and sustainability.

Another clear example of a common barrier across all projects is economic challenges. In this regard, much like our own findings, RESOURCE also emphasizes the importance of both public and private financing:

"It is important to promote the existence of financing, both public and private, to enable the development of circular businesses" (D.2.3 of RESOURCE).

Considering the experiences of InvestCEC and RESOURCE, it becomes evident that bioeconomy projects encounter similar challenges regardless of the country in which they are developed. This shared understanding has



underscored the importance of working collaboratively, as it has been revealed that many of the barriers faced by projects in Catalonia are also present elsewhere. Consequently, there is a clear need for harmonized approaches and coordinated efforts across the European Union. Several of the recommendations from these Projects closely align with those we have proposed in this Deliverable, such as those mentioned by InvestCEC in Deliverable D.3.3 (see p. 14), among others:

- Communicating the non-environmental benefits of the circular economy
- Providing support and coaching to circular economy entrepreneurs
- Promoting multi-stakeholder collaboration
- Expand the scope of the EU Circular Economy Taxonomy



Conclusion

In conclusion, this second Policy Brief emphasizes the urgent need to overcome persistent barriers in bioeconomy projects and calls for more supportive policies at both EU and local/regional levels, in line with the recommendations presented in this Deliverable. Although implementing changes within the Bioboost timeframe is challenging, Bioboost is working in close coordination to communicate the challenges faced by bioeconomy projects to the Catalan Government. Drawing on its practical experience, the project seeks to underscore the need for better policy alignment to effectively promote and support the development of the bioeconomy sector.

Unlocking the full potential of the bioeconomy will require coordinated EU-level action, harmonized regulatory frameworks, public financing, stronger collaboration between public and private stakeholders, and enhanced support for facilitation and the pursuit of synergies.

Learn more about Bioboost Project: www.bioboost.cat info@bioboost.cat



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