

D5.6. Lessons Learnt & Best Practices



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Executive Summary

The BIOBOOST project was designed to catalyse investment into the Catalan bioeconomy by establishing a One-Stop-Shop Accelerator providing tailored Project Development Assistance (PDA) services. The overarching objective was to mobilise €30 million in investment while strengthening the technical, legal, financial and systemic maturity of regional bioeconomy initiatives.

Throughout its implementation, the Accelerator supported a portfolio of bioeconomy projects at different maturity levels, applying a structured methodology based on project selection, tailored service design, and impact monitoring. Over time, this methodology evolved from an initial framework definition phase into a consolidated operational model capable of delivering integrated technical, legal, financial and facilitation services.

The experience gained through the assessment and support of multiple Bioboosters allowed the consortium to identify recurrent structural barriers affecting bioeconomy initiatives. These include low technological maturity, insufficient data availability, limited access to pilot infrastructure, regulatory uncertainty, governance complexity, lack of risk-sharing mechanisms, social acceptance challenges, and capacity gaps within primary-sector actors. In addition, operational challenges within the Accelerator itself highlighted the importance of clear service integration, promoter commitment, and adaptive management.

Beyond identifying barriers, the BIOBOOST Accelerator generated significant added value. At project level, it strengthened structuring and professionalisation through the use of Project Development Plans (PDPs), clarified investment narratives, and improved regulatory positioning. At territorial level, it fostered systemic coordination and circular value-chain integration. At ecosystem level, it enhanced transparency and credibility through structured monitoring and impact evaluation frameworks.

The lessons learnt confirm that successful bioeconomy acceleration requires more than technical expertise. It demands systemic facilitation, adaptive governance, integrated service delivery, and alignment between economic viability and territorial value creation.

This deliverable consolidates the key lessons and best practices derived from the implementation of the Accelerator and formulates recommendations for improving and replicating Project Development Assistance mechanisms in the bioeconomy sector.

1. Introduction

The Bioboost project is an EU-funded initiative that supports the development of circular bioeconomy projects in Catalonia. Its main goal is to mobilise €30 million in investment by supporting local initiatives to overcome recurrent barriers related to technical, legal, business, and financing aspects.

To achieve this, the project operates an Accelerator Office, which acts as a one-stop shop for Project Development Assistance (PDA). The Accelerator provides support in four key areas:

- Facilitation and coordination
- Technical feasibility
- Legal and regulatory guidance
- Business and financial planning

Each supported project, called Biobooster, receives a tailored service package based on its needs and level of maturity. The Accelerator helps to move projects forward—from initial ideas to viable investment cases—by working closely with promoters, stakeholders, and the financing community.

The Bioboost project also contributes to the broader Catalan and European bioeconomy agendas by:

- Engaging with investors and public institutions to overcome systemic barriers,
- Developing replicable methodologies and tools,
- Strengthening collaboration between sectors and territories.

During the implementation of the project, the methodology (see D2.2: “*Accelerator Operational and Monitoring Plan Dossier*.”) has been refined to improve the Accelerator operability (see D3.1-D3.3: “*Year 1/2/3 Accelerator Activity and Monitoring Report*”) for delivering more targeted and effective services. The assessment of 10 projects has allowed to evaluate the barriers and determine how to tailor the required services on a case-by-case basis. In this current deliverable are reported the main lesson learnt experienced and best practices implemented during the execution of the different Bioboosters. For this, the different challenges for delivering the PDA services have been analysed. As a result, a list of recommendations for the improvement and continuation of the Accelerator has been developed.

2. Challenges identified in PDA services delivered

This section presents the main challenges identified during the operation of the Accelerator. In this broader context, the term “challenge” refers to any difficulty or constraint affecting project development. However, for the purposes of this report and in relation to the development of the projects towards investment-readiness, these challenges are referred to as “barriers”, as they represent factors that limit the delivery of the Bioboost services and hinder or prevent projects from reaching investment-ready status.

These barriers include difficulties encountered during project evaluation, as well as those arising in the definition of the workplan and the delivery of services. As similar challenges have been observed across different Bioboosters, they have been grouped into 10 distinct categories to enhance clarity and avoid repetition.

For each category, a description of the barrier is provided, indicating in which Bioboosters it was identified, how it relates to the different Accelerator services, and the lessons learned derived from it. Further details on the different Bioboosters can be found in Annex 2.

2.1. Technological Maturity and Feasibility

Barrier description:

Many innovative bioeconomy projects begin at low Technology Readiness Levels (TRLs 3–4) and lack access to the pilot or demonstration facilities needed to advance their technologies. As a result, they struggle to validate processes under real operating conditions and face significant challenges when attempting to scale up solutions that are technically viable only at laboratory or small-scale settings. This gap slows development, increases risk, and limits the transition from concept to market-ready applications.

Bioboosters where barrier has been found:

- Wool processing plant
- Open access plant for industrial pre-scaling of alternative protein
- Labin
- Insectius
- Inoït (Biobooster not accepted)

How affect to the services provided:

The lack of technological readiness hinders the definition of **technical services** due to low maturity and confidentiality constraints. This also directly affects **financial and investment aspects**, as the absence of a technical and economic viability assessment reduces the project’s attractiveness to investors.

Lesson Learnt / Best Practice:

- Conduct early TRL and feasibility assessments to identify gaps before accepting and starting the definition of the PDA services.
- Provide methodological guidance for scaling pathways, cost assumptions, and risk assessment.
- Promote shared public–private facilities (pilot plants) to reduce costs and accelerate validation.
- Promote regulatory sandboxes for innovative bioeconomy projects.

2.2. Data Availability and Early-Stage Preparedness

Barrier description:

Projects often lack the minimum data required for business model development, technical feasibility assessment, or permitting processes. This absence of essential information results in delays, rework, and inefficiencies, as additional time and resources must be dedicated to gathering and validating the missing data. In many cases, this also slows decision-making and reduces the overall project readiness for subsequent development stages.

Bioboosters where barrier has been found:

- Wool processing plant
- Ametller Mont-Roig Hub
- Open access plant for industrial pre-scaling of alternative protein
- Alere (Biobooster not accepted)
- Chlydro (Biobooster not accepted)

How affect to the services provided:

The lack of information hinders the implementation of **technical, legal or financial services**. By affecting the possibility to technically assess the project consequently impacts the definition of the business model that could confirm the economic viability. Therefore, reducing the project's attractiveness to investors because of project un-readiness. In addition, this lack of information creates inefficiencies within the Accelerator, resulting in extra workload and, in some cases, making it impossible to deliver the service within the agreed timeframe or at the expected quality level.

Lesson Learnt / Best Practice:

- Establish a baseline data checklist early in the process (technical inputs, material flows, costs, land-use constraints, legislative considerations).
- Implement a pre-diagnostic or audit phase to understand maturity, expectations, and gaps before defining any Project Development Plan (PDP).
- Create templates and standardised tools to ensure consistent data collection across regions.

2.3. Resource Availability and Systemic Value Chains

Barrier description:

Some solutions could technically be sound but lack access to the necessary raw materials or benefit from local territorial synergies needed to ensure their overall viability. This constraint also reduces their potential for effective implementation and future scaling.

Bioboosters where barrier has been found:

- Wool processing plant
- Ametller Mont-Roig Hub
- Compost Segrià
- Labin
- Inoït (Biobooster not accepted)

How affect to the services provided:

The lack of access to essential raw materials and territorial synergies limits **both technical and systemic services** by reducing the practical feasibility of proposed solutions constraining the ability to test, optimize, or implement them effectively. At the same time, it weakens broader value-chain integration, reduces stakeholder engagement, and prevents territorial alignment, ultimately diminishing the potential for scalable, long-term systemic impact.

Lesson Learnt / Best Practice:

- Integrate territorial resource mapping tools early (e.g., SYNER-type platforms).
- Train project promoters on circular value chains, symbiosis opportunities, and alternative feedstock strategies.
- Strengthen regional collaboration networks to improve resource availability and exchange.

2.4. Investment Readiness and Risk Sharing

Barrier description:

The absence of effective risk-sharing mechanisms and persistent misalignment between conventional financial KPIs and the broader systemic impacts these initiatives aim to generate difficult accessing investors due to high perceived levels of risks.

Bioboosters where barrier has been found:

- Coopirenaica
- Wool processing plant
- Open access plant for industrial pre-scaling of alternative protein

How affect to the services provided:

This barrier directly affects the **financial services**. Even if the added value of the service remains on minimizing project risks, make them investment ready and appealing for investors, the specificities of some bioeconomy projects makes then financially unattractive due to a gap between project financials (even if economically viable) and investors' expectations. Therefore, despite of project potentials in terms of sustainability and ecosystemic or strategic benefits for the locality, they are not considered as an investment opportunity, curbing the mobilization of capital into bioeconomy initiatives.

Lesson Learnt / Best Practice:

- Develop a Bioeconomy Investment Readiness Framework including guidance on financial modelling, risk assessment and tailored pitch materials.
- Promote mechanisms such as public guarantees, blended finance and co-investment platforms.
- Educate investors on systemic bioeconomy benefits (ecosystem services, resilience, emission reductions).
- Establish an Investment Advisory Board or regional investor liaison to connect projects with appropriate capital.

2.5. Regulatory Framework and Permitting

Barrier description:

The regulatory framework governing the bioeconomy sector is frequently outdated, imprecise, and incomplete, which hinders its interpretation and application. This situation arises from the ambiguity and obsolete nature of existing regulations and from the absence of legislation that establishes unified criteria or guidelines for innovative bioeconomy projects.

Furthermore, the administrative procedure for obtaining the relevant permits represents a significant challenge, primarily due to bureaucratic delays and the involvement of multiple administrative authorities at the national, regional, and local levels. This results in a fragmented regulatory framework and a lack of procedural efficiency, as different authorities may have overlapped. The complexity of navigating multiple administrative bodies with varying timelines, documentation requirements, and assessment criteria generates considerable uncertainty and slows down decision-making processes.

The complexity arising from these combined regulatory and administrative barriers generates legal uncertainty and limits innovation, while also prolonging project timelines and substantially increasing costs, potentially rendering viable bioeconomy projects economically unfeasible or significantly reducing their competitiveness.

Bioboosters where barrier has been found:

- Alcarras Bioproductors
- Ametller Mont-Roig Hub
- Insectius
- ECOTROS
- Cooperativa Plana de Vic

How affect to the services provided:

This barrier complicates the delivery of legal and financial services required for some of the bioboosters.

Regarding the regulatory framework, outdated and ambiguous regulations create legal uncertainty that restricts the growth and deployment of bioeconomy initiatives, adding considerable uncertainty for investors and project promoters. Legal teams must spend more time interpreting conflicting rules and resolving inconsistent guidance from different authorities. The absence of unified regulatory criteria and guidelines across jurisdictions severely restricts the ability to scale services, as each geographical area requires navigating distinct regulatory requirements.

Concerning administrative and bureaucratic procedures, fragmented processes and multiple authorities significantly postpone the launch of services, preventing innovative bioeconomy solutions from reaching the market in a timely manner. The additional costs incurred through extended preparation periods, legal consultancy fees, and compliance with overlapping administrative requirements are reflected in service pricing, reducing cost-competitiveness and potentially limiting market adoption.

Lesson Learnt / Best Practice:

- Designate a legal advisor within the one-stop-shop to provide regulatory guidance and support bioeconomy projects.
- Implement fast-track administrative mechanisms to accelerate the obtaining of permits,
- Develop standardized documentation templates that can be adapted across different administrative levels.

- Use regulatory sandboxes to enable real-world experimentation with low-TRL bioeconomy technologies under controlled oversight, reducing regulatory uncertainty and investment risk.
- Facilitate knowledge-sharing between regions.
- Produce guidance documents and legal toolkits on interpretation of ambiguous regulations and regulatory pathways for bioeconomy projects.
- Encourage regular updates to outdated legislation to reflect current bioeconomy innovations and align with EU frameworks.

2.6. Governance and Multi-Stakeholder Coordination

Barrier description:

Governance complexity represents a significant barrier in bioeconomy projects involving multiple stakeholders. Coordinating diverse interests, responsibilities, and institutional frameworks significantly slow down decision-making processes. When governance structures are complex and roles are poorly defined, it becomes unclear who holds decision-making authority and who is ultimately responsible for outcomes, weakening overall accountability. This often leads to difficulties in identifying the most suitable legal form to regulate relationships, particularly in public-private collaborations common in bioeconomy initiatives.

Bioboosters where barrier has been found:

- Coopirenaica
- Compost Segrià
- Wool processing plant
- Open access plant for industrial pre-scaling of alternative protein
- Alcarràs Bioproductors

How affect to the services provided:

These barriers hinder the delivery of **legal and systemic services** to a bioeconomy project. For legal services, the lack of clarity about the actors involved, as well as in the distribution of responsibilities, makes it difficult to provide legal advice and define the most appropriate governance structure, particularly when a public administration is involved. This also complicates the drafting of clear contractual frameworks and collaboration agreements that adequately allocate responsibilities and decision-making powers among stakeholders.

From a systemic perspective, weak role clarity undermines coordination among stakeholders, reduces ownership of key tasks, and complicates efforts to align actors across the value chain. As a result, cross-sector collaboration becomes fragmented, feedback loops slow down, and strategic decisions lose momentum, ultimately limiting the project's capacity to scale, integrate within territorial ecosystems, and generate broader systemic impact.

Lesson Learnt / Best Practice:

- Use systemic facilitation methods and stakeholder mapping tools to align expectations.
- Train Project Managers as systemic facilitators, not only coordinators.
- Establish clear governance frameworks at project inception, defining roles, responsibilities, and decision-making authority for all stakeholders to prevent delays and accountability gaps.
- Foster continuous dialogue among stakeholders to build shared understanding of objectives, timelines, and responsibilities from the outset.

Conduct regular governance reviews throughout the project lifecycle to address emerging coordination challenges and adjust roles as needed.

2.7. Social Acceptance and Communication

Barrier description:

Social resistance often emerges from limited public familiarity with bioeconomy technologies, which can generate uncertainty, misconceptions, or fear about potential risks. This resistance is further reinforced by past negative experiences with industrial or environmental projects that have eroded trust in institutions and technology developers. As a result, communities may be less willing to engage, support, or participate in new initiatives, creating additional barriers to implementation and long-term acceptance.

Bioboosters where barrier has been found:

- Coopirenaica
- Cooperativa Plana de Vic
- Ametller Agro-Park
- Ametller Mont-Roig Hub
- Archroma (Biobooster not accepted)

How affect to the services:

The **social resistance** can significantly hinder the delivery of systemic services. When communities are hesitant or distrustful, it becomes more difficult to build collaborative networks, align stakeholders across the value chain, and secure the social licence needed for territorial integration. This slows down engagement processes, reduces the effectiveness of capacity-building and communication efforts, and limits the project's ability to foster cross-sector cooperation. Ultimately, systemic interventions lose momentum, face higher transaction costs, and struggle to generate the long-term social and institutional support required for scalable bioeconomy transitions. When left unaddressed, social resistance may give rise to legal disputes, generating legal uncertainty and potentially jeopardizing the very foundations of the project, thereby threatening its legal viability and long-term continuity.

Lesson Learnt / Best Practice:

- Incorporate communication and mediation services into support programmes.
- Promote community engagement early, using transparent narratives about risks, benefits, and territorial impact.
- Provide templates, communication frameworks and case studies for promoters.

2.8. Operational Challenges of the Accelerator

Barrier description:

Some services were perceived as disconnected from one another, with unclear expectations and limited alignment on objectives. In addition, offering them free of charge reduced commitment levels among certain participants, leading to lower engagement, inconsistent follow-through, and reluctance to share the data needed for meaningful analysis and impact assessment.

Bioboosters where barrier has been found:

- Coopirenaica
- Wool processing plant
- Compost Segrià
- Mancomunitat Penedès Garraf (Biobooster not accepted)

How affect to the services provided:

This barrier undermines the delivery of **all the Bioboost service**. On the **technical** side, low participant engagement and incomplete data limit the ability to perform accurate assessments, refine solutions, or validate technologies. For **legal** services, unclear roles and weak commitment delay the provision of essential documentation, hinder compliance checks, and create gaps in permitting strategies. **Financial** services are affected when participants do not provide reliable operational, cost, or market information, making it difficult to evaluate business models, assess risks, or build credible investment cases. Finally, for **systemic** services, fragmented participation disrupts coordination across value chain actors, reduces trust, and hinders efforts to align stakeholders around shared goals. Together, these issues make it harder to generate actionable insights, slow down decision making, and diminish the overall impact of support provided to the project.

Lesson Learnt / Best Practice:

- Establish clear service agreements, responsibilities, and expected outputs.
- Provide a structured service catalogue that differentiates support for companies (economic value) vs. public bodies (territorial impact).
- Use integrated project roadmaps to ensure coherence across services.

2.9. Capacity Building and Skills Gaps (Primary Sector & Innovators)

Barrier description:

Awareness of circular opportunities within the primary sector remains limited, making it difficult for actors to identify potential value-adding uses for their resources. Innovators also struggle to communicate the benefits of their solutions in a clear and compelling way, as messaging is often overly technical and fails to resonate with farmers, cooperatives, or local industries. This communication gap reduces interest, slows adoption, and hinders the development of collaborative circular initiatives.

Bioboosters where barrier has been found:

- Coopirenaica
- Alcarras Bioproductors

How affect to the services provided:

The capacity building and skill gaps limits the delivery of **all the Bioboost service**. On the **technical** side, low understanding among primary producers limits the availability of accurate data on biomass, practices, and local constraints, making it harder to design realistic technical solutions or validate process feasibility. For **legal** services, unclear awareness of circular processes slows the provision of essential documentation and compliance information, complicating permitting strategies and increasing the time required to clarify regulatory implications to stakeholders unfamiliar with bio-based approaches. The **financial** dimension is also affected: if producers and local actors do not grasp the economic potential of circular models, they are less likely to share cost information, consider new

revenue streams, or participate in investment planning—weakening business model development and investor readiness. Finally, at the **systemic** level, communication that fails to resonate with local realities hinders engagement across the value chain, limits trust and alignment among actors, and reduces the capacity to build collaborative networks or mobilise the territorial synergies needed for a successful bioeconomy transition. Altogether, these communication and awareness gaps slow decision-making, reduce participation, and weaken the overall impact of the services provided

Lesson Learnt / Best Practice:

- Strengthen training and extension services, especially in conventional agricultural regions.
- Support innovators with strategic communication, investor storytelling and market positioning.
- Offer specialised training modules on circularity, valorisation and systemic value creation.

2.10. Tools and Digital Support

Barrier description:

Many actors lack the capacity to apply resource-mapping and symbiosis tools in a meaningful way, limiting their ability to detect potential material exchanges, valorisation pathways, and synergies across the territory. Without adequate technical support to guide users through data collection, analysis, and interpretation, these tools remain underutilised and often fail to generate actionable insights. As a result, opportunities for circular integration are overlooked, and decision-makers struggle to prioritise interventions, assess feasibility, or develop robust bioeconomy strategies.

Bioboosters where barrier has been found:

- Coopirenainca
- Compost Segrià
- Ametller Mont-Roig Hub
- Labin
- Ecotros (Biobooster not accepted)
- Chlydro (Biobooster not accepted)

How affect to the services provided:

Systemic services rely on a clear understanding of material flows, actors, and territorial linkages to identify opportunities for collaboration and circular integration. When stakeholders lack the skills or guidance to collect data, run analyses, or interpret results, the mapping of biomass availability, waste streams, and potential synergies becomes incomplete or inaccurate. Insufficient technical support further amplifies these gaps, making it difficult to validate findings, prioritize interventions, or translate insights into coordinated actions across the value chain. As a result, systemic services lose their ability to convene actors around shared opportunities, build strategic partnerships, and design coherent territorial pathways. This weakens stakeholder alignment, slows the emergence of viable circular ecosystems, and reduces the overall transformative potential of the bioeconomy initiative.

Lesson Learnt / Best Practice:

- Provide hands-on training and user manuals for digital tools (e.g., SYNER).
- Standardise data formats and promote interoperability.
- Showcase tool applications through case studies.

3. Areas for improving the operability of the Accelerator

The implementation of the Bioboost Accelerator has provided valuable insights into the strengths and limitations of the current Project Development Assistance (PDA) model. While the tailored support approach proved effective in advancing bioeconomy initiatives, several structural and operational areas for improvement were identified that should be addressed to enhance the effectiveness, efficiency, and long-term impact of the PDA.

Based on the challenges identified and the lessons learnt gathered during the implementation of the Bioboost Accelerator (Section 2: “Challenges identified in PDA services delivered”), several priority actions have been identified to improve the effectiveness and impact of the PDA services delivered:

- **Strengthen project pre-selection and readiness assessment**

Introduce a mandatory pre-diagnostic phase to assess TRL, data availability, governance, and commitment levels before defining the PDA. This will ensure better alignment between project maturity and the scope of services provided.

- **Improve integration and coordination of PDA services**

Implement integrated project roadmaps with clear milestones linking technical, legal, financial, and systemic services, ensuring coherent delivery and avoiding fragmented support.

- **Increase commitment and accountability of project promoters**

Establish formal service agreements defining roles, data requirements, timelines, and expected outputs. Explore co-commitment mechanisms (e.g. cost-sharing or performance-based milestones) to improve engagement.

- **Reinforce capacity-building within supported projects**

Complement PDA services with targeted training on data management, business planning, regulatory pathways, and communication with investors and stakeholders, especially for early-stage and primary-sector actors.

- **Enhance regulatory support and administrative facilitation**

Strengthen legal advisory capacity within the one-stop shop, promote standardised permitting documentation, and expand the use of regulatory sandboxes to reduce uncertainty and delays.

- **Adapt investment readiness support to bioeconomy specificities**

Develop bioeconomy-tailored investment readiness tools, promote blended finance and risk-sharing mechanisms, and strengthen dialogue with investors on systemic and territorial value creation.

- **Increase effective use of digital and mapping tools**

Provide hands-on training, standardised data templates, and facilitation support to ensure resource-mapping and symbiosis tools generate actionable outputs for PDA delivery.

4. Contribution of the Bioboost Accelerator to the local bioeconomy

Over four years of implementation, BIOBOOST has clearly demonstrated the relevance of specialised acceleration services in unlocking and advancing bioeconomy projects. The experience confirms that complex bio-based initiatives require more than technical validation: they demand structured development pathways, coordinated stakeholder engagement, and tailored strategic support to move from concept to implementation.

While the previous section analysed the challenges encountered during the implementation of PDA, the BIOBOOST Accelerator has simultaneously shown how a structured and adaptive acceleration model can effectively address many of those constraints. Its contribution lies not only in the provision of individual services, but in how those services were delivered — through an integrated, flexible, and system-oriented methodology capable of adapting to project maturity, territorial conditions, and evolving external contexts.

Over time, the Accelerator evolved from a methodological framework into a fully operational support mechanism, generating measurable value across projects and stakeholders. This contribution can be understood across four complementary dimensions: project structuring and professionalisation, territorial systemic impact, investment and credibility enhancement, and operational learning.

Strengthening project structuring and professionalization

One of the most tangible contributions of the BIOBOOST Accelerator was the structured organisation of projects through the Project Development Plan (PDP).

Many projects entered the Accelerator with promising concepts but incomplete documentation, unclear governance structures, limited feasibility data, or underdeveloped financial models. Through the PDP, projects were required to define:

- Clear technical scope and boundaries,
- Identified risks and barriers,
- Defined milestones and timelines,
- Allocation of responsibilities,
- Required services and expected outputs.

This structured roadmap helped transform fragmented initiatives into organised development processes.

The PDP did not function as a static document. It evolved into a flexible management tool that could be updated according to project maturity and changing external conditions. This adaptability increased the effectiveness of service delivery and prevented misalignment between expectations and resources.

Moreover, the Accelerator enhanced the professionalisation of project promoters by:

- Clarifying CAPEX and OPEX structures,
- Supporting techno-economic analysis,
- Structuring preliminary business models,
- Identifying regulatory pathways,
- Improving communication and investment narratives.

This professionalisation process reduced ambiguity and increased internal coherence within projects, even when external constraints limited short-term implementation.

Generating Systemic Territorial Impact

Beyond individual projects, the Accelerator contributed to strengthening the Catalan bioeconomy ecosystem.

Several supported initiatives involved complex multi-actor configurations, including cooperatives, municipalities, private companies, and public institutions. In these cases, the role of the Accelerator extended beyond technical advice into systemic facilitation.

Through stakeholder mapping, value-chain analysis, and coordination processes, the Accelerator:

- Facilitated dialogue between actors with different interests and risk perceptions,
- Identified circular synergies and resource optimisation opportunities,
- Encouraged integration of energy, waste, and agricultural systems,
- Promoted alignment with regional bioeconomy strategies.

A consistent observation across projects is that technological feasibility alone is insufficient for implementation. Governance clarity, stakeholder alignment, and territorial embeddedness are decisive conditions for progress.

In this sense, BIOBOOST acted as a neutral intermediary capable of reducing coordination frictions and fostering systemic thinking within projects that otherwise would have remained fragmented or institutionally blocked.

Enhancing Investment Readiness and Credibility

Another significant contribution lies in improving project credibility vis-à-vis investors and public authorities.

From the outset, the Accelerator integrated monitoring mechanisms to assess technical, environmental, economic, and social dimensions. Over time, this framework was strengthened through the introduction of quantitative impact assessment for selected projects.

This structured approach to impact evaluation generated several benefits:

- Increased transparency in project assumptions,
- Clearer articulation of environmental and socio-economic contributions,
- Improved documentation for financing discussions,
- Better identification of investment risks and mitigation strategies.

Experience showed that investment-readiness in bioeconomy projects depends not only on expected financial returns, but also on the clarity of governance structures, regulatory positioning, and the ability to demonstrate broader systemic benefits.

By formalising these elements within project roadmaps and monitoring frameworks, the Accelerator reduced informational asymmetries between project promoters and potential financiers.

Operational Learning and Methodological Consolidation

The evaluation of a broad pipeline of candidate projects and the support of a portfolio of Bioboosters provided substantial operational insight into how bioeconomy acceleration mechanisms function in practice.

Key operational improvements introduced during implementation included:

- First-contact meetings prior to formal acceptance,
- Strengthened validation procedures with an External Advisory Committee,
- Implementation of time-tracking mechanisms per project,
- Regular structured follow-up meetings,
- Formalised closure and reporting procedures,
- Progressive integration of quantitative impact assessment.

These improvements illustrate that acceleration mechanisms in the bioeconomy require adaptive governance and continuous methodological refinement.

The BIOBOOST experience confirms that:

- Early filtering of project maturity reduces resource inefficiencies,
- Flexible planning instruments (such as adaptable PDPs) are essential,
- Systemic facilitation is as important as technical expertise,
- Impact monitoring strengthens credibility and strategic alignment.

The contribution of the Accelerator therefore resides not only in the services delivered, but also in the structured methodology, adaptive management approach, and systemic coordination capacity developed throughout the project lifecycle. These elements directly reinforce the objectives of the [Catalan Bioeconomy Strategy 2030](#) and its [2025–2027 Action Plan](#), which emphasize participatory governance, cross-sectoral coordination, and the identification and prioritization of concrete actions to advance a circular, competitive bioeconomy in Catalonia.

5. Conclusions

The implementation of the BIOBOOST Accelerator has provided a comprehensive testbed for understanding how tailored Project Development Assistance can support the maturation of bioeconomy initiatives.

First, the experience confirms that the main bottlenecks in bioeconomy projects are rarely purely technological. While technological maturity remains relevant, governance complexity, regulatory fragmentation, limited data availability, financial misalignment, and insufficient stakeholder coordination often represent more significant obstacles to implementation.

Second, the structured integration of technical, legal, financial, and systemic services within a single support mechanism proved essential. Fragmented or isolated advisory services are insufficient to address the interconnected nature of bioeconomy projects. The Project Development Plan (PDP) emerged as a critical tool to ensure coherence, sequencing, and accountability across support areas.

Third, investment-readiness in the bioeconomy requires adaptation of traditional financial frameworks. Many initiatives generate systemic environmental and territorial value that is not fully captured by conventional financial KPIs. Bridging this gap requires blended finance mechanisms, risk-sharing instruments, improved impact quantification, and stronger dialogue with investors.

Fourth, systemic facilitation and stakeholder alignment are decisive factors for progress. Bioeconomy projects often involve multiple actors with heterogeneous interests, capacities, and risk perceptions. Without structured governance frameworks and active facilitation, coordination gaps significantly slow down implementation.

Fifth, adaptive management is fundamental for accelerator-type mechanisms. The evolution of BIOBOOST's methodology, including improvements in project pre-selection, flexible PDP management, follow-up mechanisms, and impact monitoring, demonstrates that continuous refinement is necessary to maintain effectiveness and efficiency.

Finally, the BIOBOOST experience highlights that acceleration mechanisms should not only aim to mobilise investment, but also to strengthen regional bioeconomy ecosystems, enhance promoter capacities, cross-sectoral coordination and foster systemic transformation. The contribution of the Accelerator lies not only in the number of services delivered, but in the methodological framework, coordination capacity, and learning processes developed throughout the project lifecycle. These elements align with and reinforce the priorities set out in the [Catalan Bioeconomy Strategy 2030](#) and its [2025-2027 Action Plan](#), particularly their emphasis on strengthening governance mechanisms, fostering cross-sectoral collaboration, and accelerating the maturation of bio-based value chains. At a broader scale, the approach also reflects the principles of the [European Bioeconomy Strategy](#), which calls for systemic innovation, sustainable resource use, and integrated territorial development as foundations for a resilient and competitive bioeconomy across the EU.

The lessons and best practices consolidated in this report provide a foundation for improving future Project Development Assistance (PDA) schemes and for replicating structured bioeconomy acceleration models in other regions seeking to transition towards more circular, resilient, and sustainable economic systems.

ANNEX 1 - Biobooster's Factsheets and Media Materials

Detailed information on each Biobooster, including project descriptions, objectives, development status and key results, is compiled in individual factsheets. In addition, audio-visual materials have been produced to showcase the projects, present their promoters, and illustrate their contribution to the circular bioeconomy.

BIOBOOSTER	Factsheet	Video
Alcarràs Bioproductors	https://bioboost.cat/files/FITXA-Alcarras-ENG-3.pdf	https://youtu.be/_9CSTyUTVPg
Wool Processing Plant	https://bioboost.cat/files/FITXA-Planta-llana-Tagamanent-ENG_reduced-1.pdf	https://www.youtube.com/watch?v=0bHD9aWi0iM&t=1s
Ametller Mont-Roig Hub	https://bioboost.cat/files/FITXA-Ametller-ENG.pdf	https://youtu.be/potUmZ6qMj8
Labin	https://bioboost.cat/files/FITXA-Labin-ENG-1.pdf	On-going
Cooperativa Plana de Vic	On-going	-
Open access plant for industrial pre-scaling of alternative protein	https://bioboost.cat/en/biobooster-first-pre-industrial-scaling-plant-for-alternative-protein/	-

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