



Final Webinar

De-risking Bioeconomy Projects: Lessons Learned from BIOBOOST

RocaJunyent



Simbiosy

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Welcome & Warm-up

Code: 5463 7200



Why Bioeconomy Accelerators Matter for Europe's Transition

Lucie Blondel – Policy Officer at DG Research & Innovation (European Commission)

Final Webinar: De-risking Bioeconomy Projects: Lessons Learned from BIOBOOST



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BIOBOOST in Perspective: Key Results, Project Insights, and BIOBOOSTER Experiences in Removing Barriers and Enabling Projects

*Miriam Romero – Project Manager at Inveniam Group
& BioBoost Project coordinator*

Final Webinar: De-risking Bioeconomy Projects: Lessons Learned from BIOBOOST



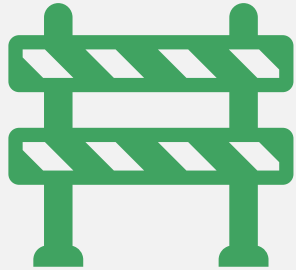
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The BioBoost project



The challenge of the bioeconomy

Despite de strong potencial in Catalonia...



...many bioeconomy initiatives struggle to scale, face regulatory uncertainty, lack coordination across stakeholders and are not investment-ready.



BioBoost: The Project



4 years: started June 2022



“Horizon Europe Research and innovation programme”.



1.7M€



Objective:

Stimulate an additional investment of **30 million euros** in sectors of the Catalan bioeconomy until 2026 **by unlocking project's barriers.**



**Circular
Cities & Regions
Initiative**

CCRI Project

An initiative
of the



BioBoost: How?

Free strategic assistance services

With the aim of reducing investment risk and execution time in bioeconomy projects rooted in Catalonia.

- Understand the **barriers** that slow down the implementation of bioeconomy projects.
- Look for **opportunities and solutions** to overcome the challenges identified.
- **Reduce investment risk** and **execution time**.
- Provide a **systemic vision**.
- Promote **public-private collaboration**.
- Propose **recommendations** and specific strategies to promote the bioeconomy in the territory and in the EU.

BioBoost: The Consortium



Symbiosy
Impact mapping, facilitation and
circular economy services



inveniam . .
Business & Finance Services

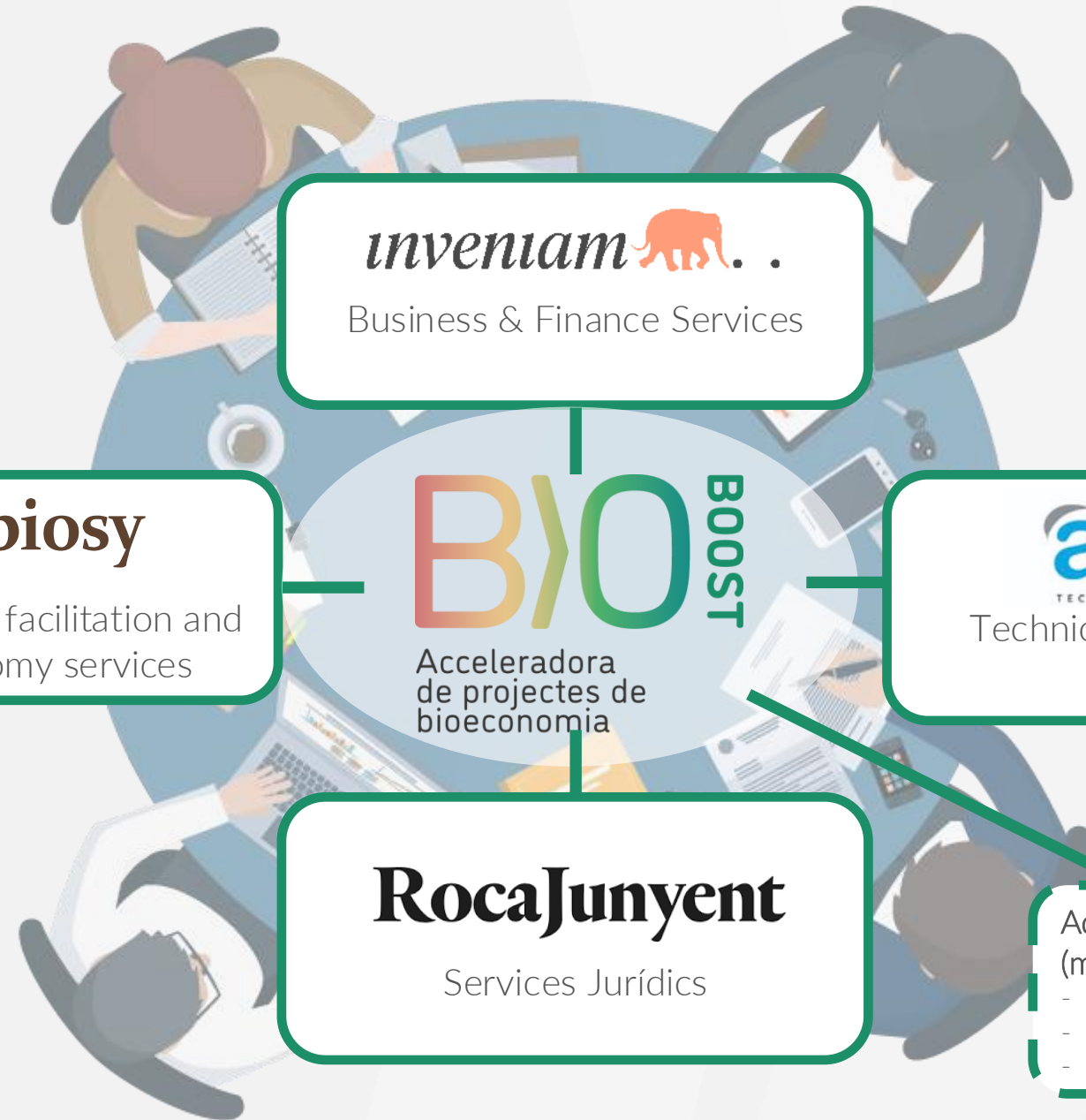


aeris
TECNOLOGÍAS AMBIENTALES
Technical and Engineering
Services

RocaJunyent
Services Jurídics

Advisory board
(multisectorial):

- Public administration
- Business sector
- Academy



BioBoost: To who?

The Bioboosters



What they are?

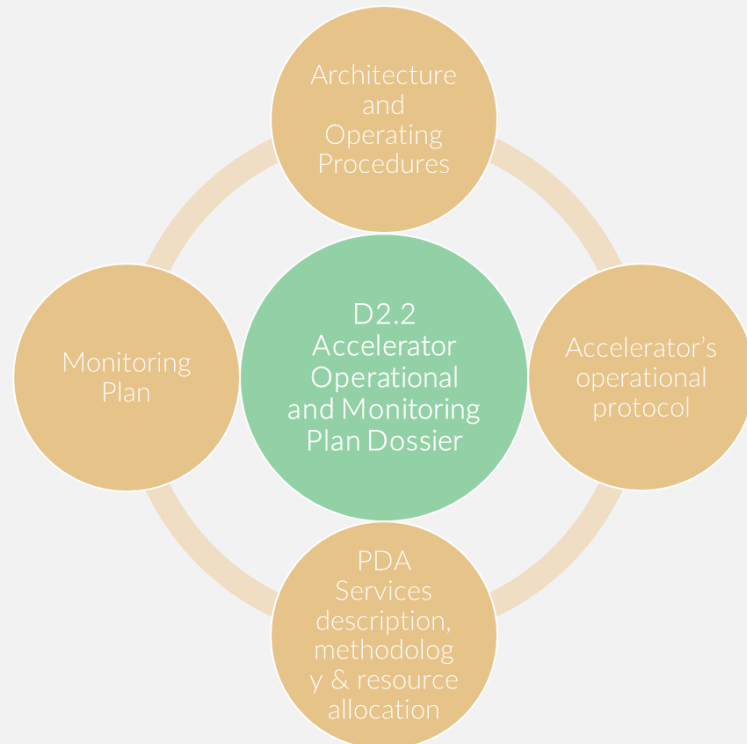
1. **Bioeconomy projects** (transforming renewable biological resources to produce bio-based materials, energy, products or services in the bioeconomy sectors)
2. They have a **systemic impact**
3. They need **collaboration between different stakeholders** to succeed
4. They are found in **Catalonia**
5. They promote investments of more than **€1M**

Four years in perspective



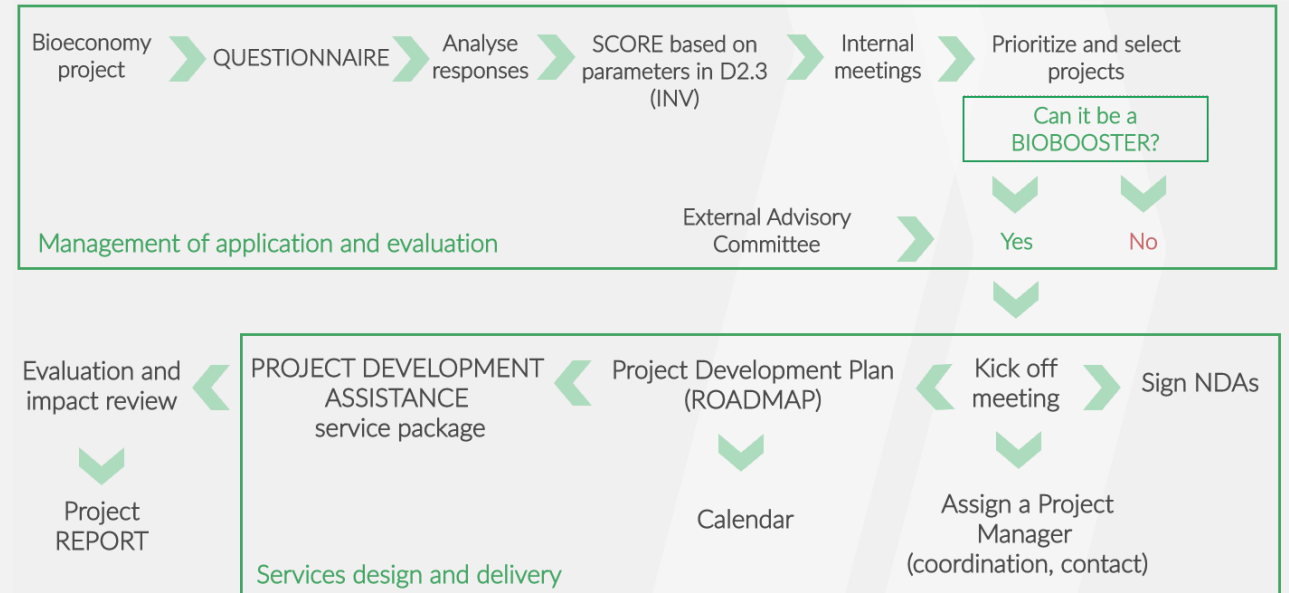
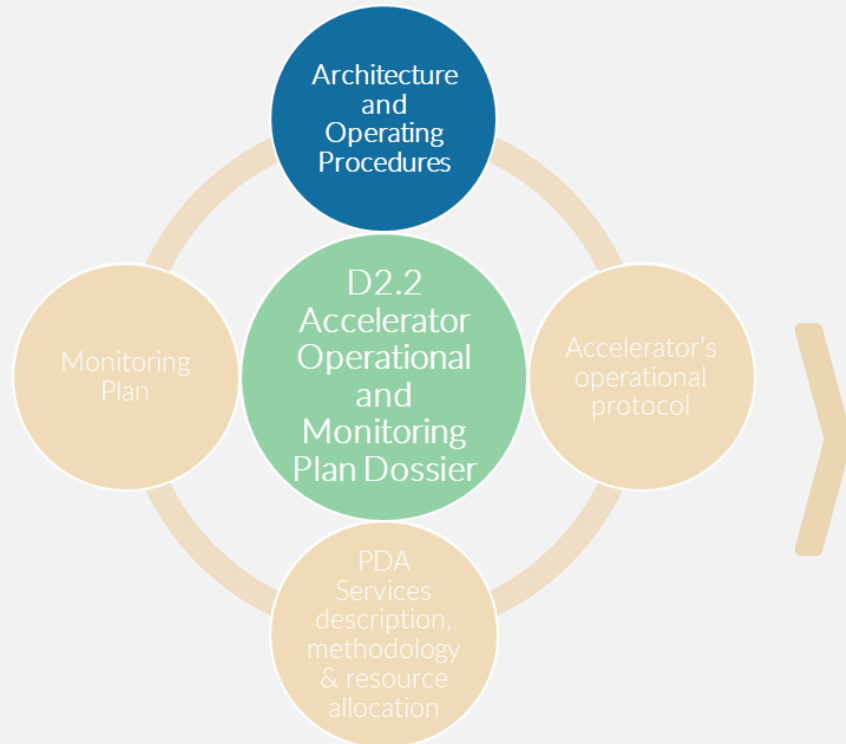
The methodology

4 years testing and shaping the Accelerator's methodology



The methodology

4 years testing and shaping the Accelerator's methodology



The methodology

4 years testing and shaping the Accelerator's methodology



Project Selection – Weighting Criteria

MILESTONE	INVESTMENT	PROJECT MATURITY	SYSTEMIC IMPACT POTENTIAL	PDA SERVICES	SECTOR	LOCATION
1 st Stage < 12 M€	40%	20%	15%	10%	Cooperativa	5%
2nd Stage Between 12M€ & 25M€	25%	15%	20%	10%		10%
3rd Stage >25M€	15%	5%	15%	20%		20%

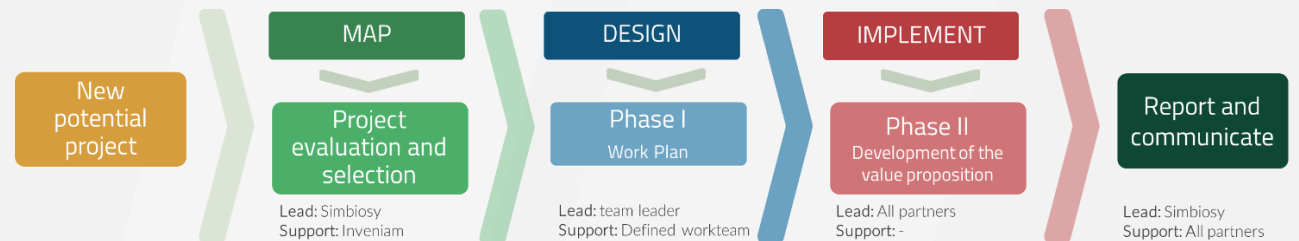
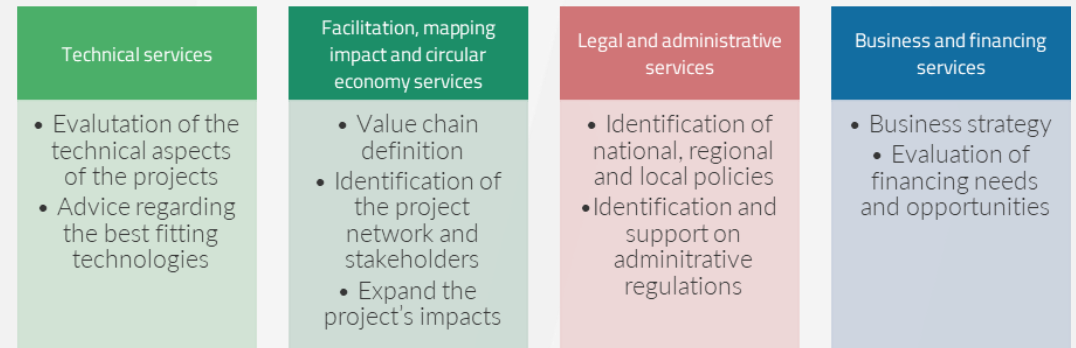
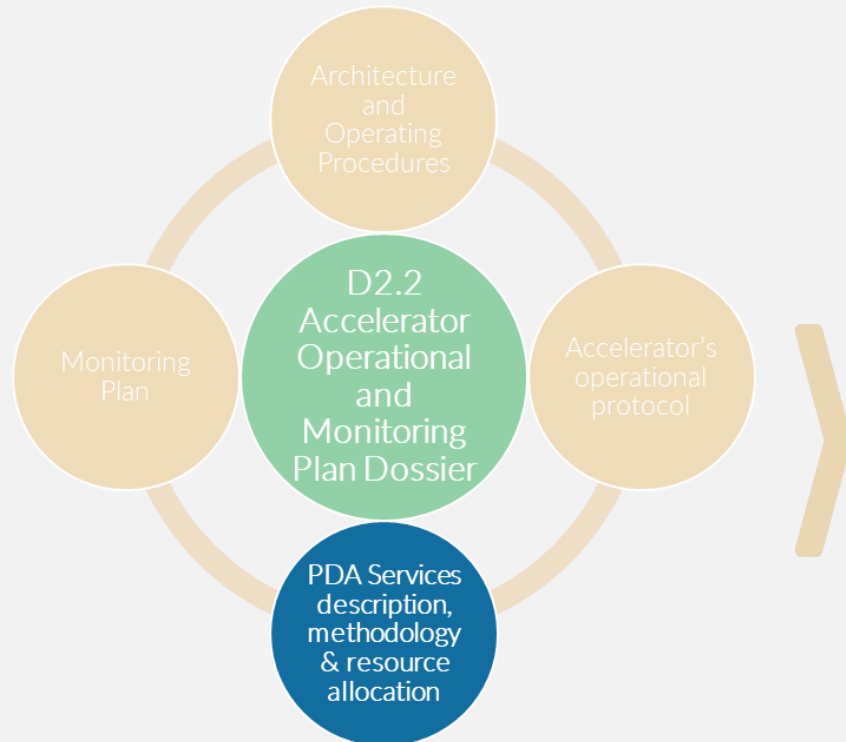
Biobooster pipeline revision (internal)



Strategic Committee feedback

The methodology

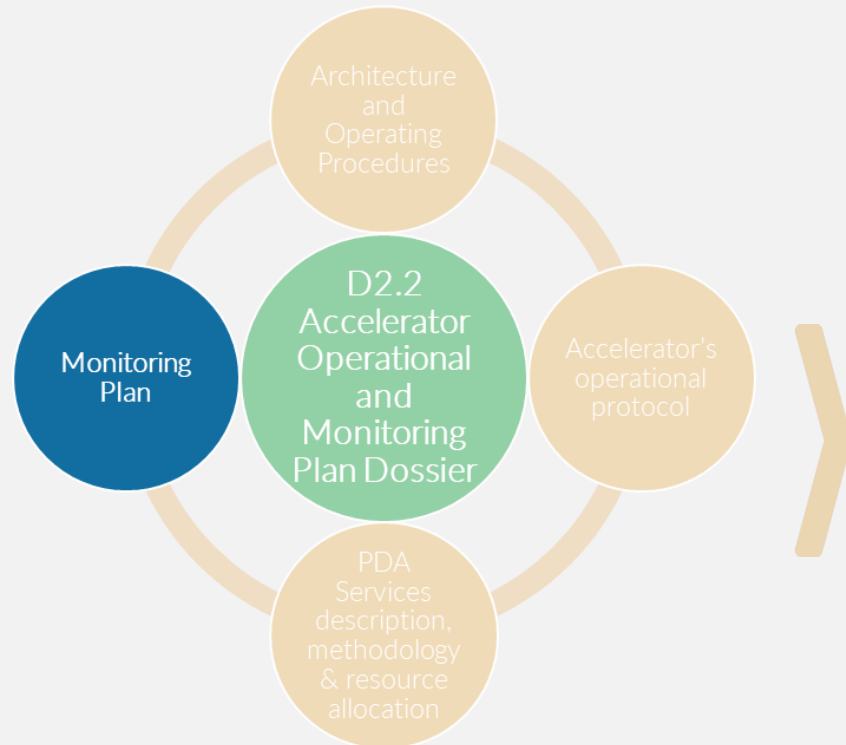
4 years testing and shaping the Accelerator's methodology



Based on CCRI methodology

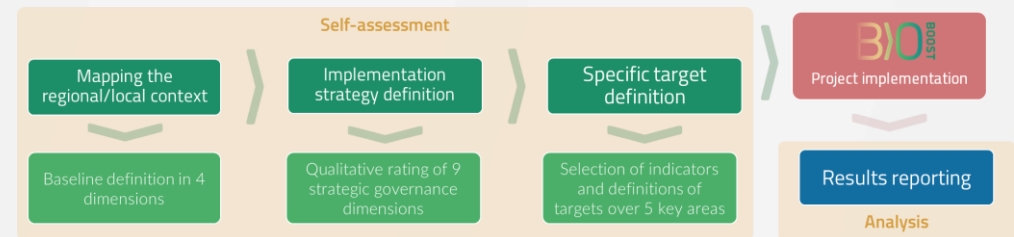
The methodology

4 years testing and shaping the Accelerator's methodology



➔ Impact of the assisted projects

Based on CCRI methodology and OCDE indicators



➔ Performance of the Accelerator

The Accelerator pipeline

	Potential Biobooster	Score from questionnaire	Evaluation Status
1		8.54	Accepted as Biobooster 1, finally suspended
2	Alcarràs Bioproductors SAT	8.97	Accepted as Biobooster 2
3		3.27	Rejected
4	Ametller Origen	8.93	Accepted as Biobooster 3
5		6.17	Rejected
6	Wool processing plant	5.67	Accepted as Biobooster 5
7	EPACAT – Protein Plant	8.27	Accepted as Biobooster 4
8		7	Accepted as Biobooster 7, finally suspended
9	Plana de Vic Cooperative	7.23	Accepted as Biobooster 6
10		4.87	Rejected
11		3.70	Rejected
12	Labin Products SL	4.73	Accepted as Biobooster 9
13	Insectius	5.90	Accepted as Biobooster 8
14		6.27	Rejected
15		8.03	Rejected
16		4.87	Rejected
17	Ecotros	5,80	Accepted as Biobooster 10
18		6,4	Deferred to later stages
19		8,07	Rejected
20		4,23	Rejected

20 Projects evaluated

10 Accepted as Bioboosters

9 Projects rejected

1 deferred to a later stage

What the numbers say

KPI	Result	Final target
Number of bioeconomy projects applying for PDA services	20	20
Number of bioeconomy projects receiving PDA services	11	10
Total count of PDA services provided	60	50
Satisfaction rating or feedback from bioeconomy projects participants regarding the effectiveness and value of the PDA services	4,5/5	>4
Investments leveraged	50 M€	30 M€
Stakeholders involved	1000	500

The relevance of the services offered

	Facilitation / Mapping	Technical	Administration and legal	Business and financing
Biobooster 1	High	Medium	Low	High
Biobooster 2	High	Medium	High	High
Biobooster 3	Medium	High	Low	High
Biobooster 4	High	Low	Medium	High
Biobooster 5	Low	Low	High	High
Biobooster 6	Medium	High	Medium	Low
Biobooster 7	N/A	N/A	N/A	N/A
Biobooster 8	Low	Low	High	Low
Biobooster 9	High	Low	Low	Low
Biobooster 10	High	Medium	High	High

- 1 Business and financing
- 2 Facilitation / Mapping
- 3 Administration and legal
- 4 Technical

Bioboosters: an overview of the services delivered



The Bioboosters

8 Bioboosters, 3 typologies

1

Bioenergy

Alcarràs

Cooperativa Plana de Vic

Ecotros

Ametller Origen

2

Wool valorisation

Tagamanent plant

3

Agri-food

Insectius

Alternative protein plant

Labin Products

The Bioboosters

1

Bioenergy

Alcarràs

Cooperativa Plana de Vic

Ecotros

Ametller Origen

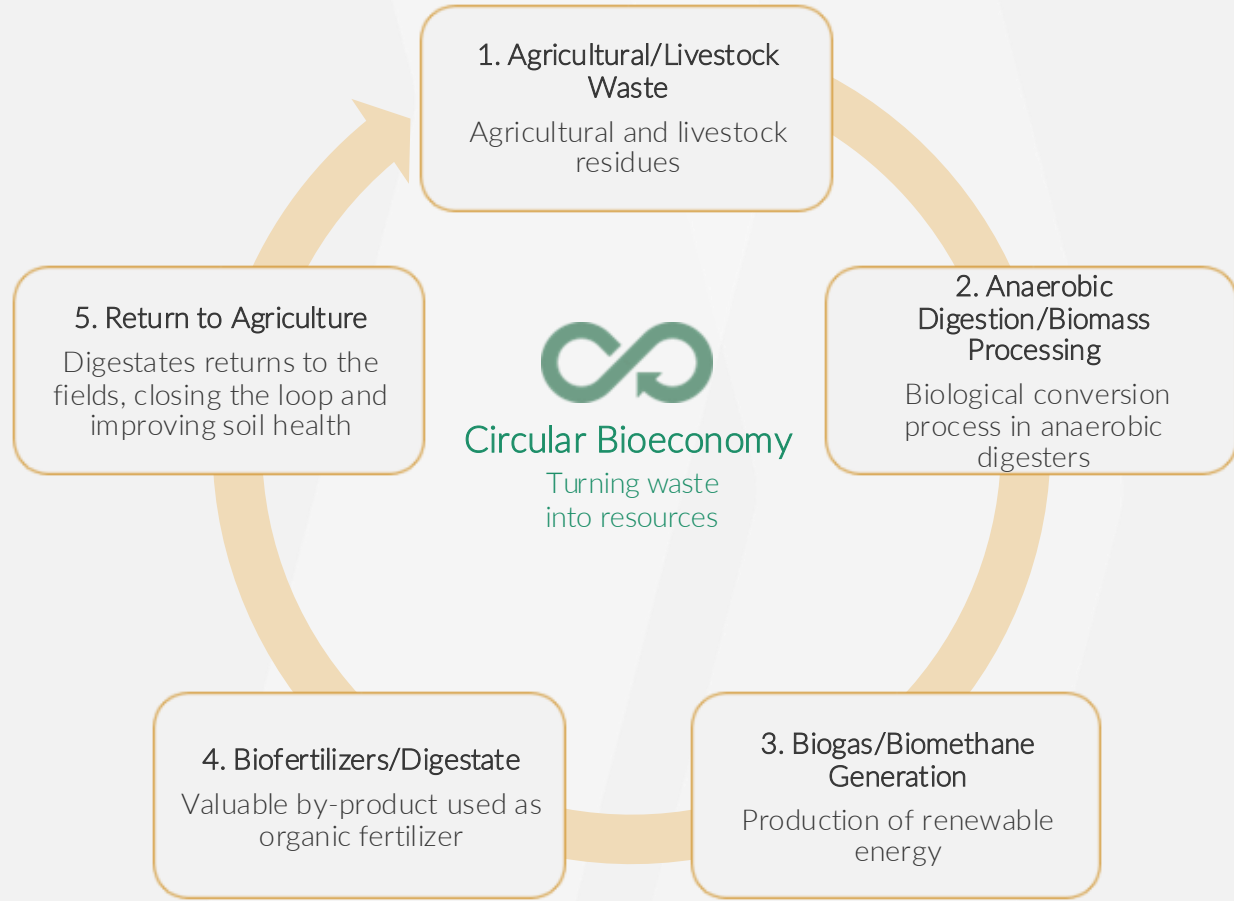


The Bioboosters

1

Bioenergy

- Alcarràs
- Cooperativa Plana de Vic
- Ecotros
- Ametller Origen



Waste and emissions reductions	Renewable and sustainable energy	Soil fertility and sustainable agriculture	Circular and local economy
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The Bioboosters



Description: Cooperative of 150 livestock farming families representing over 600 cattle and pig farms in Alcarràs, promoting a circular bioeconomy model through the first biocluster (“biopolígon”) in Catalonia.



Feedstock: Cattle and pig sector, together with agricultural and vegetal residues.

Bioenergy

Alcarràs

Cooperativa Plana de
Vic

Ecotros

Ametller Origen

The project



Biogas plant to produce electricity and use digestate to produce compost as a waste management solution.



Strengthening circular economy practices and creating new local value chains for the livestock sector and the regional bioeconomy.

The Bioboosters



Description: Livestock cooperative (founded in 1966) representing farmers in the Osona region, focused on promoting a more sustainable livestock sector.



Feedstock: Pig slurry and livestock manure

Bioenergy

Alcarràs

**Cooperativa Plana
de Vic**

Ecotros

Ametller Origen

The project



Biogas plant to improve manure management for local farmers, providing a sustainable and economically viable solution (digestates, ammoniacal waters and ammonium sulphate salts).



In collaboration with the technology and research centre **CT BETA** and **Genia Bioenergy**, which provides expertise in energy, engineering, plant operation and the biomethane market.

The Bioboosters



Description: Catalan initiative focused the valorisation of agricultural and forestry biomass, promoting carbon sequestration, soil improvement and sustainable land management.



Feedstock: Woody biomass from agricultural pruning, olive groves, agroforestry residues and municipal green waste. Woody biomass from agricultural pruning, olive groves, agroforestry residues and municipal green waste.

Bioenergy

Alcarràs

Cooperativa Plana de
Vic

Ecotros

Ametller Origen

The project



Installation of a pyrolysis unit to valorise local tree pruning and agroforestry biomass from agricultural fields through biochar production.



Improvement of local forestry and woody biomass management while reducing wildfire risk in an area highly vulnerable to forest fires.

The Bioboosters



Description: Catalan agri-food company integrating agricultural production, food processing and retail distribution.



Feedstock: Agricultural by-products, horticultural residues and agro-industrial side streams generated from greenhouse and food production activities.

Bioenergy

Alcarràs

Cooperativa Plana de
Vic

Ecotros

Ametller Origen

The project



Development of the Hub Mont-roig agro-industrial park, including over 50 hectares of technical greenhouses and R&D facilities dedicated to sustainable food production and agricultural innovation.



Potential integration of renewable energy systems, including solar PV infrastructure, biogas and pyrolysis plants to meet high energy demands.

The Bioboosters

Bioenergy

Alcarràs

Cooperativa Plana de Vic

Ecotros

Ametller Origen

Different projects, common barriers

Complex and
time-consuming
administrative
procedures

Challenges with
urban planning and
facility location

Limited expertise to
choose the right
biotechnology and
scale

Unclear financing
sources and
investment
structure

Absence of a
business plan

Difficulty explaining
the project
convincingly to
stakeholders

Reluctance toward
innovation and large
investments

Limited vision of
locally available
resources

Oposition from local
citizens

The Bioboosters

The services offered to de-risk them

Bioenergy

Alcarràs

Cooperativa Plana de Vic

Ecotros

Ametller Origen

Facilitation

Mapping of locally
available resources
for the biogas plant

Market access
exploration for sub-
product

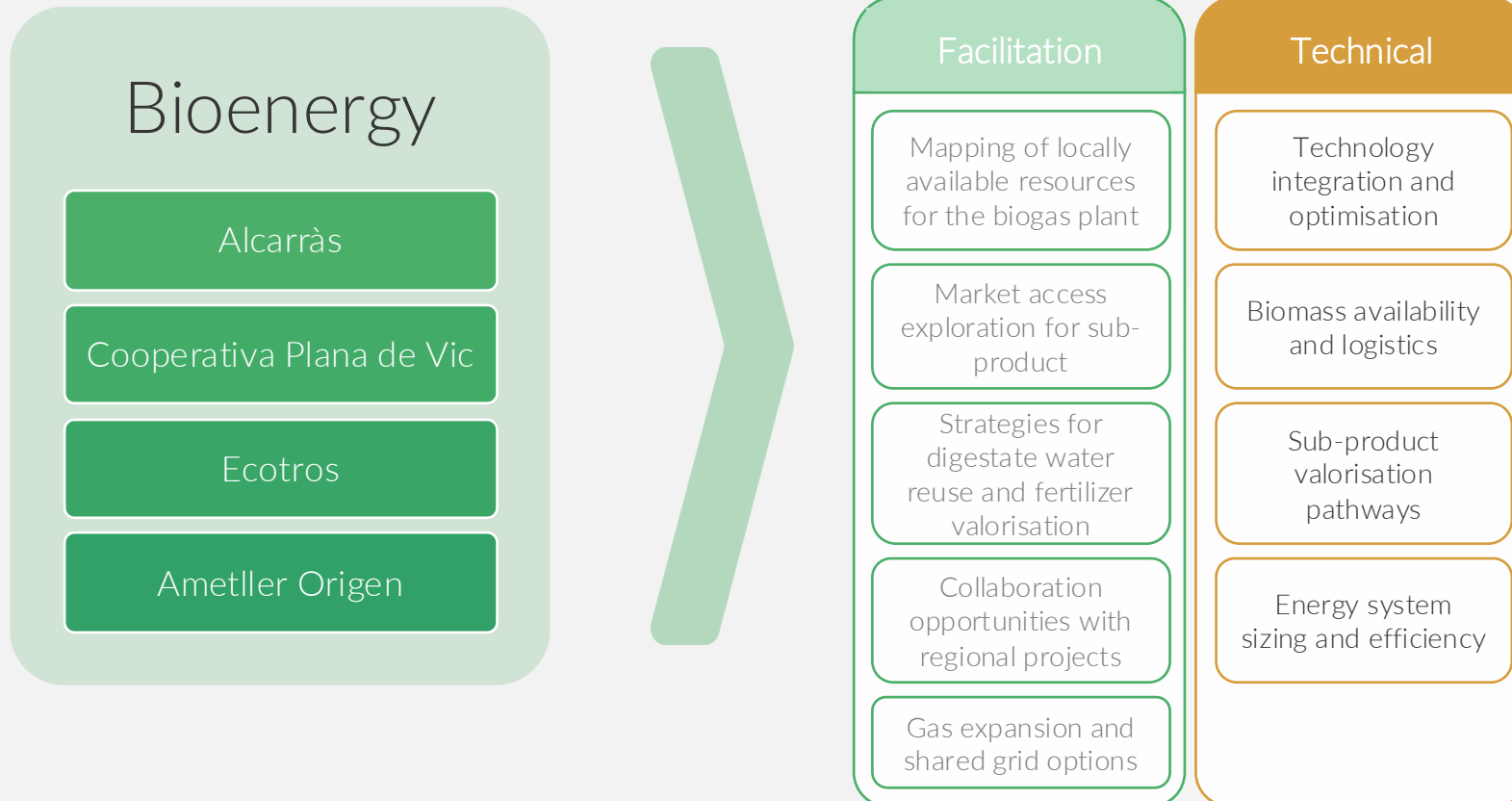
Strategies for
digestate water
reuse and fertilizer
valorisation

Collaboration
opportunities with
regional projects

Gas expansion and
shared grid options

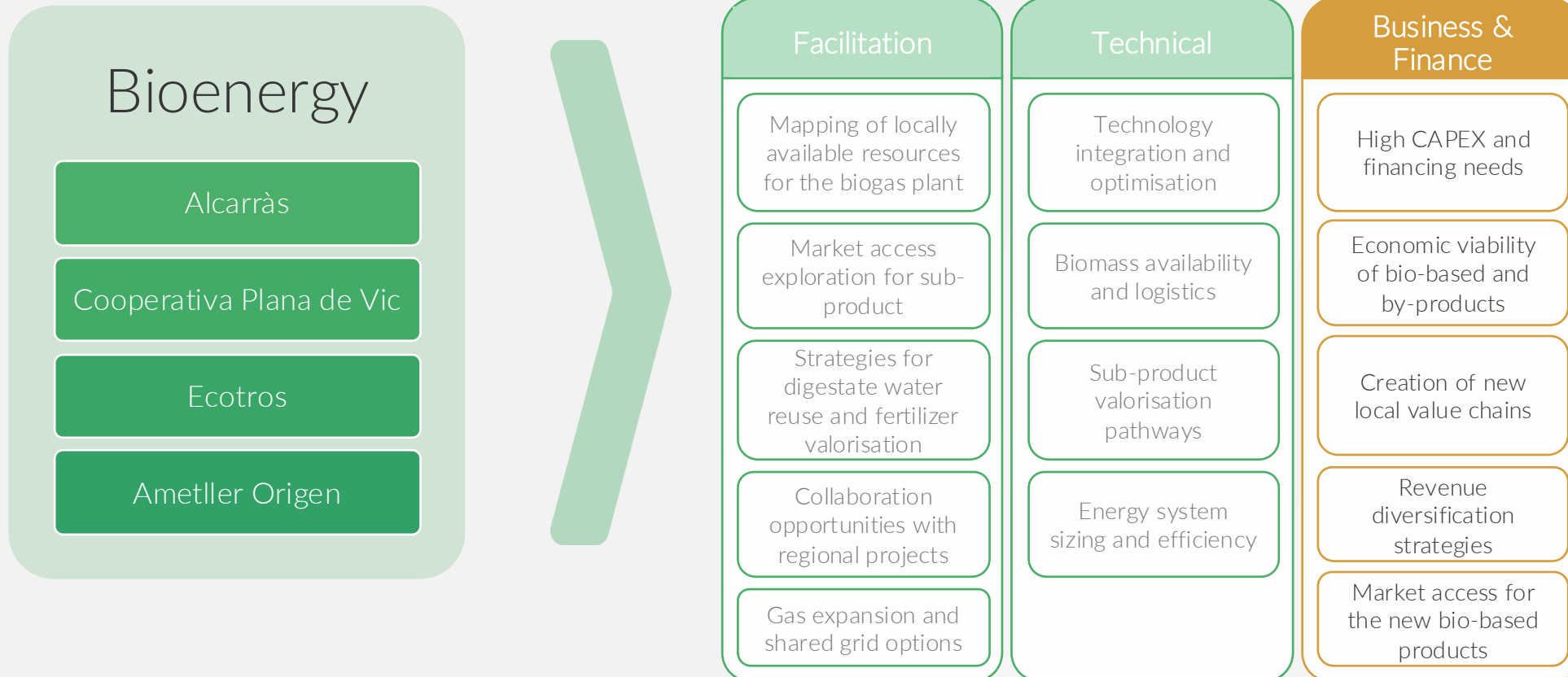
The Bioboosters

The services offered to de-risk them



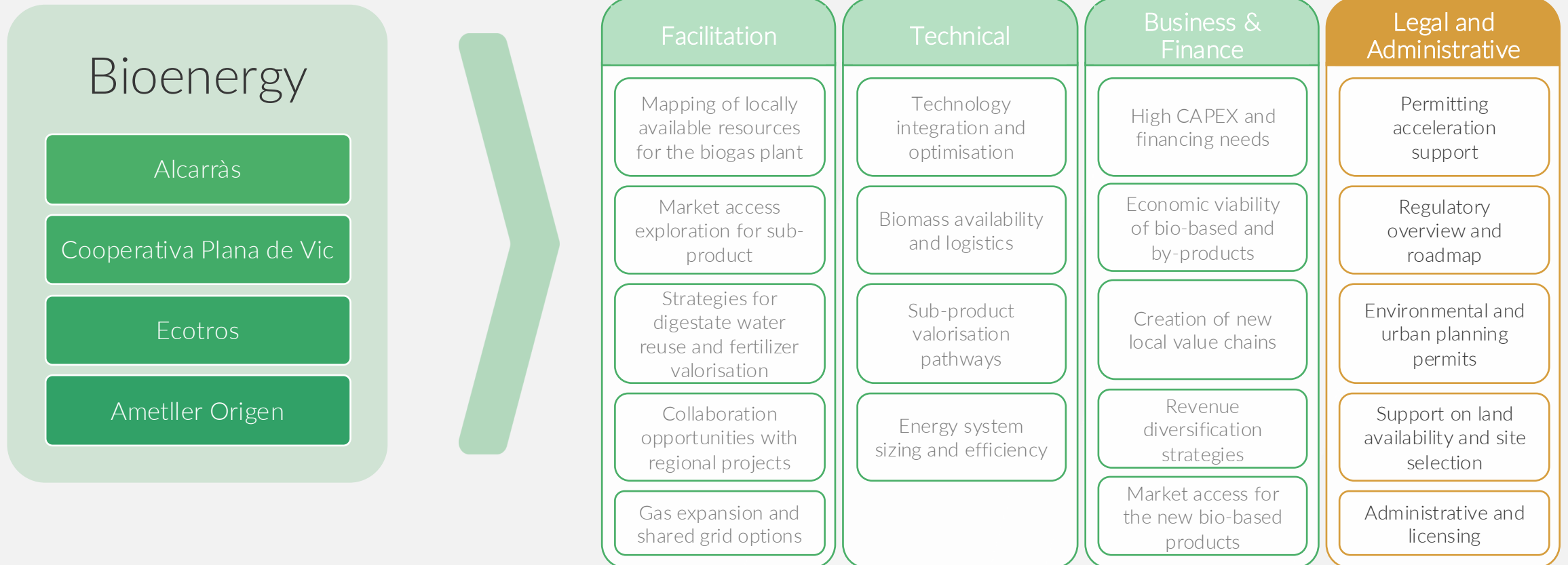
The Bioboosters

The services offered to de-risk them



The Bioboosters

The services offered to de-risk them



The Bioboosters



Description: Public initiative led by the Municipality of Tagamanent to support circular bioeconomy and extensive livestock farming.



Feedstock: Raw sheep wool from local and regional livestock farms.

2

Wool valorisation

Tagamanent plant

The project



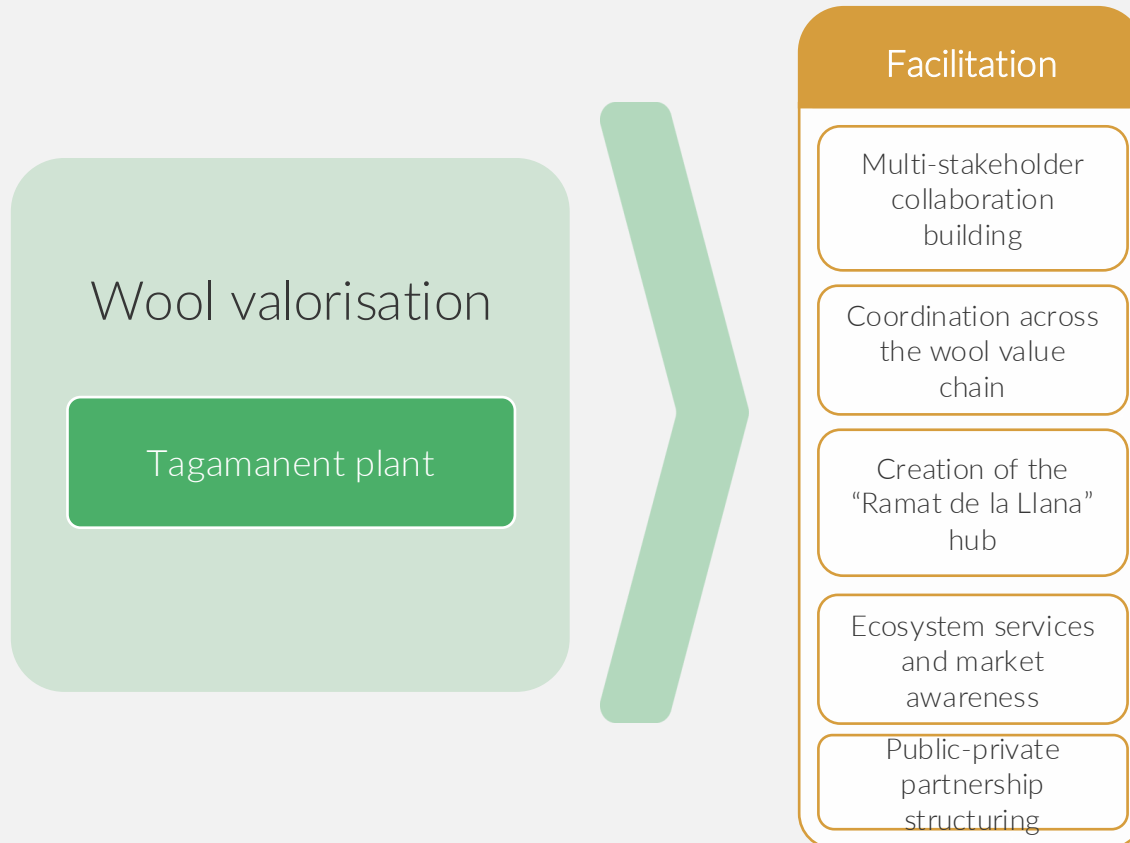
Development of a modular wool washing and processing plant to transform sheep wool into value-added products for sectors such as bioconstruction, textiles, fertilisers and insulation materials.



Support for rural livelihoods, extensive livestock farming and ecosystem services linked to wildfire prevention and landscape management.

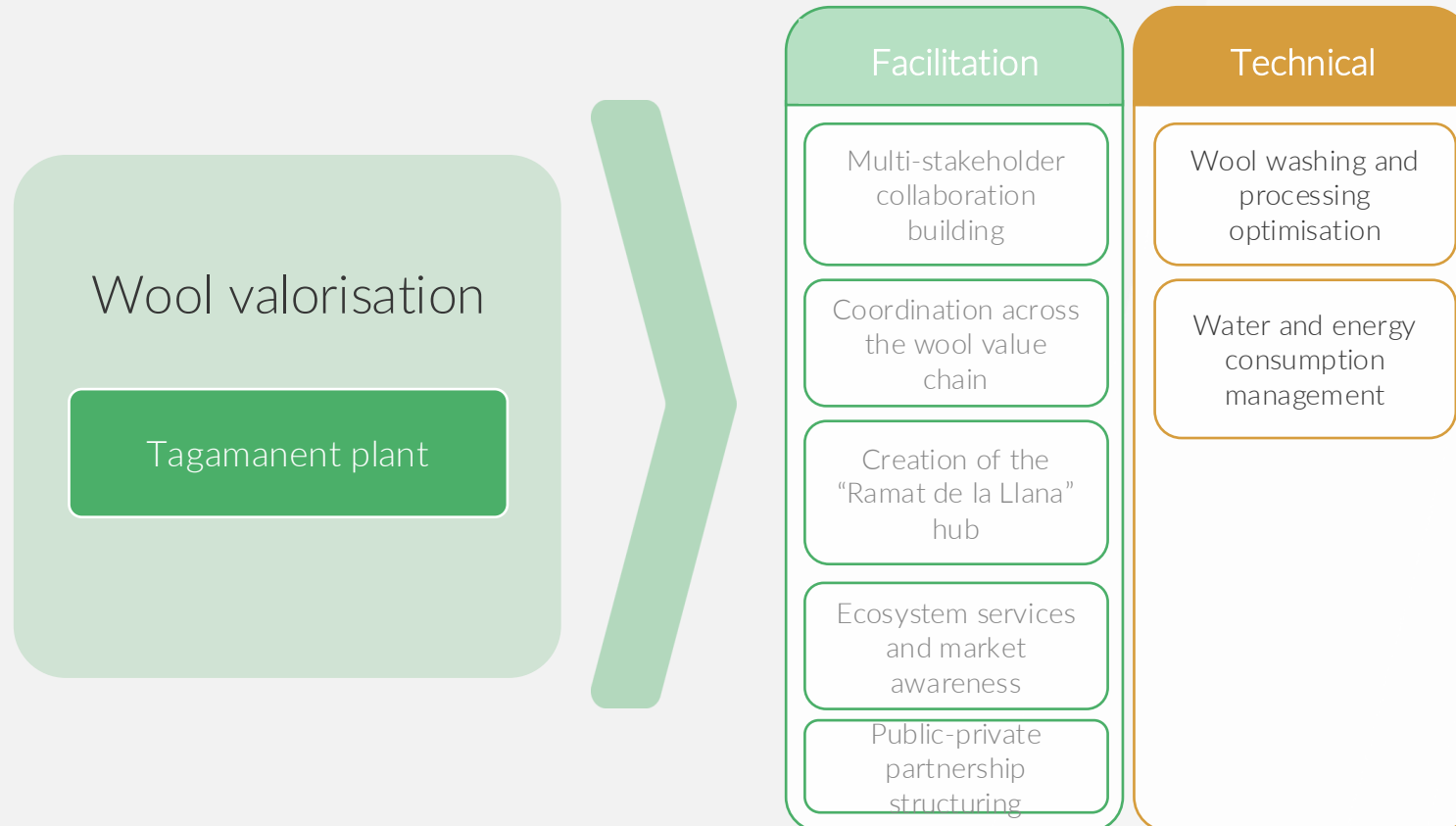
The Bioboosters

The services offered to de-risk them



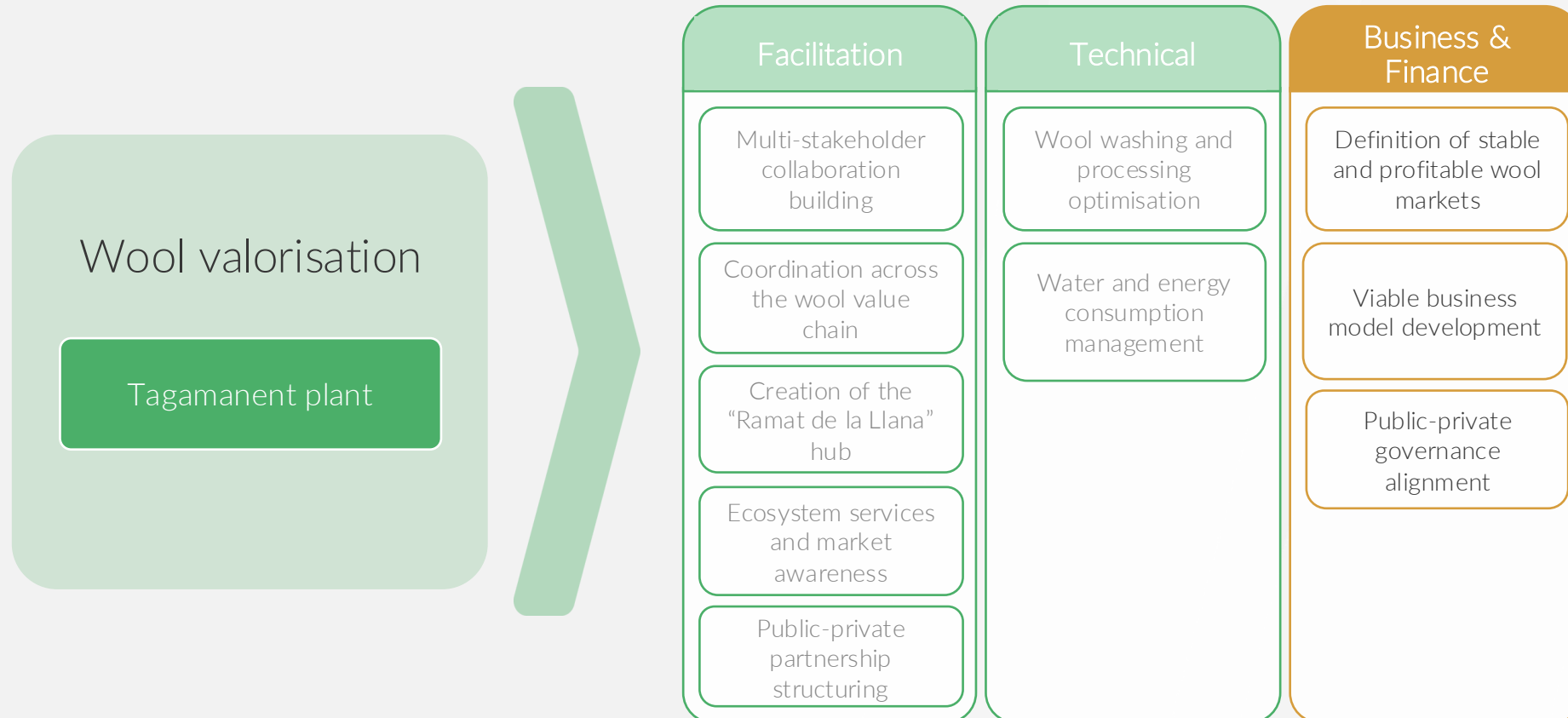
The Bioboosters

The services offered to de-risk them



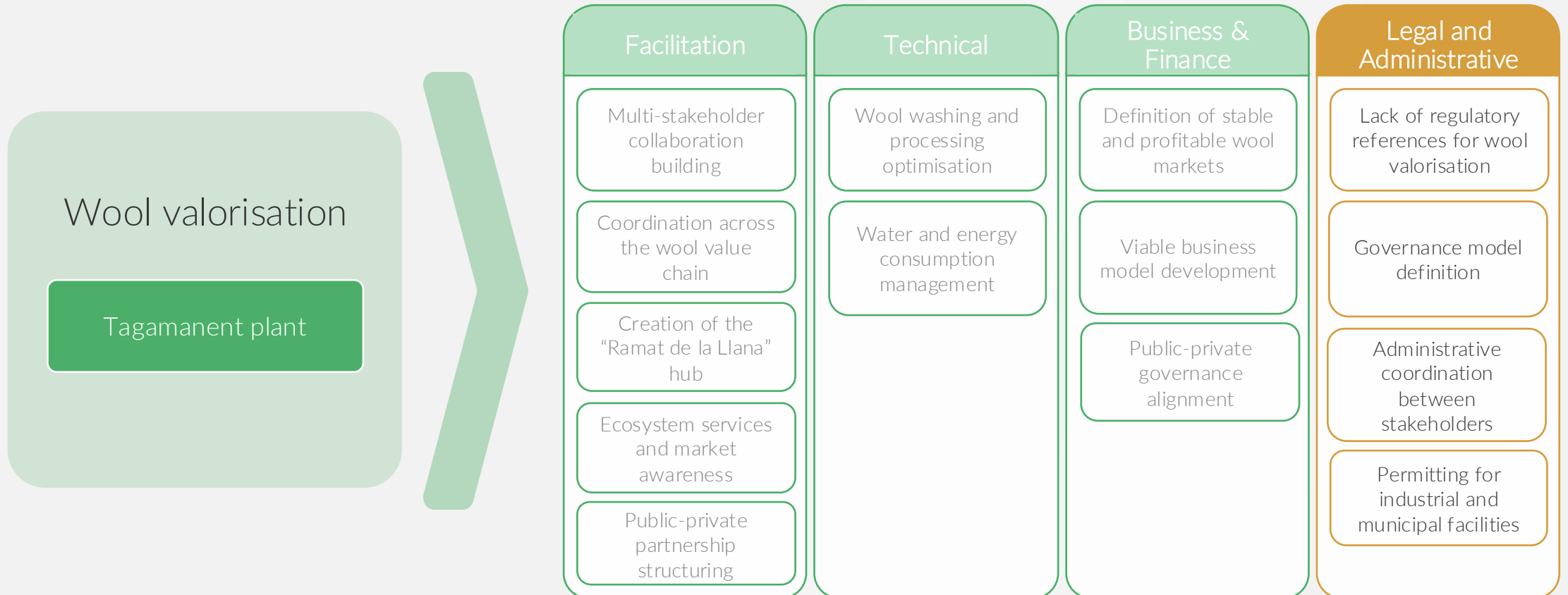
The Bioboosters

The services offered to de-risk them



The Bioboosters

The services offered to de-risk them



The Bioboosters **INSECTIUS**

3

Agri-food

Insectius

Alternative protein plant

Labin Products



Mataró
(Barcelona)



Description: Biotech start-up specialised in optimising insect farming through advanced technologies and circular production models with a positive environmental impact.



Feedstock: Organic side streams and underutilised organic waste used as feed for Black Soldier Fly (BSF) larvae.

The project



Deployment of modular and portable Black Soldier Fly farming units supported by a real-time monitoring and optimisation platform.



Production of alternative proteins and organic fertilisers from organic waste streams, promoting circular economy solutions and reducing environmental impact.

The Bioboosters

BIOHUBCAT

Hub de la
Bioeconomia
de Catalunya



Description: BIOHUBCAT is a Catalan bioeconomy initiative promoted under the RIS3CAT 2030 strategy to accelerate high value-added bioindustries and new circular value chains in the agri-food sector.



Feedstock: Alternative protein sources and agri-food side streams for extraction, production and transformation processes.

Agri-food

Insectus

Alternative protein plant

Labin Products

The project



Development of an open-access pre-industrial scaling plant for alternative protein processes, supporting companies in scaling up extraction, production and transformation technologies beyond pilot phase.



Reduce technological and investment risks associated with pre-industrial scale-up while fostering innovation in alternative proteins and circular bioeconomy solutions in Catalonia.

The Bioboosters



Description: specialised in fertilisers and biostimulants, developing innovative bio-based ingredients through the valorisation of animal by-products.



Feedstock: Category 3 animal by-products (SANDACH) used for the production of bioactive peptides and lipids through enzymatic hydrolysis.

Agri-food

Insectus

Alternative protein plant

Labin Products

The project



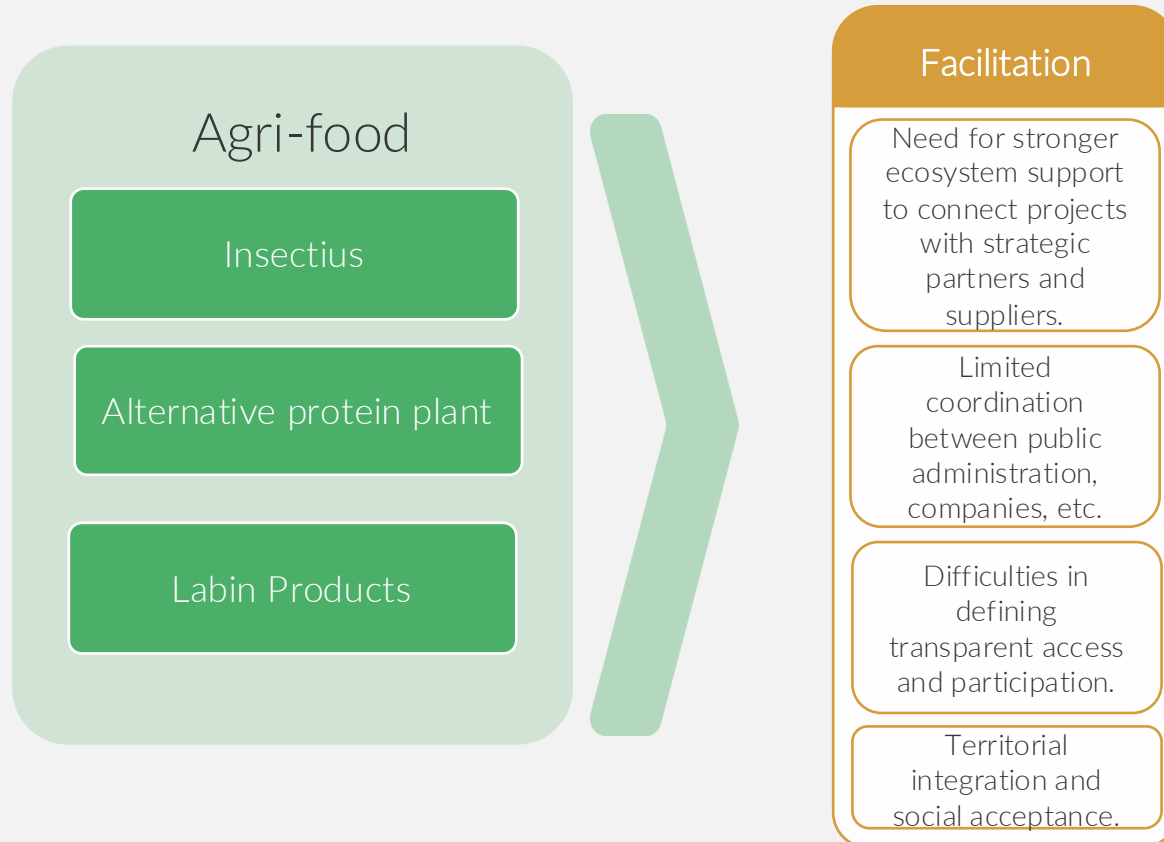
Scale-up of a pilot production plant for bioactive compounds, increasing processing capacity, while diversifying raw material sources and expanding into new market applications beyond agriculture.



Improve territorial integration, reduce odour emissions and improve environmental and social acceptance while supporting industrial bioeconomy growth.

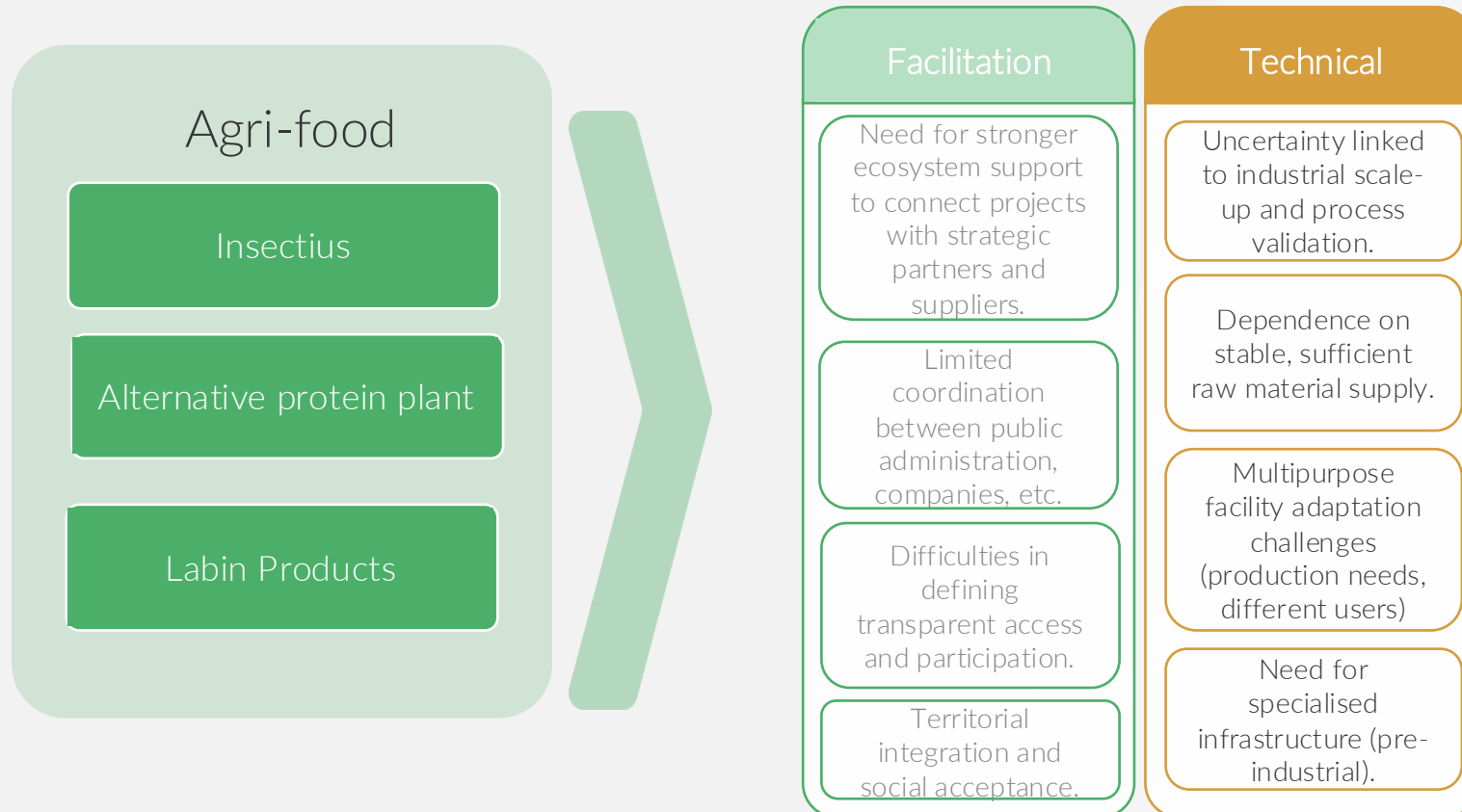
The Bioboosters

The services offered to de-risk them



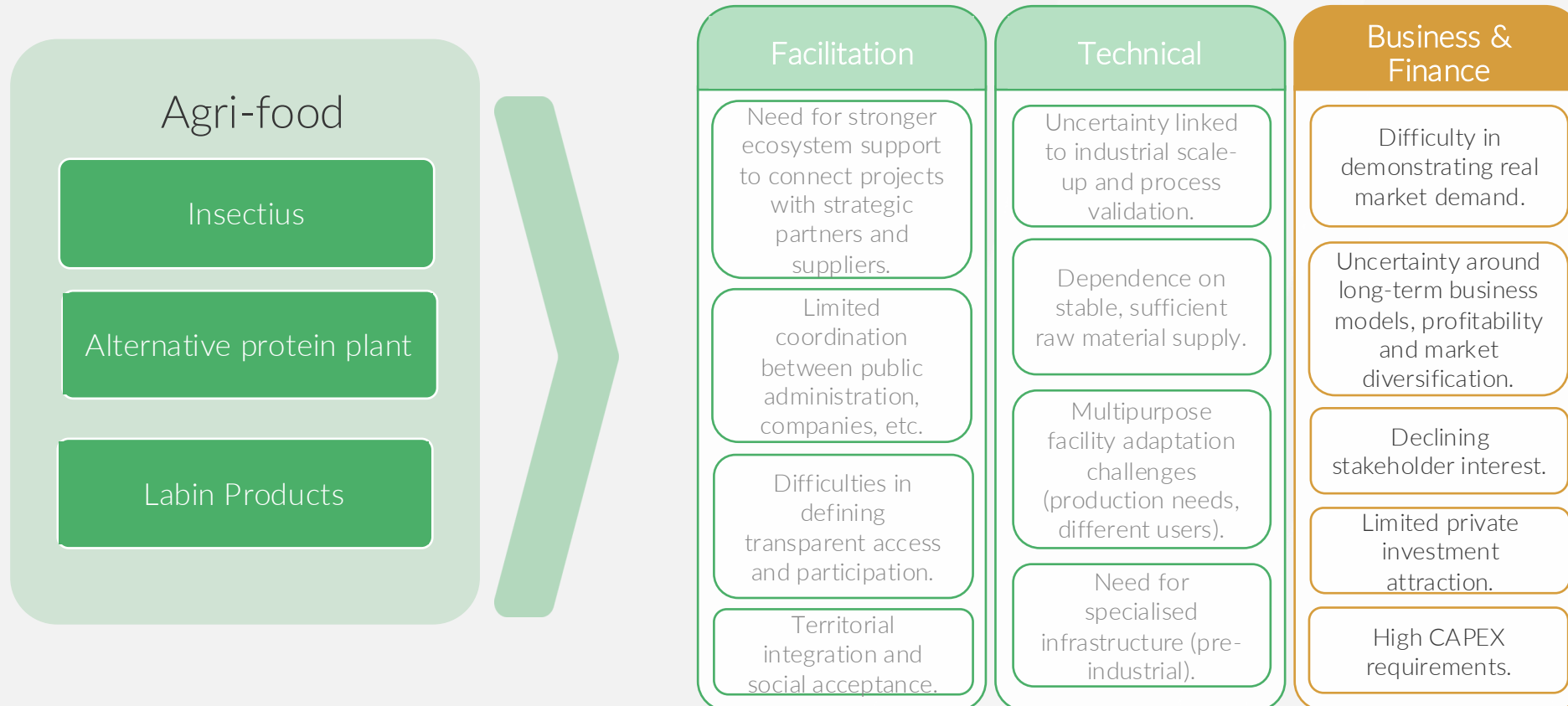
The Bioboosters

The services offered to de-risk them



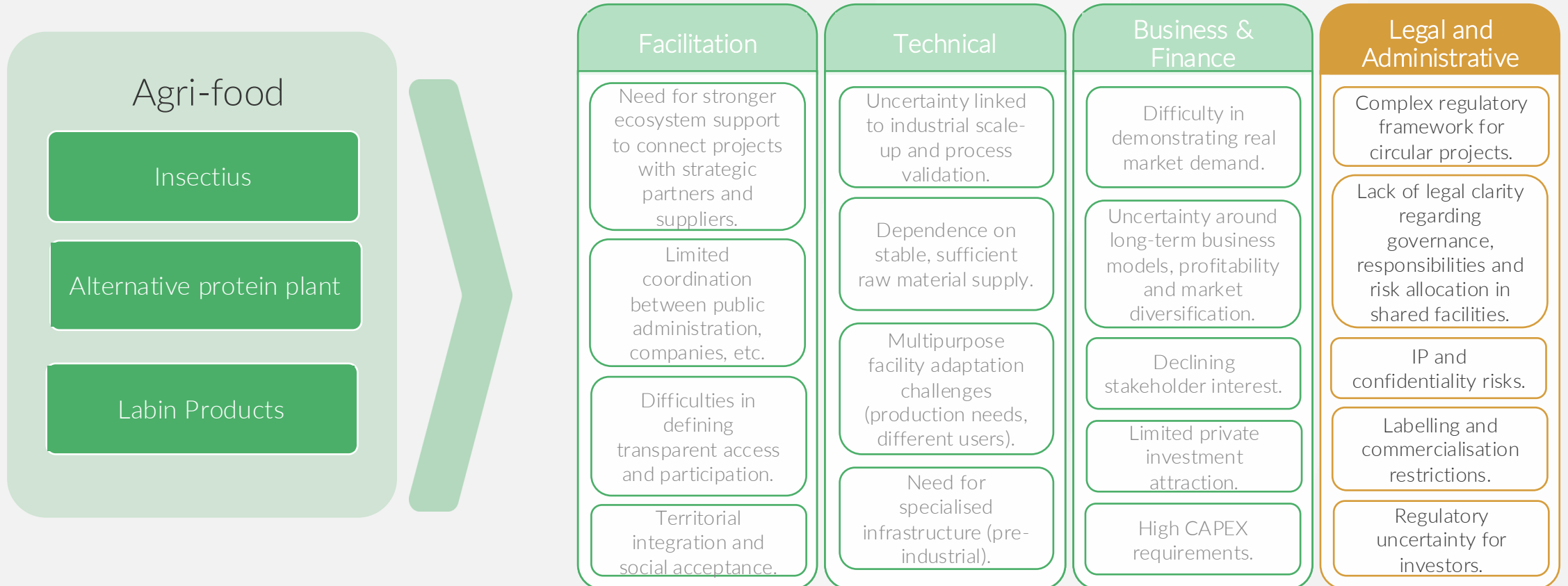
The Bioboosters

The services offered to de-risk them



The Bioboosters

The services offered to de-risk them



Main Lessons and Takeaways from the Accelerator



Main operational challenges

Services
perceived as
fragmented

Misaligned
expectations

Limited
commitment from
some projects

Incomplete data
sharing

affecting...

Technical services

Financial analysis

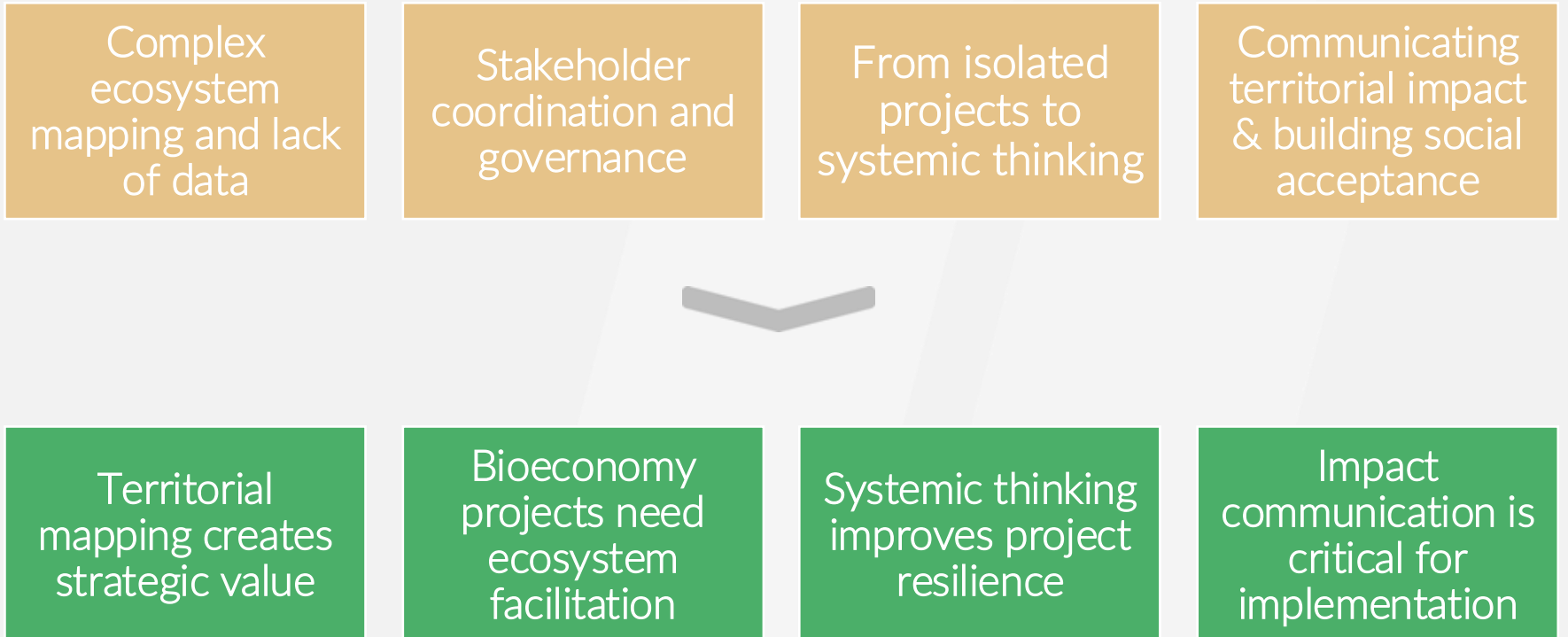
Coordination
efficiency

Systemic support

Main challenges & key learnings



Facilitation & impact mapping



Main challenges & key learnings



Technical advice

Technological
maturity

Data availability

Resource
constrains

Access to
scale-up
infrastructure



Early validation
reduces scale-up risk

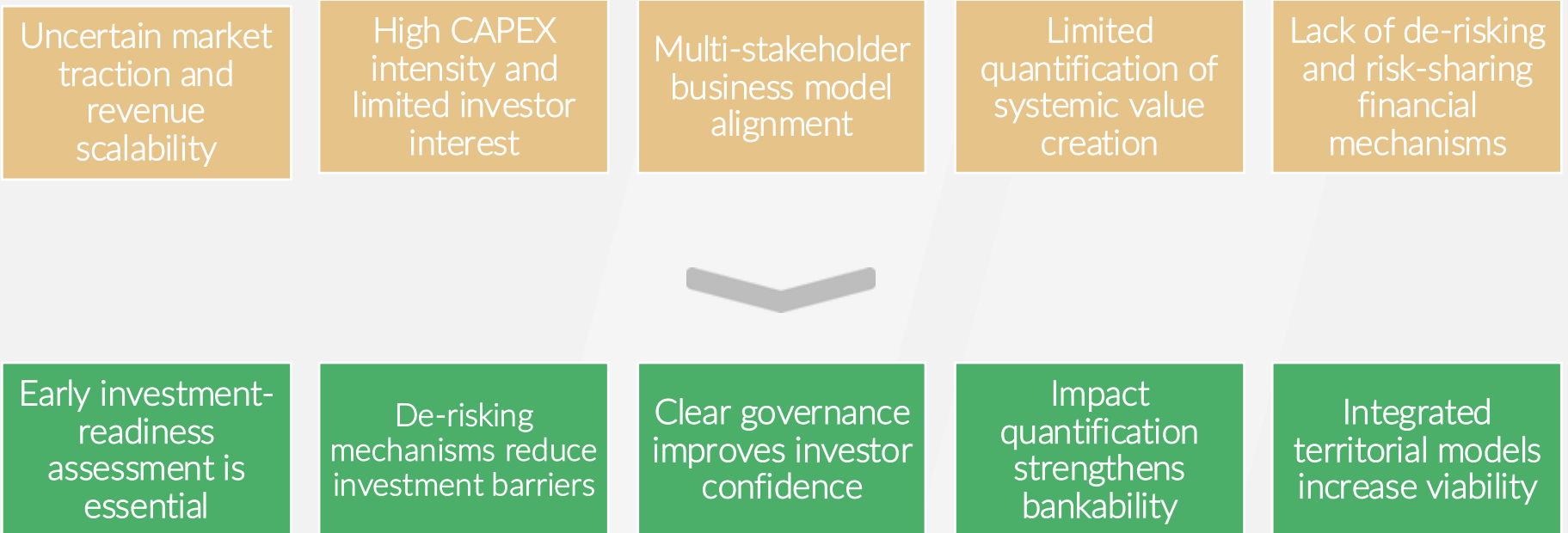
Better data enables
better decisions

Shared pilot
infrastructures
accelerate scale-up

Main challenges & key learnings



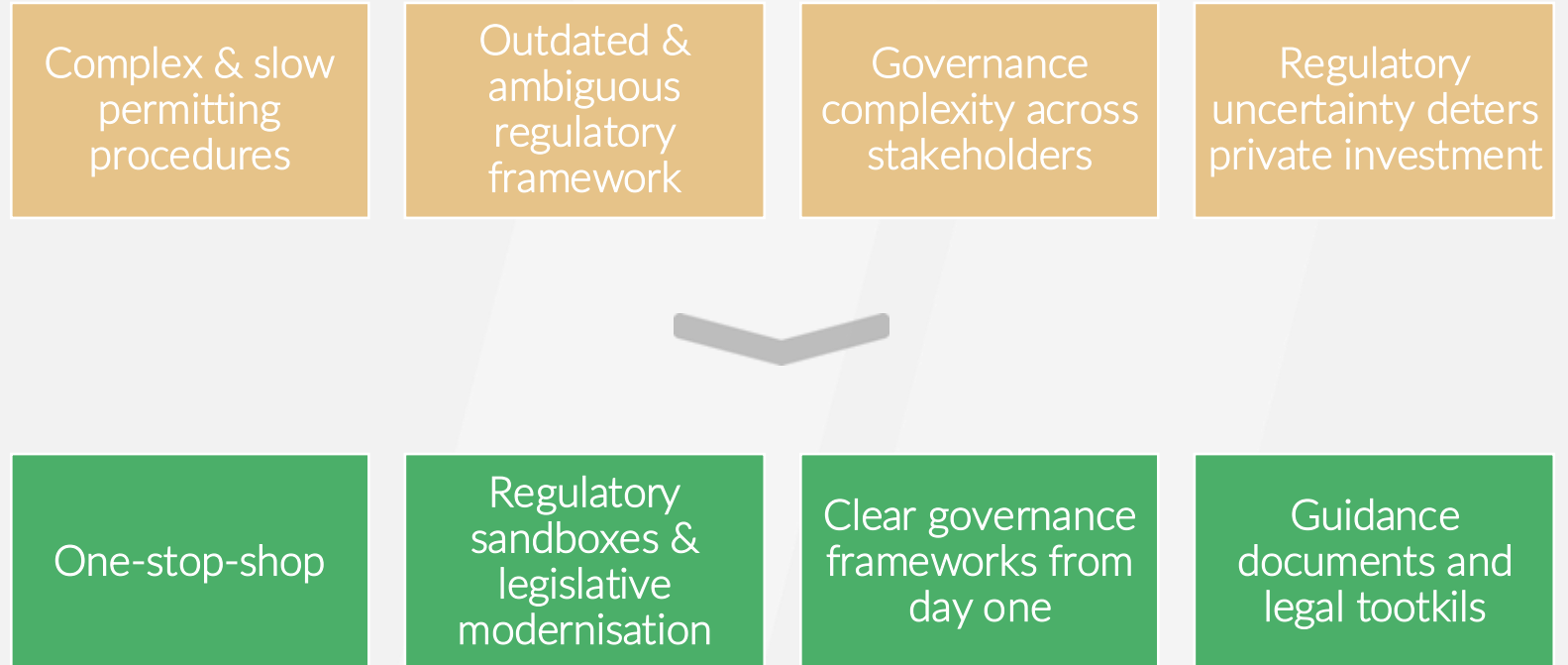
Business & Finance



Main challenges & key learnings



Legal and Administrative



Where should the Accelerator evolve



In conclusion...

bioeconomy projects require

The coordination
between various
stakeholders

New governance
model

Innovative
financing
schemes

The application of
regulatory
innovation
frameworks

Fostering g
public-private
partnership
models



**Unlocking the bioeconomy requires
ecosystems, not isolated innovation**

Thank you

B>O **BOOST**
Acceleradora
de projectes de
bioeconomia



Round Table: How to De-risk Bioeconomy Projects

Moderated by Miriam Romero

Speakers:

- Victor Falguera – Executive Director at BioHubCat & CIDAFcat
- Lorenzo Valeriani – Senior project and exploitation manager at Meta Group (CircularInvest Project)
- Michael Nettersheim – Managing Partner at European Circular Bioeconomy Fund (ECBF)
- Carmen Ronchel Barreno – Senior EU Project Manager at Corporación Tecnológica de Andalucía (CTA) (BioInSounth Project)

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Closing reflections

*Vessela Stoyanova-Monteleone – BioBoost Project Officer at European Research
Executive Agency (REA)*

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