

A competitive bioeconomy for a sustainable future

Oliver ZOBELL – CBE JU Samuele AMBROSETTI – BIC

05/05/2025





Co-funded by the European Union



Table of contents

• The Circular Biobased Europe Joint Undertaking

• Call 2025

- Overview & topics
- CBE specific requirements (incl. IKOP)
- Proposal preparation: Lessons learnt from past calls
- Call 2025 timing, tips & tricks and networking opportunities

The Circular Biobased Europe Joint Undertaking



ircular io-based

€2 billion public-private initiative



European Union Represented by the European Commission

Bio-based Industries Consortium Part of Horizon Europe programme

Launched in 2021,

operates until 2031

> Contributing to the European Green Deal

Building on the success of its predecessor BBI JU

CBE JU is funding projects that deliver bio-based solutions – materials and products made from waste and biomass – in an innovative, sustainable and circular way



Large-scale first-of-its-kind product facility in Europe **Types of supported actions** ==== Scale up and demonstration of technologies Development and validation of technologies == 8 **RIA** Research and Innovation Actions IA Innovation Actions (including Flagships)

Technology Readiness Level (TRL)

CSA: Coordination and Support Actions (no link with TRLs)



CBE JU portfolio: 2014-2023



24% universities & research centres **CBE JU funding per type of** beneficiary (unique) Other Research Organisations Higher Education Establishments Private Companies

35% small and medium-sized enterprises

Data: CORDA, May 2024



Type of action:

4

Research & Innovation action

ye	Number of projects 13 0 coordinated projects	CBE JU funding 1.51M€
	Ongoing Completed	Private companies Universities & research centres
	7 6	1.40M€
	Small and medium-sized enterprises (SMEs) Only private companies CBE JU funding to SMEs 0.42M€ Number of SMEs 2	Beneficiaries
Innovation at Innovation action	ction - Flagship Innovation action Coordination & Support action	12



Advisory bodies: States Representatives Group; Scientific Committee; Deployment groups

What is CBE?

- Institutionalised
 Partnership under Horizon
 Europe
- Funding Research and Innovation projects up to TRL 8 (unicum!)
- 6 annual calls for proposals, from 2022 to 2027
- Budget: € 1 billion of public funding + € 1 billion industry investment

biconsortium.eu

Bio-based Industries Consortium

biconsortium.eu



The Bio-based Industries Consortium (BIC) is a non-profit organisation connecting industry, academia, regions and citizens to transform bio-based feedstocks into novel sustainable products and applications, and create circular bioeconomy ecosystems through investments, innovation and know-how.



CBE JU – BIC's role

Advancing competitive, sustainable circular bio-based industries in Europe

Circular Bio-based Europe Joint Undertaking

Public-private partnership



Formulate the Strategic Research & Innovation Agenda (SRIA) with the EC



Develop with EC the Annual Work Programmes



Play an active role in CBE governance



Cooperate with CBE JU advisory bodies and Programme Office

CBE JU



CIRCULAR BIO-BASED EUROPE JOINT UNDERTAKING (CBE JU)

Advisory bodies: States Representatives Group; Scientific Committee; Deployment groups

What is CBE?

- Institutionalised Partnership under Horizon Europe
- Funding Research and Innovation projects up to TRL 8 (unicum!)
- 6 annual calls for proposals, from 2022 to 2027
- Budget: € 1 billion of public funding + € 1 billion industry investment

CBE JU

From BBI JU (2014-2020)...



... to CBE JU (2021-2027)*



6 annual calls for proposals, from 2022 to 2027

€ 1 billion of public funding + at least € 1 billion from industry
 ~150 projects expected

*the last call for proposals is in 2027. Projects are expected to run until 2031-32

Data: CORDA, June 2021



BBI+CBE JU Flagship and Demo plants

On the map

CBE JU is funding first-of-their-kind biorefineries and demonstration plants to help expand the European circular biobased economy.

Select what you want to see:

Demonstration plant

Flagship biorefinery



biconsortium.

CBE JU – the role of BIC members

Each Industry Member has a seat in the **Programming Working Group**. The PWG:

- Provides initial input about priorities for the CBE AWPs (short term and medium-long term)
- Gives mandate to BIC staff to discuss the AWP with the EC
- Contributes with topic-specific input in the framework of AWP preparation

Each Associate Member has a seat in the **Associate Members Working Group**. The AMWG:

- Provides initial input about priorities for the CBE AWPs (short term and medium-long term)
- Contributes with topic-specific input in the framework of AWP preparation

Jan-Mar Consultation on priorities April-May Shortlist of possible topics June - October Drafting of Annual Work Programme with EC December AWP published

p)

April

Open call

September Call deadline

CBE 2025 topics DEADLINE 18 SEPTEMBER 172 M € total

Торіс	Ν	TotalM€		
FLAG-01 Urban-industrial symbiosis for biowaste valorisation				
FLAG-02 Bio-based drop-ins/smart drop-in platform chemicals , via cost-effective, sustainable and resource-efficient conversion of biomass				
FLAG-03 Circular-by-design fibre-based packaging with improved properties	1	20		
FLAG-04 Retrofitting of industrial plants towards higher-value bio-based products	1	20		
IA-01 Sustainable macroalgae systems for innovative, added-value applications: cultivation and optimised production systems	2	14		
IA-02 SSbD bio-based solutions to replace hazardous conventional chemicals for textiles production				
IA-03 Scaling-up nutritional proteins from alternative sources	2	14		
IA-04 Cost-effective and robust continuous biotech bio-based processes				
IA-05 SSbD bio-based polymers/(co)polymers unlocking new market applications	2	14		
RIA-01 Valorisation of untapped forest biomass				
RIA-02 Bio-based and biodegradable delivery systems for fertilising products to reduce microplastics pollution & promote soil health	2	7		
RIA-03 Alternative biomanufacturing routes for natural and synthetic rubber	2	7		
CSA-01 Develop and deploy new curricula and knowledge exchange practices relevant to bio-based systems				

Networking and matchmaking evenus

BIC Annual matchmaking event

12 February 2025

Expected 300+ participants from industry and university/research

Keynote speeches

Thematic **workshops** on topics

Pitches of proposal concepts

Over 800 one-to-one meetings

Matchmaking starts and continues on the <u>online platform</u>!

https://www.youtube.com/watch?v=k6 XX6RX08xI



CBE JU

biconsortium.eu

2 Business

Online partnering platform

:MBERS AREA 31C Membership	BIC Matchmaking ever	Programme -5% Topics	Members Participants Priches	$\stackrel{\text{\tiny def}}{=}$ My participation		
SIC Members SIC Matchmaking Event Webinars Open Innovation Compet SISC-E Challenge	Q Search a person Selected topics Sector of activity	Al My totous	My connections My meetings Q. Seach I My profile My message BIC Matchmaking event 2025 About News Programme Ac Topice	s 🚉 My network 👘 My agenda	My participation Tofile My messages X My network My agenda	(
tuman resources Regions & industry	Type of organisation Type of activities Country	+ + G Gil Proj Sabi	Q, Search a pitch Topics + History	Bio-based Industries Consor	tium Members Area	Samuele Ambrosetti Standard account elisca My profile My profile My account
tegional funding E APP n.elisca.app		Mir Ted KCL	Type of pitch + Country + Ed Prot Ed Aut	Bio-based Industries Members Area	Bio-based Industries Consortium BIC MATCHMAKING EVENT 12 Between Matching Consortium BIC MATCHMAKING EVENT 12 Between Matching Consortium BIC MATCHMAKING BIC	Aking eve aking eve ant 2025ITh building ci
		τų	Real Property in the second se	BIC Members Area © Online © Community MY MEMBERSHIP @ My membership	Latest news Registration is OPEN for the BIC Matchmaking event 202	Logout View all
				ピ Membership application	Published 4 hours ago Bio-based Industries Consortium Members Area "Registration is OPEN for the BIC Matchmaking event 2025!"This is the annua	al event for all BIC members to meet.

Every quarter, one pitching webinar for all new members to introduce themselves



Biowaste and biomass availability studies



Open Innovation Competition



Webinars

Identifying new bio-based opportunities

BIC online meeting

The future of marine and aquatic biomass in Europe

With the idea of introducing BIC members to lesser-known sustainable feedstock and resources, BIC organised a three-part webinar focusing on marine and aquatic biomass (M&A). We explained what M&A biomass is and how it can be part of the solutions to major challenges. The webinars demonstrated current and emerging uses of M&A-based products in different highvalue applications ranging from food and feed to bioplastics, pharmaceuticals, and cosmetics.

WATCH THE COVERAGE OF BIC'S \rightarrow marine & Aquatic Webinar \rightarrow

MPowerBIO

Helping members to access finance is a top priority for BIC. This need is paramount, with funding gaps often appearing in projects scaling up from pilot to demonstration plants, and moving from demonstration to flagship/first-of-a-kind (FOAK) and industrial-scale projects.

We organised a webinar which included a presentation on the opportunities of the European Circular Bioeconomy Fund (ECBF), a dedicated fund investing in growth-stage companies in the European bioeconomy. MPowerBio were there to talk about bringing SMEs across the financial valley of death.

WATCH THE WEBINAR \rightarrow



Business

Connection with investors (open to all)

SMEs and startups seeking strategic funding and partnerships for the growth and deployment of their technologies and production processes in circular and bio-based economy Register for the next event here: <u>https://techtour.com/sectors</u>

2025 Events: 24 April Ghent, Belgium November, Wuppertal, Germany

2024 Investment Event Programmes - 2025





MEET INNOVATION IN BIO-BASED INDUSTRIES SECTOR

Finance

Finance

BIC bioeconomy regions platform

🛓 Digital partnering platform

50+ REGIONS PARTICIPATING IN THE BIC ECONOMY PLATFORM



based on profiles

Bioeconomy strategy

Currently, the region is implementing the RIS3 strategy. Accessing the following link http://www.admordest.vo/index.php?page=RIS3-Nord-Est-2014-2020&kunguage=) you can find more information about RIS3 strategy.

Financial incentives available for bio-based investment

RED 05 income tax for amployees 05 income tax for RED companies for the next 10 years Deduction of RED aligible expenses + Depreciption of RED aquipment, solaries for RED personnel, + 50% of these expenses can be deducted from the taxable income IT&C OS income tax for amployees Eligibility catrice: + Bachelons degree in one of the 41 technical specializations available, + The employee is hired an a software angineer/programmer/software analyst position; + Annual revenue per exampted employee must be ever USD to 000. OTHER 00 profit tax for the reinvested profit in new technological equipment used for businese purposes +1 a company benefits from one exemption on the income tax for reinvestment it will not benefit from occessing deviced depreciation. STAFE AD = 00 B07/ 2014 The State Ald Scheme 807/2014 has a budget of EUR m 600 foreseen for the 2014 2020 period. It aims at supporting major CAPEX investment, EURIBLE COSTs - Construction of new buildings - Renting costs for existing buildings - CAPEX isomed at taxing investment - To be viable and determine the operational efficiency of the company - To growe the stimulating effect of the state old - To generate contributions to regional development - To facilitate extra investments in the region EURIBUTY CRITERIA FOR COMPANIES - Nex profitability for existing sampanies - 20 - signify for any companing FON 100000

Types of industry sectors interested in attracting investment from O Agriculture & agri-food O Bioenergy O Chemicals & materials O Forestry and pulp & paper W Waste management & treatment

Market sectors interested in

Automotive; Agri-feed; IF&C; Tourism; Manufacture; Wood processing (furniture, timber);

Feedstock 1

Hardwood

Tonnes produced per year

626,000

Feedstock 2

Softwood

Tonnes produced per year

3,544,000

Feedstock 3

Sawdust

Technology providers

Tonnes produced per year

247,604

biconsortium.eu

BISC-E student competition



The winning student team gets 5000 € and one year of complimentary BIC membership as an industry member



Communication campaigns BIC's Key Messages on Draghi Report • 6 pages



Bio-based Industries Consortium (BIC) 12,707 followers 7mo • 🕤

Last week, BIC Executive Director Dirk Carrez and Head of Programming Samuele Ambrosetti were busy in the Baltic states, spreading the word about all things bio-based, our ...more





#BETTERWITHBIOBASED

Clean clothes and a cleaner environment.

By harnessing the power of biological enzymes, Novozymes has enabled detergent manufacturers to reduce the chemical levels in detergents (e.g. surfactants, optical brighteners and polymers), making them more eco-friendly.

Cargill and the SUSBIND project





BIC's KEY MESSAGES ON MARIO DRAGHI'S

The future of European

competitiveness

Bio-based Industries

The Bio-based Industries Consortium

investments 20 Creating circular bioeconomy ecosystems through 80 6 8 innovation and know-how in Europe's bio-based industries. Bio-based Industries

Selection of sustainable feedstock

Lab-scale studies on Industrial testing of new chemical and enzymatic bio-based wood board synthesis of epoxy type binders and products binder components and

Sustainable biobinders for wood-based

panels from renewable resources

nilot essays

Economic and environmental sustainability assessments



Trend report 2025

https://biconsortium.eu/publication/bic-trend-report-2024-2025



Boosting Europe's future: the case for more biomanufacturing

The EU Competitiveness Compass identifies the bioeconomy as a growth engine to invest in. In addition, the bioeconomy can increase the EU's strategic autonomy and security, for example, by providing raw materials security and via settingup more EU-centric supply chains, taking a circular economy approach by sourcing, processing, manufacturing and re-using renewable feedstock.

One key element, and as outlined in the Draghi report, is to put research and innovation at the centre of the EU's strategic priorities, including a strategy to establish competitive research and innovation systems. Bio-based solutions are at different levels with regard to their maturity and go-to-market ability.

It is vital to allow those products to enter the market. This should include dialogue between industry, policymakers and other stakeholders to develop a transition path for our sector to better contribute to the EUs long-term competitiveness.



Biomanufacturing in Europe: what regulation will it take?

Insights from BIC workshops series

BIC 2024 - 2025 Trend Report

The Bio-based Industries Consortium (BIC) hosted in October 2024 a workshop to explore how to turn political commitments on biomanufacturing into better regulation that enhances competitiveness. supports the green transition and promotes strategic autonomy in Europe.

The workshop highlighted the innovative power in biomanufacturing across industrial sectors to help the planet

Take aways

move away from fossil resources for the benefit of greater sustainability Yet, participants recognised that the current EU's regulatory

framework is still titled towards fossil incumbents and require urgent and thorough rectification, also in light of the global competition in the technology and manufacturing sectors.

The European Commission sent a strong signal with the nature. The time EU priorities and

path from lab to xild be welcomes ons, such as food als, materials and

Policy Recommendations

Establish harmonised rules across Member States on key issues of circularity, such as end-of-waste criteria and recycling.

Leverage the potential of the Capitals Market Union for more investments towards bio-Further develop instruments and metrics to measure the contribution of the bioeconomy

and biomanufacturing to the EU industry.

of sustainably sourced biomass, respecting the cascading and food first principle

Create and expand market opportunities for bio-based products.

Propose a "EU defossilisation

accelerator" e.g. support lead markets

for biomanufacturing sectors helping

making Europe independent of fossi

raw materials. The accelerator should

Ensure a reliable and affordable supply

include a package of measures.

For the EU to become a hub for bioeconomy innovation, it s essential to create a preferred playing field for these biobased alternatives

Such actions are essential for the EU to remain competitive and prosperous, and also contribute to solutions that curb global emissions and reduce environmental pollution.

The next years will thus be crucial for the EU to set in place

the right framework with a coherent set of regulations and funding to enable the bioeconomy to meet its full potential





DOWNLOAD

EU 2025 Policy Recommendations

2024-2025

Trend Report

From 2025 onwards, the EU should consider the following points for making policy choices:



Let's agree on a kind of defossilisation accelerator

Going from lab to fab to market typically has four crucial elements: you need the permit, the financing, people with the right skills and a market (demand)

BIC

A *defossilisation* accelerator* should address those four elements and help to create lead markets to make Europe more independent of fossil raw materials. The accelerator should include a package of measures to support biomanufacturing "made in Europe".

-> If the ambition is to accelerate defossilisation. this cannot be done in a cost-competitive way

with residues and waste only. The bio-based industry needs to know how much renewable feedstock can be sustainably sourced.

Let's strategically use

renewable feedstock

This is underlined by the Letta Report which says that "the strategic use of biomass for high-value applications, such as materials and chemicals that can substitute for fossil-based or critical raw materials, is another crucial element*

Let's create a regulatory framework for the business case of today and tomorrow

→ A more innovation-prone EU policy framework will increase the attractiveness of investments in Europe. Bio-based industries, including the many start-ups, should benefit more strongly from the EU Single Market through simplification and coordination, to overcome fragmentation and to ensure coherence. To make it a business case for companies active in the bio-based sector, the regulatory framework should be fit for purpose

That includes addressing regulatory bottlenecks, using regulatory opportunities and ensuring regulatory foresight e.g. via regulatory sandboxes and an interdisciplinary policy design before EU regulation is drawn up.

Society

Advocacy and PA

Helping policymakers advance the bio-based industries



2024 was a busy year for BIC's public affairs work – particularly with regard to EU biotechnology and biomanufacturing. We recognise the mutual importance of biomanufacturing for Europe and for the bio-based industries, and wanted to focus on actions that drove this message home.

Following the European Commission releasing its "Communication on biotechnology and biomanufacturing", we organised a workshop to explore what regulation it will take in Europe for biomanufacturing with around 30 participants from EU Institutions, civil society and industry.

BIC also joined 17 other bioeconomyfocused organisations to sign a joint statement outlining core principles that we asked the Commission to embed into their consideration. BIC was consulted by the EU Commission on the so-called Draghi Report on "The future of EU competitiveness: a competitive strategy for Europe".

Through our contribution, we outlined the importance of the bio-based industries for a truly competitive Europe.

Making the bio-based industries concrete for policymakers is a crucial part of our work. We organised in June a visit to CBE JU project sites and facilities owned by BIC members.

The group of 30 included representatives from the European Commission's DG GROW and the Director General, Kerstin Jorna. They were taken to the PLENITUDE/Cargill site in Sas van Gent, the Netherlands and the Bio Base Europe Pilot Plant in Ghent.



We need to make business easier and faster in Europe. I will make speed, coherence and simplification key political priorities in everything.

Ursula von der Leyen, President of the European Commission

biconsortium.eu

An exciting period ahead of us...

- Biotech and Biomanufacturing Initiative implementation
- Revision of the Bioeconomy Strategy
- Life Sciences Act, Clean Industry Act, Circular Economy Act...
- Definition of FP10 including new partnerships



Simplified regulatory framework and faster access to market

Launch a study analysing how biotech legislation could be further streamlined. This study could lay the foundations for a possible EU Biotech Act.



- Launch a study to identify barriers and ways to support the consolidation of investment funding, by mid-2025.
- Advocate for the inclusion of biotech and biomanufacturing as part of the European Innovation Council accelerator Work Programme 2025.



Better support for scale-up and ease of navigating regulations

Establish an EU Biotech Hub to help companies navigate through the regulatory framework and identify support to scale up, by end 2024.



· Further develop methodologies to ensure a fair comparison between fossil-based and bio-based products, in 2025, including the review of the Product Environmental Footprint



Accelerate the uptake of AI in biotechnology together with stakeholders

- Support structured exchanges with businesses and industry in biotech and biomanufacturing in the context of the GenAl4EU initiative
- Raise awareness of facilitated access to the EuroHPC supercomputers for AI startups and the science and innovation community.
- Support the development of advanced generative AI models for healthcare leveraging data, existing tools and using EuroHPC supercomputing capacities.



Foster a larger market for biotechnology and biomanufacturing

Deepen cooperation with international partners, such as the US, on biotechnology research, under the Science and Technology Agreements. by end 2024.



 By taking into account the current societal. demographic and environmental challenges, reinforcing the bioeconomy's industrial dimension and its links to biotechnology and biomanufacturing to contribute to a stronger EU economy.

... do you want to be part of it?

JOIN US!

<u>Biconsortium.eu/membership</u>

The bioeconomy is part of the solution to master the green transition

The bioeconomy has a much greater economic potential than the current share of the EU economy. New materials and products with unique properties can create new markets and growth opportunities. The bioeconomy can also contribute to other societal objectives, in particular to climate and environmental objectives by 2050. The circular bioeconomy is part of the solution, it can power a climate-neutral, sustainable, resilient and competitive Europe.

But this cannot happen by itself.

EU policymakers must take action to realise the full potential of the circular bioeconomy to reach the EU's environmental, economic and social goals.

Europe must build on the strength of its bioeconomy. With a turnover EUR 2.5 billion (of which ca. 30% is in the bio-based industries), the sector provides employment to nearly 18 million people. The bioeconomy, with biorefineries at its core, supplies bio-based products which are largely sourced, manufactured, used and recycled in Europe. The science is excellent across academia and universities. Thousands of European companies are active and at the forefront of bio-based innovation.



Call 2025

2



Table of contents

- The Circular Biobased Europe Joint Undertaking
- Call 2025
 - Overview & topics
 - CBE specific requirements (incl. IKOP)
- Proposal preparation: Lessons learnt from past calls
- Call 2025 timing, tips & tricks and networking opportunities



Call topic structure

		HORIZON-JU-CBE	-2025-XX-NN Topic title		
Topic		Type of action	Research and Innovation Action		
		Indicative budget	The total indicative budget for the topic is EUR 14 million		
		Expected EU contribution per project	It is estimated that a contribution of EUR 7 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts		
	Торіс	TRL	TRL 6-7 at the end of the project		
AWP 2025		Link to CBE JU Specific Objectives	1.1: Increase the intensity of cross-disciplinary research and innovation activities		
2025		Link to CBE JU SRIA Strategic Priorities	1.1.2: Develop innovative production systems in the bio-based industry 1.1.3: Develop innovative bio-based products		
Торіс		CBE JU KPIs	 4.5 Number of products with improved life cycle environmental performance 5.1 Number of innovative products that are biodegradable, compostable, recyclable, reused or upcycled (circular-by-design) 5.2 Number of projects developing circular production practices (incl. industrial & industrial urban symbiosis) 6 Increase innovative bio-based outputs and products 		



Topic

Topic

AWP

2025

Expected

outcomes

Scope

Topic



The 'change' to be achieved

- Provides a broad description of what is the impact to be achieved by the project
- The dissemination and exploitation of future research results are vital for the impact`

The 'problem'

- Identifies the aspects of the challenge that needs to be tackled
- Specifies a **perimeter** to the problem described
- Does not specify the expected solutions to the problem, nor the approach to be taken



13 topics and their budget

Feedstock oriented projects Market oriented projects (new materials/products & applications) Re-industrialisation & technologies

Type of action	Topics HORIZON-JU-CBE-2025					
IA– Flagship	IAFlag-01	Urban-industrial symbiosis for bio-waste valorisation	20			
	IAFlag-02	Bio-based drop-ins/smart drop-in platform chemicals, via cost-effective, sustainable and resource-efficient conversion of biomass	20			
	IAFlag-03	Circular-by-design fibre-based packaging with improved properties	20			
	IAFlag-04	Retrofitting of (bio)refineries industrial plants towards higher-value bio-based products	20			
	IA-01	Sustainable macroalgae systems for innovative, added-value applications: cultivation and optimised production systems	14			
	IA-02	Safe and Sustainable by Design (SSbD) bio-based solutions to replace hazardous conventional chemicals for textiles production	14			
IA	IA-03	Scaling-up nutritional proteins from alternative sources	14			
	IA-04	Cost-effective and robust continuous biotech bio-based processes	14			
	IA-05	SSbD bio-based polymers/copolymers unlocking new market applications	14			
	R-01	Valorisation of untapped forest biomass	7			
RIA	R-02	Bio-based and biodegradable delivery systems for fertilising products to reduce microplastics pollution & promote soil health	7			
	R-03	Alternative biomanufacturing routes for natural and synthetic rubber	7			
CSA	S-01	Develop and deploy new curricula and knowledge exchange practices relevant to bio-based systems	1			

CBE 2025 topics - FLAGSHIP

Торіс	N	Total M€	
IAFLAG-01 Urban-industrial symbiosis for biowaste valorisation	1	20	
IAFLAG-02 Bio-based drop-ins/smart drop-in platform chemicals , via cost-effective, sustainable and resource- efficient conversion of biomass	1	20	
IAFLAG-03 Circular-by-design fibre-based packaging with improved properties			
IAFLAG-04 Retrofitting of industrial plants towards higher-value bio-based products			

- Funding: 20 M€ for 1 project selected. Funding rate: 60% for companies, 100% for non-profit entities
- IKOP threshold: at least 20% of eligible costs of the project as a whole
- End **TRL 8** for the main stream of activities
 - Parallel activities at lower TRL are allowed to e.g. pave the way to next gen
- Multi-actor approach: see topic for specific actors to be involved
- Links and complementarities to previous / ongoing projects: see topic for specific projects
- Contribution to CBE specific requirements: see topic for specific details
- Business plan: executive summary (proposal Part B) <u>AND</u> full business plan (Annex to proposal)
 - Hearing to clarify business plan assumptions no new information, just clarification

bicortert Environmental impact and SSbD assessment required

CBE 2025 topics - FLAGSHIP

FLAG-01 Urban-industrial symbiosis for biowaste valorisation

TRL

8

Scope

- (overview)
- Demonstrate feasibility and viability of a full-scale biorefinery model converting bio-waste into added value products. Synergies with existing waste management infrastructures and urban-industrial symbiosis approaches (up and/or downstream) are in scope.
- Demonstrate production of **SSbD**, added-value bio-based products, minimising waste generation.
- Address **logistics** influencing economic viability and social acceptance. In addition to CBE specific requirements:
- Address **regulatory framework aspects** related to the use of bio-waste streams and their conversion to end products, with particular reference to the end of waste criteria.
- Perform an assessment of **social involvement and benefits**.
- Identify regions/areas in EU/EEA/EFTA countries and ACs with high potential for such the biorefinery model and include a task to replicate/adapt the concept in selected regions/areas
 NB: The main feedstock in scope for this topic is separately collected urban bio-waste, as defined under the Waste Framework Directive.

According to the specific targeted conversion routes, **bio-based residues and waste from other sources can be used as supplementary feedstock**
CBE 2025 topics - FLAGSHIP

FLAG-02 Bio-based drop-ins/smart drop-in platform chemicals, via cost-effective, sustainable and resource-efficient conversion of biomass

TRL	8
Scope (overview)	 Demonstrate cost-effective, robust, sustainable, large-scale production processes for obtaining bio-based drop-in (including smart drop-in) platform chemicals at end TRL: 8. Exclude substances of very high concern (SVHCs). Target resource efficiency, minimisation of process waste and process safety aspects. Cascading valorisation of secondary biomass and residual streams is also in scope. Demonstrate the further conversion and integration of produced chemicals into market relevant products (reaching an end TRL 6 or higher). In addition to CBE specific requirements: Address compliance with regulatory frameworks, considering the targeted platform chemical(s) and related impurities type and concentration

CBE 2025 topics - FLAGSHIP

FLAG-03 Circular-by-design fibre-based packaging with improved properties

TRL

8

Scope

- Scale-up (TRL 8) production technologies and deploy the complete value chain to **fibre-based** (overview) packaging materials with improved or novel properties (over specified bio-based and/or nonbio-based benchmark) addressing relevant market applications. Consumer / industrial primary, secondary and/or tertiary packaging products are in scope. Fibre-derived packaging is also in scope.
 - Demonstrate (at end TRL: 8) the application of targeted fibre-based materials into end packaging products, proving to meet market requirements. The use of bio-based add-ons (e.g., additives, coatings, adhesives, etc...) is also in scope - proven that they are not hindering targeted EoL and that fibre-based materials is the main component of the packaging;
 - Design the packaging products for circularity and validate their sustainable end-of-life at **relevant scale** (TRL 6 and above). Recycling, reuse and/or remanufacturing are all in scope. In addition to CBE specific requirements:
 - Consider end-users/consumers perception, behaviour and preferences across the different steps of products' lifecycle: product design, use and end-of-life
 - Include a task to address the **regulatory status** of the demonstrated packaging product(s) and their safety for the intended use

CBE 2025 topics - FLAGSHIP

FLAG-04 Retrofitting of industrial plants towards higher-value bio-based products

TRL Scope 8

- Retrofit an existing industrial facility with innovative and sustainable biomass conversion process(es) yielding more valuable product(s) than the one(s) produced with the old process(es).
 - Demonstrate the production of bio-based chemicals and materials (reaching end TRL 8) and their further conversion into end products (end TRL 6 or higher) to be validated in marketrelevant application(s). Moreover, proposals should also address cascading valorisation of residual streams across the value chain. Food/feed ingredients are not in scope.

In addition to CBE specific requirements:

- Establish the **full value chain** including biomass supply and logistics, with the appropriate involvement of biomass providers, fostering the creation or enhancement of a local/regional ecosystem centred around the biorefinery.
- Design and test a **training programme(s) for upskilling/reskilling** the (bio)refinery and related ecosystem workforce.

NB: Existing **biorefineries** and **fossil-based industrial plants** on brownfield are in scope of this topic as a target of the retrofitting action. Greenfield implementation is out of scope

Торіс	N	Total M€
IA-01 Sustainable macroalgae systems for innovative, added-value applications: cultivation and optimised production systems	2	14
IA-02 SSbD bio-based solutions to replace hazardous conventional chemicals for textiles production	2	14
IA-03 Scaling-up nutritional proteins from alternative sources	2	14
IA-04 Cost-effective and robust continuous biotech bio-based processes	2	14
IA-05 SSbD bio-based polymers/(co)polymers unlocking new market applications	2	14

- Funding: 14 M€ for 2 projects selected. Funding rate: 60% for companies, 100% for non-profit entities
- IKOP threshold: at least 15% of eligible costs of the project as a whole
- End TRL 6-7 for the main stream of activities
 - Parallel activities at lower TRL are allowed to e.g. pave the way to next gen
- Multi-actor approach: see topic for specific actors to be involves
- Links and complementarities to previous / ongoing projects: see topic for specific projects
- Contribution to CBE specific requirements: see topic for specific details
- Quantified business case and proposed business model including potential for upscaling (Part B)
- Environmental impact and SSbD assessment

IA-01 Sustainable macroalgae systems for innovative, added-value applications: cultivation and optimised production systems

Scope
 Select and optimise macroalgal feedstock focusing on applications with high market potential. In line with the EU Algae Initiative, harvesting macroalgae from the wild is excluded, as the topic focuses on cultivation.

 Demonstrate cultivation in suitable and scalable sustainable systems, aiming at high biomass yield, optimised production parameters. Cultivation in open environment and in closed systems are both in scope. Multitrophic and mixed cultivation approaches (e.g. multiple algae species, algae and fish/shellfish farming etc) are also in scope, as well as algae-mediated remediation and the use of nature-based solutions

• Demonstrate **further biomass processing and conversion steps** into bio-based products. In addition to CBE specific requirements:

• Ensure environmental safety and avoidance of environmental risks, incl. monitoring and mitigation measures. Environmental assessment must include: biodiversity protection/and possible enhancement, avoidance of invasiveness, zero toxicity, carbon sequestration and carbon mass balances. Any risks to ecosystems should be assessed and avoided.

NB: for the sake of this topic, marine plants such as seagrass are also considered in scope

TRI

6-7

IA-02 SSbD bio-based solutions to replace hazardous conventional chemicals for textiles production

TRL

6-7

Scope (overview)

- Demonstrate SSbD bio-based alternatives to hazardous conventional chemicals used in the production of textiles. Bio-based solutions applicable to bio-based and/or fossil-based textiles production are both in scope. Chemicals in scope for replacement include both those that are currently only used in production processes and also those that are included in the end-product(s). SSbD bio-based solutions in scope are:
 - o chemicals (organic and/or inorganic compounds) <u>AND/OR</u>
 - \circ processing routes, removing the need for chemical-to-chemical substitution .
 - Ensure **compatibility** of the innovative chemicals and/or processes with textile manufacturing equipment and practices
 - Test the **impact of the alternative bio-based chemical(s) and/or process on the endproduct(s),** based on available standards.

IA-03 Scaling-up nutritional proteins from alternative sources

Scope (overview)
 Demonstrate innovative processes for the extraction/production of proteins for application as nutritional food starting from alternative sources. The scope covers proteins from plants, invertebrates, microorganisms, fungi, aquatic biomass, fermentation of bio-based feedstock (including biogenic gaseous carbon).

• Proposals should **target nutritional proteins for food**; the co-production of nutritional proteins for feed is also in scope by adopting cascading approach, to ensure full valorisation of residual biomass.

Pure proteins, protein-rich mixtures and protein-enriched ingredients are in scope

- Address efficient and cost-effective **downstream separation and purification** processes (when applicable), to meet the targeted quality and stability for final applications.
- Demonstrate **nutritional adequacy** of the proteins and their effect on food formulations. Additional properties are also in scope depending on the application

In addition to CBE specific requirements:

• Test the safety of developed proteins and formulations in line with EU regulatory requirements and EFSA guidelines. Identify potential regulatory gaps and provide recommendations to overcome potential bottlenecks.

TRL

7

IA-04 Cost-effective and robust continuous biotech bio-based processes

TRL

6-7

- Scope
 Identify the existing bottlenecks in the switch to continuous process(es), how the proposed innovative approach can overcome challenges of targeted processes, which are currently only operating in batch or fed-batch mode, and specify the advantages of switching to continuous.
 - Demonstrate continuous biotech processes (microbial, cell factories and/or enzymatic) for the sustainable production of bio-based chemicals/products addressing identified bottlenecks.
 - Together with addressing **continuous upstream** processing (encompassing biocatalysis optimisation), **demonstrate integration of efficient DSP** systems to achieve high purity, in compliance with final applications requirements, while also facilitating/not hindering the continuous upstream operation. Focus on one or more bio-based chemicals/products with high market potential.
 - Address resource efficiency and circularity by applying process intensification and by valorising upstream and downstream side-streams (e.g., water, fermentation media, exhausted cells, etc...)

IA-05 SSbD bio-based polymers/(co)polymers unlocking new market applications

TRL

6-7

- Scope
 Demonstrate the production of bio-based (co-)polymeric structure(s) with functional (overview)
 properties at least on par with fossil-based counterparts (if any) and/or higher than bio-based benchmarks (if any). Adding new functionalities compared to benchmarks is also in scope.
 - Address resource efficiency measures to achieve costs reduction and higher sustainability, as for example reduction of primary energy consumption, water recycling, (bio)-catalyst recycling, side-streams/by-products valorisation, etc.
 - Include a task to validate (at minimum at end TRL 5) the targeted (co-)polymeric structure(s) into end products proving to meet market requirements. Ensure (co)polymer(s) processability and compatibility with downstream conversion route(s) into end products. The development of bio-based composites is not in scope. Proposals should target at least two application sectors.
 - **Eco-design** the bio-based (co)polymeric structure and related end products to address sustainable EoL. Validate the selected EoL option(s) of the (co)-polymeric structure at minimum at TRL 5. Landfilling/incineration are not in scope as EoL options.

Торіс	N	Total M€
RIA-01 Valorisation of untapped forest biomass	2	7
RIA-02 Bio-based and biodegradable delivery systems for fertilising products to reduce microplastics pollution & promote soil health	2	7
RIA-03 Alternative biomanufacturing routes for natural and synthetic rubber	2	7

- Funding: **7 M€ for 2 projects selected**. Funding rate: **100%** for companies, **100%** for non-profit entities
- IKOP threshold: at least 5% of eligible costs of the project as a whole (NEW FOR 2025)
 - Since the maximum funding rate is 100% for all, IKOP is obtained by voluntary reduction of the funding rate of (a subset of) BIC members in the proposal.
- End TRL 4-5
- Multi-actor approach: not mandatory unless specified in the topic
- Links and complementarities to previous / ongoing projects: see topic for specific projects
- Contribution to CBE specific requirements: see topic for specific details
- Qualitative business case for investment showing promise when upscaled
- Environmental impact assessment (based on preliminary data)

bicortort SSbD assessment only when specified

RIA-01 Valorisation of untapped forest biomass

TRL

5

- Scope (overview)
 Develop innovative planning tools and technologies for harvesting, storage, pre-treatment of residual and/or low value, unused or underutilized forest biomass or lower volume or/and less homogeneous biomass. Adopt decentralised approaches, including small-scale, mobile, containerised units, that consider the unique challenges across different European regions and among large, medium-sized, and small companies.
 - Develop and test **the feasibility of conversion routes** to bio-based chemicals and compounds, materials, products, assessing the viability of new business models around these concepts.
 - Test the **local value chain** by optimising logistics, improving cost efficiency, and collaborating with central hubs for further processing and refining. Actively involve local forest owners, managers, and other primary sector operators (e.g., farmers, horticulturists) to develop and test novel value chains in pilot areas.
 - Address the feasibility for different ownership types and cooperative structures to ensure alignment with value-chain cooperation.

In addition to CBE specific requirements:

- Provide recommendations for the development of EU carbon farming certification methodologies for the unused and underutilised forest biomass in long-lasting products
- Go beyond the specific feedstock environmental sustainability requirements by actively preventing soil degradation and biodiversity and carbon loss

RIA-02 Bio-based and biodegradable delivery systems for fertilising products to reduce microplastics pollution & promote soil health

TRL

5

Scope
 Develop circular and sustainable production processes for novel bio-based and biodegradable
 (overview)
 delivery system(s) for fertilising products. In addition, assess the applicability/adaptability of the delivery system(s) to additional possible agricultural inputs such as pesticides and seeds.

- Validate the delivery system(s) for fertilising products (**lab-scale and/or small-scale field trials**), ensuring agronomic efficiency, safety, scalability and sustainability with similar or improved properties compared to conventional systems.
- Assess the **long-term effect and biodegradability** of delivery system(s) when applied in natural soil conditions, applying standard tests, methods and protocols. Biodegradability-related aspects should also be monitored and assessed in fresh, estuarine or marine water (considering the risk of dispersion in water)

In addition to specific CBE requirements:

- In applying the SSbD framework consider the delivery systems and their decomposition products (including microplastics) and take into account different farming systems (incl. organic agriculture).
- As part of MAA, engage with farmers to develop and test the newly established delivery systems on demo/pilot farms, and analyse the effects on plant development, soil health and water.

4-5

RIA-03 Alternative biomanufacturing routes for natural and synthetic rubber

TRL Scope (overview)

- Identify and characterise the suitable sources of rubber-bearing genetic backgrounds (e.g., plants, yeast, microbial hosts, etc...) which are suitable for optimisation for **natural and/or synthetic rubber biomanufacturing**. When targeting plant-based sources, proposals should focus on implementing low-ILUC solutions.
- **Develop bio-based solutions** aiming at high yield of isoprenoid and/or other elastomers, e.g. by deploying the modern tools of biotechnology or other biomanufacturing approaches.
- Advance EU/AC-based production, extraction and/or processing methods, to enable high productivity and quality of high molecular weight natural rubber and/or other bio-based elastomers. Test the suitability of the developed biomanufactured alternatives into end-products.

Торіс	N	Total M€
CSA-01 Develop and deploy new curricula and knowledge exchange practices relevant to bio-based systems	1	1

- Funding: 1 M€ for 1 project selected. Funding rate: 100% for all participants
- Not related to TRL
- **Multi-actor approach**: not mandatory unless specified in the topic
- Links and complementarities to previous / ongoing projects: see topic for specific projects
- Contribution to CBE specific requirements: see topic for specific details

CSA-01 Develop and deploy new curricula and knowledge exchange practices relevant to bio-based systems

TRL	N/A
Scope (overview)	 Establish a network of industry and universities/RTOs. Ensure engagement of stakeholders from the 'Widening' countries and make sure that their specificities and needs are incorporated in the development and testing of the curricula. Mutual learning from/to rural and coastal/blue bioeconomy, including primary producers, should also be considered. Mobilise the network to co-create a set of curricula for education, training and retraining/reskilling/upskilling of students and professionals in the field of circular bio-based systems. Curricula should include both STEM and SSH disciplines. Capitalise on any best practices and success stories, available also at international level.
	• Test the implementation of the developed curricula with pilot groups of students and professionals. Some of the training methodologies that may be considered are laboratory practices, field work, internships, simulation, case studies, problem-based learning, supervised projects, vocational training, online classes/webinars etc



Horizon Europe + CBE requirements





CBE JU Call 2025 specific requirements (1/2)

Specific CBE JU requirement	Type of action	Where to include it in Part B
Feedstock sourcing (eligibility condition)	RIA and IA, incl. FLAG	Part B – (Y/N) question
Feedstock sustainability requirements	RIA and IA, incl. FLAG	Part B – (Y/N) question
Description of feedstock	RIA and IA, incl. FLAG	Part B – 1.2 Methodology
Environmental performance	·	
a) Ex-ante assessment	RIA and IA, incl. FLAG	Part B – 1.2 Methodology
Identification of environmental issues		
• Estimation of environmental sustainability performance		
Estimation of carbon removal potential		
b) Ex-post assessment		
Dedicated task for RIA	RIA	Part B - 3.1 Workplan and
 Dedicated task or WP (LCSA) for IA non-FLAG 	IA, incl. FLAG	resources



CBE JU Call 2025 specific requirements (2/2)

Specific CBE JU requirement	Type of action	Where to include it in Part B
Multi-actor approach (MAA)	IA, incl. FLAG RIA and CSA, when specified	Part B – 1.2 Methodology
Economic aspects:		
Qualitative business case	RIA	
Quantified business case and business model	IA non-FLAG	Part B – 2.2 Measures to maximise
• Executive summary of the business plan, including the underlying business case and business model	FLAG	impact – D&E&C
Business plan	FLAG	FLAG: Annex (Business plan)
Digital technologies	RIA and IA, incl. FLAG	Part B – 1.2 Methodology
Cross-disciplinary aspects and Social Sciences and Humanities (SSH)	All types of actions	Part B – 1.2 Methodology



Similarities and differences with Horizon Europe



Funding rate

- RIA: 100%
- IA: 60% (100% non-profit)
- CSA: 100%



Award criteria

- RIA, IA & CSA: Excellence, Impact, Implementation
 - + Impact: Ability to ensure 5% (RIA), 15% (IA) or 20% (IAFlag) of in-kind contribution to operational activities (IKOP) = minimum IKOP percentage



- RIA: 50 p.
- IA: 70 p.
- CSA: 30 p.

Scoring thresholds

- Excellence: 3/5
 - Impact: 4/5
 - Implementation: 3/5
 - Total: 11/15



In-kind contribution to operational activities (IKOP)

IKOP = Total eligible costs – Requested EU contribution (of private members)

In CBE JU, the only private member is the Bio-based Industries Consortium (BIC).

 \rightarrow Minimum percentage of IKOP (5% for RIAs, 15% for IAs, 20% for Flagships) must be reflected in the budget of partners that are BIC members.

Example: RIAs Criterion: <u>≥ 5% IKOP</u>	BIC member	Industry / Academia	Total eligible costs	Funding rate	Requested EU contribution	IKOP (only for BIC members)
Beneficiary 1 - Coordinator	Y	industry	€ 2,000,000	100%	€ 2,000,000	
Beneficiary 2	N	academia	€ 590,000	100%	€ 590,000	
Beneficiary 3 (BIC member)	Y	industry	€ 700,000	100%	€ 500,000	€ 200,000
Beneficiary 4	N	industry	€ 300,000	100%	€ 300,000	
Beneficiary 5	N	academia	€ 800,000	100%	€ 600,000	
TOTAL			€ 4,390,000		€ 3,990,000	€ 200,000
Percentage IKOP = € 200,000 = 4,5% < 5%						

(Examples of IA and Flagship budget tables will be included in the FAQ for applicants)



In-kind contribution to operational activities (IKOP)

IKOP = Total eligible costs – Requested EU contribution (of private members)

In CBE JU, the only private member is the Bio-based Industries Consortium (BIC).

 \rightarrow Minimum percentage of IKOP (5% for RIAs, 15% for IAs, 20% for Flagships) must be reflected in the budget of partners that are BIC members.

BIC member	Industry / Academia	Total eligible costs	Funding rate	Requested EU contribution	IKOP (only for BIC members)
Y	industry	€ 2,000,000	100%	€ 2,000,000	
N	academia	€ 590,000	100%	€ 590,000	
Y	industry	€ 700,000	100%	€ 500,000	€ 200,000
Ν	industry	€ 300,000	100%	€ 300,000	
N	academia	€ 800,000	100%	€ 600,000	€ 200,000
		€ 4,390,000		€ 3,990,000	€ 400,000
	Y N Y N	YindustryNacademiaYindustryNindustryNacademia	Y industry € 2,000,000 N academia € 590,000 Y industry € 700,000 N industry € 300,000 N academia € 800,000	Y industry € 2,000,000 100% N academia € 590,000 100% Y industry € 700,000 100% N industry € 300,000 100% N academia € 800,000 100%	Yindustry $€ 2,000,000$ 100% $€ 2,000,000$ Nacademia $€ 590,000$ 100% $€ 590,000$ Yindustry $€ 700,000$ 100% $€ 500,000$ Nindustry $€ 300,000$ 100% $€ 300,000$ Nacademia $€ 800,000$ 100% $€ 600,000$

Percentage IKOP = $\frac{2400,000}{64,390,000}$ = 9.1% < 5%

(Examples of IA and Flagship budget tables will be included in the FAQ for applicants)



IKOP vs BIC membership

• IKOP?

- Total eligible costs minus total requested funding (of BIC members)
- Only applicable to RIA and IA incl. Flagships
- CBE JU evaluation subcriterion (5%, 15% or 20% threshold, depending on type of action)

• BIC membership

- CBE JU will check BIC membership during evaluation...
- ...via an Annex to the proposal: 1 pdf file with all 'BIC membership certificates' or BIC members involved in the consortium
- BIC membership certificates to be requested to BIC via <u>https://bic.elisca.app/membership/certificate/registration</u>
- When building your consortium, you might encounter organisations interested in becoming a BIC member (and who could 'boost' your IKOP)
- 'Project membership': temporary membership option, (only') relevant for CBE JU Calls: the organisation will become a BIC member if their proposal is successful

Company contributing IKOP* in a project consortium

Bio-based Industries Consortium

What are your options?





Table of contents

- The Circular Biobased Europe Joint Undertaking
- Call 2025
 - Overview & topics
 - CBE specific requirements (incl. IKOP)
- Proposal preparation: Lessons learnt from past calls
- Call 2025 timing, tips & tricks and networking opportunities

Proposal preparation: Lessons learnt from past calls



Call 2024 results analysis

Call 2024:

- **559** proposals *created* in the F&T Portal
 - 125 remained in draft ('test' proposals...or missed submission deadline?)
 - 136 deleted by project coordinators
 - 298 proposals submitted
 - **30** proposals were invited for Grant Agreement Preparation ('main list')
 - > 35 proposals were placed on the 'reserve list'
 - 119 proposals were above thresholds, but did not make the 'main' or 'reserve' lists
 - 105 proposals were below threshold(s) (did not pass one or more of the evaluation threshold(s))
 - 9 proposals did not meet the Horizon eligibility and admissibility criteria



Call 2024 submission analysis

Would there be correlation (or even causation) between the creation time of a proposal and its success rate?

	Created between	Median creation date	Created in September
30 x Main list	24/04 - 03/09	18/06/2024	1 (3%)
35 x Reserve list	24/04 - 29/08	08/07/2024	0 (0%)
74 x above threshold(s), non-reserve	24/04 - 18/09	16/07/2024	17 (14,3%)
105 x below threshold(s)	25/04 - 18/09	07/08/2024	22 (20,1%)
9 x ineligible/withdrawn	22/05 - 15/09	26/08/2024	4 (44,4%)

=> starting to work in the Portal asap adds value!



- Impact criterion 'Expected outcomes in the topic text' source of the most common issues
- Excellence criteria 'Methodology', 'Ambition', 'In scope' in top 5 issues
- Implementation criterion 'Risk & mitigation measures' in top 5 issues
- Impact criterion 'Economic aspects' (IA/IA-Flagships business case / business model, or RIA economic viability):
 - in top 5 of issues for IA/IA-Flagships
 - the most common issue in all proposals scoring between 13.5-14.5

CBE JU Call 2025:

Timing, tips & tricks and networking opportunities





Estimated project start = May-June 2026

Proposal preparation





Get prepared ...

Study the call documentation

Select your partners

Plan your project and draft the Technical Description (Template Part B)



Horizon Europe + CBE requirements

Annual Work Programme

Circular Bio-based Europe

The Industry

and Budget

2024



Proposal (Part B)

Topic

Scope

1. Excellence 1.1 Objectives & ambition 1.2 Methodology

2. Impact

- Expected 2.1 Pathways to impact
- 2.2 Measures to maximise outcomes impact

3. Implementation

3.1 Work plan & resources 3.2 Capacity of participants & consortium as a whole

1. Excellence #@REL-EVA-RE@#

Excellence – aspects to be taken into account

- Clarity and pertinence of the project's object work is ambitious, and goes beyond the sta
- Soundness of the proposed methodology, in assumptions, interdisciplinary approaches. dimension in research and innovation conte including sharing and management of resea society and end users where appropriate.
- The following aspects will be taken into account scope of the work programme topic.
- Objectives and ambition #@PRI-OBJ-PO@# [e.g. 6 pc 1.1
 - Briefly describe the objectives of your proposed topic? Are they measurable and verifiable? Are th
 - · Describe how your project goes beyond the s ambitious. Indicate any exceptional ground-break services or business and organisational models. products and services already available on the m
 - ruct Describe where the proposed work is positioned. spectrum from 'idea to application', or from 'lab the Technology Readiness Level, if possible disting
 - A Please bear in mind that advances beyon the positioning of the project. Expectation with Innovation Actions at high TRLs.

- Methodology #@con-met-cm@##@com-ple-cp@# [6 1.2
 - Describe and explain the overall methodology underpin your work. Explain how this will enable important challenges you may have identified overcome them. [e.g. 14 pages]
 - This section should be presented as a described below under 'Implementation'
 - Describe the feedstock to be used in the project foreseen in the CBE JU Strategic Research (https://www.cbe.europa.eu/system/files/2022-0

Under the condition of respecting the "food first" be used as feedstock for CBE JU projects. IAs, inclu clarify in their proposal the amount of forecast prospective volumes needed in

Part B - P

Flagships, this should be aligned with the proposed business plan:

- assess if the above-mentioned forecasted prospective volumes have the potential to interfere with the food supply chain:
- describe possible actions (including project activities) to mitigate the identified risks, such as alternative feedstock sources, in case of potential interference with the food supply chain in future commercial operations.
- As described in the CBE JU Specific requirements in section 2.2.3.1 of the CBE JU Annual Work Programme 2025, available under https://www.cbe.europa.eu/reference-documents.
- For the assessment of the environmental performance, include in the proposal the following elements:
 - an identification of the environmental critical issues early on and the explanation on how the project will steer the development process in the right direction;
 - an ex-ante estimation of the environmental sustainability performance, including contribution to climate neutrality, resource efficiency, zero pollution (addressing the impacts on air, water, soil quality, where relevant) and circularity of the proposed biomass logistics/processes/products, compared to benchmark(s) selected by the consortium and described in the proposal. The benchmark(s) should be based on the best performing logistics/processes/products and should be duly justified in the proposal. The proposal should provide a detailed justification to demonstrate how it will improve environmental performances compared to the selected benchmark(s) and if available provide relevant references and calculations;
 - if applicable, a preliminary assessment of the carbon removal potential.
 - For more details, please refer to the CBE JU Specific requirements in section 2.2.3.1 of the CBE JU Annual Work Programme 2025, available under https://www.cbe.europa.eu/referencedocuments.
- Describe any national or international research and innovation activities, including relevant BBI/CBE JU ongoing or finalised projects, whose results will feed into the project, and how that link will be established.
- Consider applying and/or adapting existing/mature or novel digital technologies provided that they are instrumental to achieving the project's outcomes and scope. Consider the applications of digital technologies (e.g. Al, blockchain, Machine Learning, IoT, 6G etc), among the following areas: (i) Process design & modelling (including bioinformatics); (ii) Process monitoring, control and optimisation; (iii) Tracking and tracing; (iv) Data analytics and data management; (v) (Real-time) process monitoring, control and optimisation (including environmental performance); (vi) Predictive maintenance and plant engineering.
 - For more details, please refer to the CBE JU Specific requirements in section 2.2.3.1 of the CBE JU Annual Work Programme 2025, available under https://www.cbe.europa.eu/referencedocuments.
- Describe the multi-actor approach that will be implemented in the project.
 - The multi-actor approach is mandatory to be included in all IA proposals, incl. Flaaships, It is a form of responsible R&I, aiming to make the R&I process and its outcomes more reliable, demanddriven, shared and relevant to society. It also aims to have these outcomes shared more extensively. For more details, please refer to the CBE JU Specific requirements in section 2.2.3.1 of

Part B - Page 9 of 28



A good proposal is compelling

Present a compelling narrative of your methodology

What methods will be used.

How this will deliver your project's objectives.

Which challenges exist and how you will overcome them.



contextualised

Link your project to its context

"No project is an island."

What are relevant other projects ? (EU, national, regional, local)

How will you build on them or interact with them?

What is relevant existing IP ? (inside and outside the consortium)

How will you deal with it?

captivating

Present a captivating scenario to impact

Describe the project's pathway to impact :

- 1. Describe specific contributions to topic outcomes & wider impact (longer term)
- 2. Estimate their scale and significance
- 3. Assess relevant barriers, requirements, risks

Present a credible scenario to impact

Describe the project's pathway to impact :

credible

Numbers add trust !

- 1. Describe specific contributions to topic outcomes & wider impact (longer term)
- 2. Estimate their scale and significance
- 3. Assess relevant barriers, requirements, risks

Be candid about risks

Risks of pathways to impact:

External factors influencing outcome & impact + mitigation measures to address them

Risks of project implementation:

Dedicated table in the template

Internal factors influencing project results + mitigation measures to address them

candid

Ensure coherence

in other words: Avoid **ambiguity**

All parts of the proposal should be consistent.

"There are no details."

coherent

Build a strong consortium

CBE networking platform remains open:



Map topic elements and requirements to individual partners - identify gaps

High level of confidence btw partners is key.

Clarify ownership of results (IP) early.

collaborative

Be clear

up to 70 pages x 8 proposals (per evaluator)

Make it easy to grasp.

"stand out with clarity"



Aim for complete "topic eclipse" topic text + Horizon Europe requirements + CBE requirements proposal proposal proposal

every single word in topic text counts !

every single requirement counts !

complete

A good proposal is compelling contextualised captivating credible candid coherent collaborative clear complete



A good proposal is compelling contextualised captivating credible candid coherent collaborative clear complete



the launchpad of your idea !





Circular Bio-based Europe Joint Undertaking

Contact us	Follow us	Subscribe	Bio-based Industries Consortium
info@cbe.europa.eu www.cbe.europa.eu	in y D		Co-funded by the European Union