

A competitive bioeconomy for a sustainable future

Oliver ZOBELL – CBE JU

Samuele AMBROSETTI – BIC

17/03/2025



Table of contents

- **The Circular Biobased Europe Joint Undertaking**
- **CBE JU vs. Horizon Europe: similarities & differences**
 - Call 2025 topic overview & structure
 - CBE specific requirements (incl. IKOP)
- **Proposal preparation: Lessons learnt from past calls**
- **Call 2025 timing, Tips & tricks and networking opportunities**

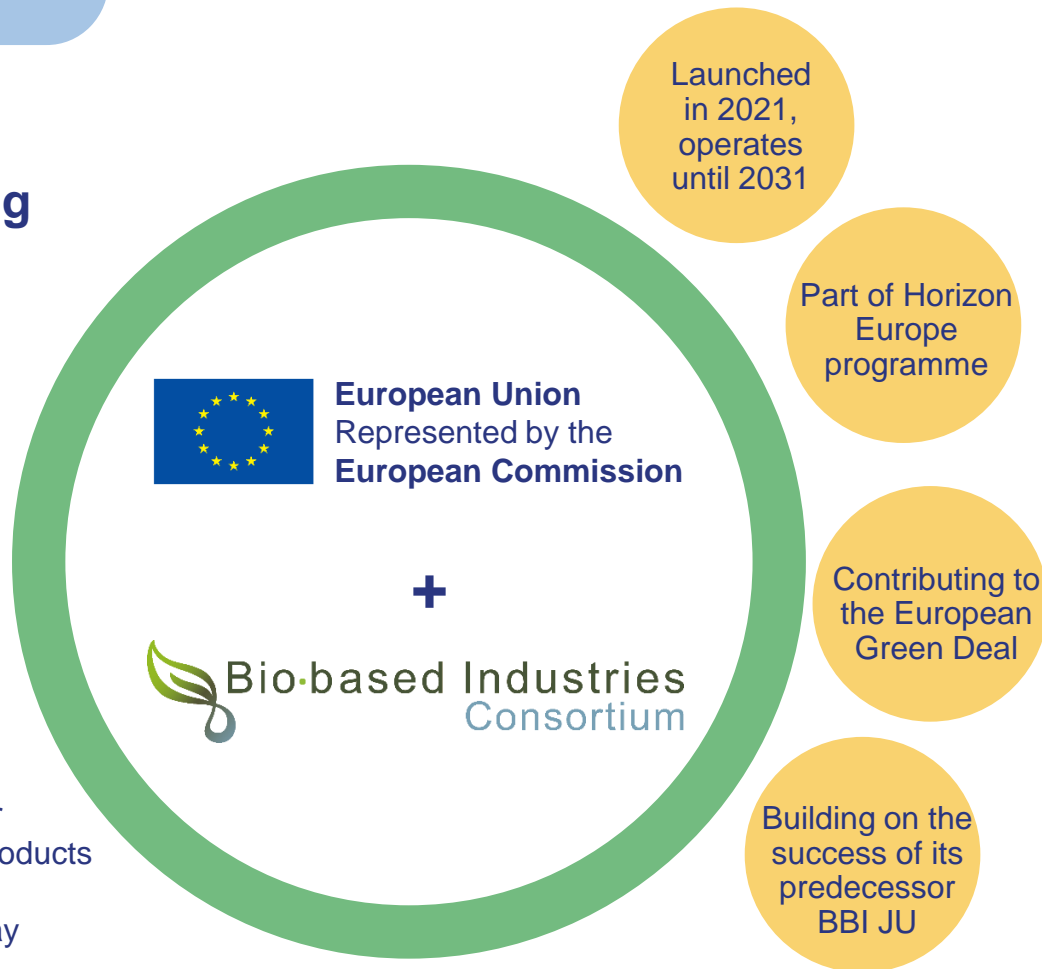
The Circular Biobased Europe Joint Undertaking

1

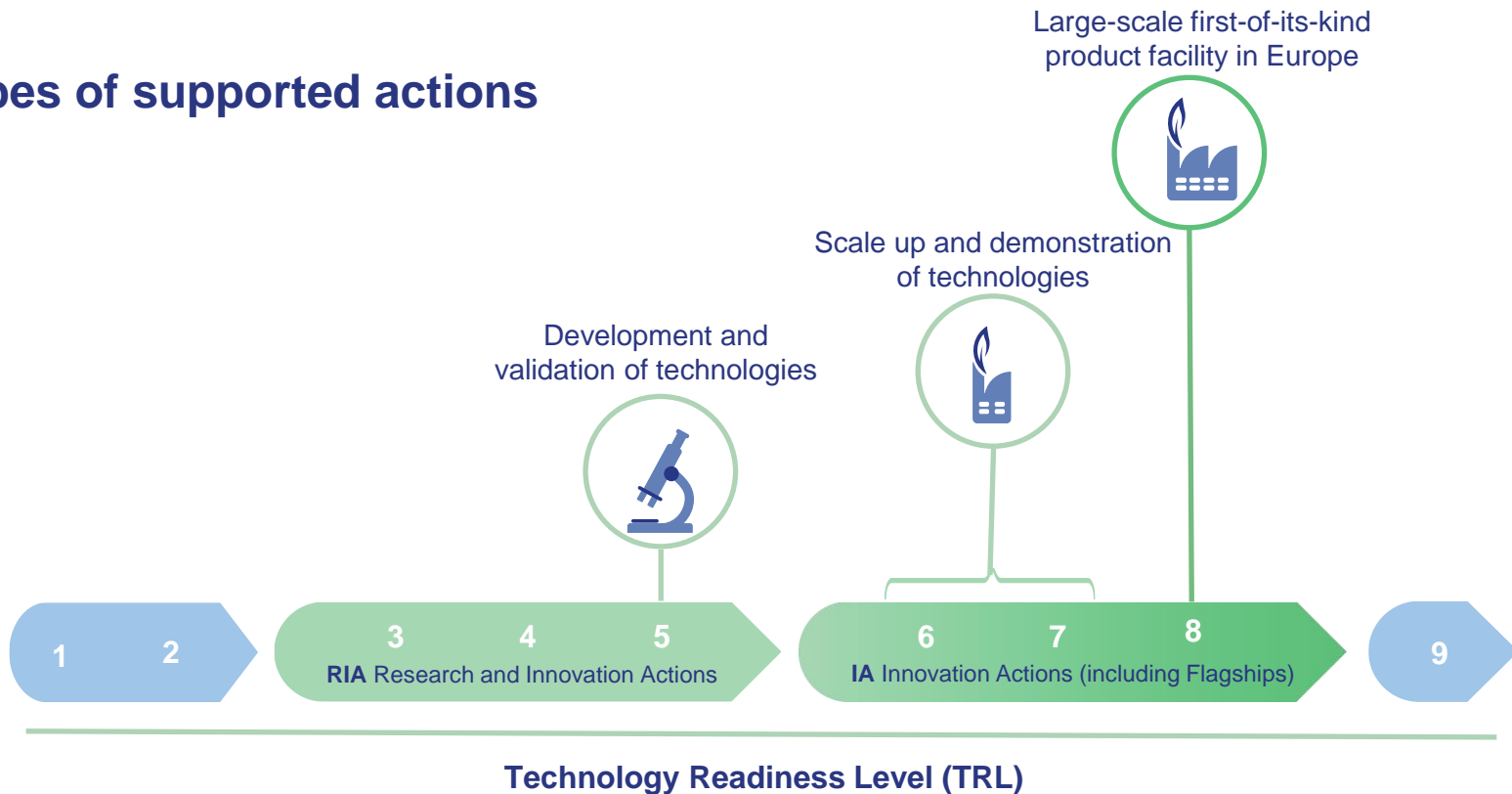
Circular Bio-based Europe Joint Undertaking

€2 billion public-private initiative

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



Types of supported actions



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

CBE JU portfolio:

2014-2023



192
projects



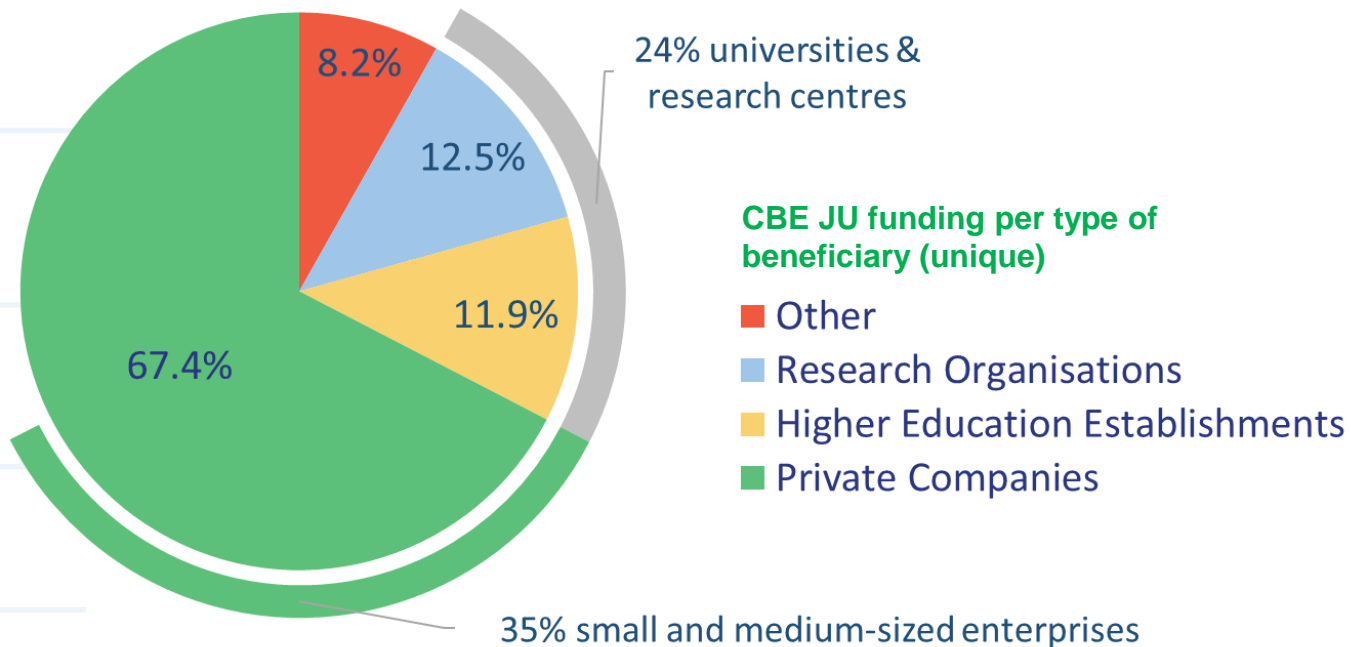
1,552
beneficiaries



€1,117 million
CBE JU
funding



43
countries



Data: CORDA, May 2024

Portugal

Number of projects

38

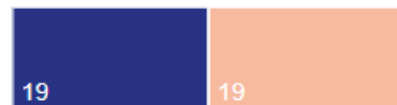
5

coordinated projects

CBE JU funding

20.45M€

Completed Ongoing



Private companies Universities & research centres other



5 Demonstration plants

| # | Locality | Type |
|---|------------------------|---------------------|
| 1 | Cascais | Demonstration plant |
| 1 | Lisbon | Demonstration plant |
| 1 | Palmela | Demonstration plant |
| 1 | Póvoa de Santa Iria | Demonstration plant |
| 1 | Vila Nova de Famalicão | Demonstration plant |

Small and medium-sized enterprises (SMEs)

Only private companies

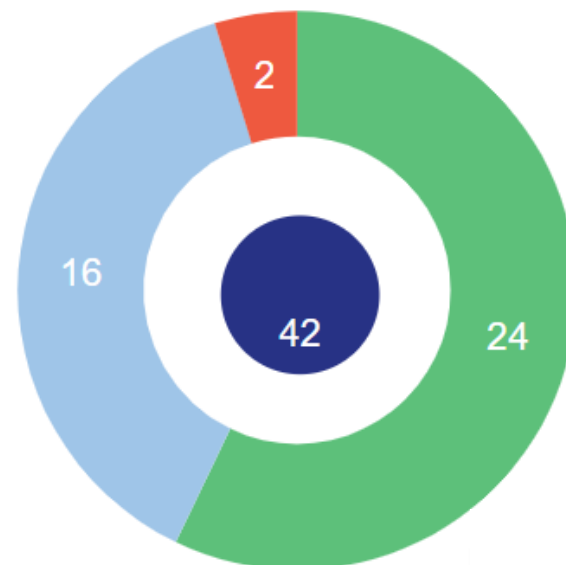
CBE JU funding to SMEs

8.72M€

Number of SMEs

14

Beneficiaries



Type of action:

Innovation action - Flagship Innovation action
Research & Innovation action Coordination & Support action



Table of contents

- The Circular Biobased Europe Joint Undertaking
- **CBE JU vs. Horizon Europe: similarities & differences**
 - Call 2025 topic overview & structure
 - CBE specific requirements (incl. IKOP)
- Proposal preparation: Lessons learnt from past calls
- Call 2025 timing, Tips & tricks and networking opportunities

CBE JU vs. Horizon Europe: similarities & differences

2

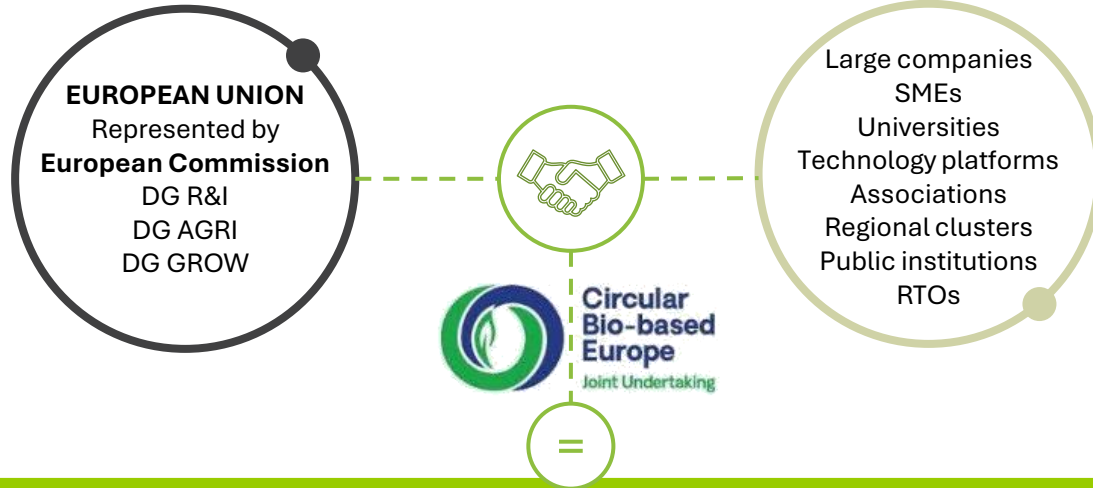
13 topics and their budget

| Type of action | Topics HORIZON-JU-CBE-2025 | | Million EUR |
|-------------------------|----------------------------|---|-------------|
| 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 | 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-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 |
| RIA | R-01 | Valorisation of untapped forest biomass | 7 |
| | 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 |

Total 172

Disclaimer: topic updates (incl. budget) are still possible before Call publication in the F&T Portal (3 Apr 2025)

CBE JU



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

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



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.

320+

industry (full) members

large companies and SMEs

280+

associate members

research organisations, academia and trade associations



| 1 | CBE JU | 2 | Business |
|---|---|---|--|
| ② | BIC represents the private sector in a public-private partnership with the European Commission called the Circular Bio-based Europe Joint Undertaking | ② | Facilitating connections and providing market intelligence through activities including networking events and commissioned reports/studies |
| 3 | Finance | 4 | Society |
| ② | Mobilising public and private finance and investors through services such as a regional funding platform and a pitching event | ② | Increasing awareness, knowledge, acceptance and education through activities such as a student competition (BISC-E) and positive impact stories on the BIC Investment Portal |



BIC also carries out specific activities to achieve a favourable policy, regulatory and financing framework for the bio-based industries, such as representing our members interest vis-à-vis the EU Institutions.

CBE JU – the role of BIC members

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

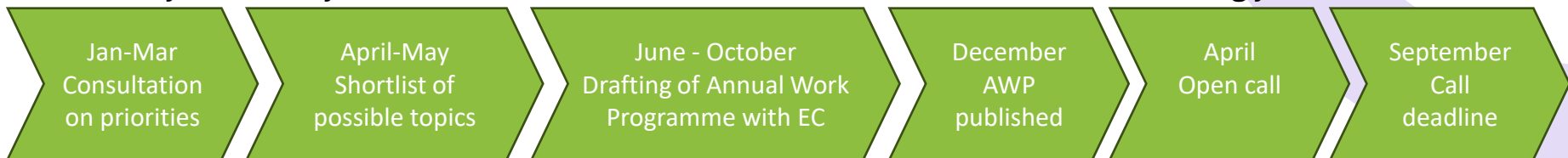
- Provides initial input about priorities for the CBE AWP (short term and medium-long term)
- Gives mandate to BIC staff to discuss the AWP with the EC
- Contributes with topic-specific input in the framework of AWP preparation

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

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

The PWG meets regularly (3-4 times a year), usually in Brussels. The AMWG usually meets online.

Every calendar year is dedicated to the formulation of the AWP for the following year.



Call topic structure

HORIZON-JU-CBE-2025-XX-NN Topic title

| | |
|---|--|
| 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 |
| TRL | TRL 6-7 at the end of the project |
| Link to CBE JU Specific Objectives | 1.1: Increase the intensity of cross-disciplinary research and innovation activities |
| 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 |
| 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 |

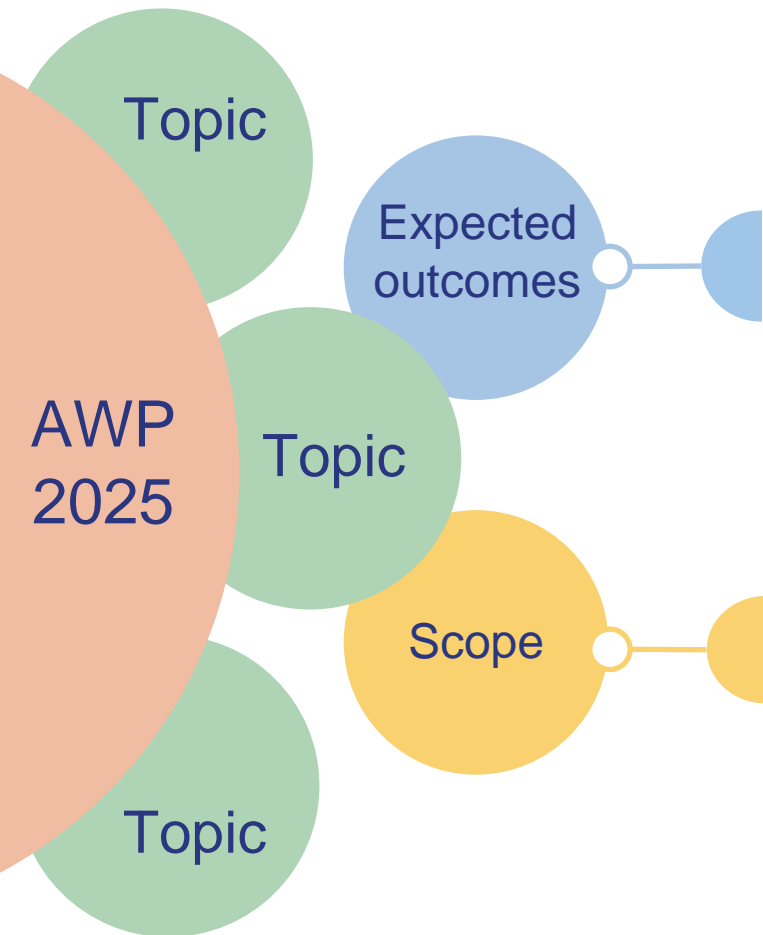
Topic

Topic

Topic

AWP
2025

Call topic structure



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

CBE 2025 topics - FLAGSHIP

| Topic | 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 | 1 | 20 |
| IAFLAG-04 Retrofitting of industrial plants towards higher-value bio-based products | 1 | 20 |

- 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) **AND full business plan** (Annex to proposal)
 - Hearing to clarify business plan assumptions – no new information, just clarification
- **Environmental impact and SSbD assessment** required

CBE 2025 topics - FLAGSHIP

FLAG-01 Urban-industrial symbiosis for biowaste valorisation

| | |
|------------------|---|
| TRL | 8 |
| Scope (overview) | <ul style="list-style-type: none">• 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. <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• 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 <p>NB: The main feedstock in scope for this topic is separately collected urban bio-waste, as defined under the Waste Framework Directive.</p> <p>According to the specific targeted conversion routes, bio-based residues and waste from other sources can be used as supplementary feedstock</p> |

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) | <ul style="list-style-type: none">• 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). <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• 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 (overview) | <ul style="list-style-type: none">• Scale-up (TRL 8) production technologies and deploy the complete value chain to fibre-based packaging materials with improved or novel properties (over specified bio-based and/or non-bio-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. <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• 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 | 8 |
| Scope (overview) | <ul style="list-style-type: none">• 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 market-relevant application(s). Moreover, proposals should also address cascading valorisation of residual streams across the value chain. Food/feed ingredients are not in scope. <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• 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

CBE 2025 topics – Innovation Actions

| Topic | 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**

CBE 2025 topics – Innovation Actions

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

| | |
|------------------|---|
| TRL | 6-7 |
| Scope (overview) | <ul style="list-style-type: none">• 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. <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• Ensure environmental safety and avoidance of environmental risks, incl. monitoring and mitigation measures. <i>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.</i> |

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

CBE 2025 topics – Innovation Actions

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:
 - **chemicals (organic and/or inorganic compounds)** AND/OR
 - **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 end-product(s)**, based on available standards.

CBE 2025 topics – Innovation Actions

IA-03 Scaling-up nutritional proteins from alternative sources

| | |
|------------------|---|
| TRL | 7 |
| Scope (overview) | <ul style="list-style-type: none">• 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 <p>In addition to CBE specific requirements:</p> <ul style="list-style-type: none">• 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. |

CBE 2025 topics – Innovation Actions

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

| | |
|------------------|--|
| TRL | 6-7 |
| Scope (overview) | <ul style="list-style-type: none">• 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...) |

CBE 2025 topics – Innovation Actions

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

| | |
|------------------|---|
| TRL | 6-7 |
| Scope (overview) | <ul style="list-style-type: none">• Demonstrate the production of bio-based (co-)polymeric structure(s) with functional 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. |

CBE 2025 topics - RIA

| Topic | 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)
- **SSbD assessment** only when specified

CBE 2025 topics - RIA

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

CBE 2025 topics - RIA

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

| | |
|------------------|---|
| TRL | 5 |
| Scope (overview) | <ul style="list-style-type: none">Develop circular and sustainable production processes for novel bio-based and biodegradable 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) <p>In addition to specific CBE requirements:</p> <ul style="list-style-type: none">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. |

CBE 2025 topics - RIA

RIA-03 Alternative biomanufacturing routes for natural and synthetic rubber

| | |
|------------------|--|
| TRL | 4-5 |
| Scope (overview) | <ul style="list-style-type: none">• 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. |

CBE 2025 topics - CSA

| Topic | 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

CBE 2025 topics - CSA

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

| | |
|------------------|---|
| TRL | N/A |
| Scope (overview) | <ul style="list-style-type: none">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

Horizon Europe (HE) rules

- Eligibility
- Admissibility
- General annexes

HE evaluation criteria

- Excellence
- Impact
- Implementation

CBE Annual Work Programme 2025

- Topics
- **Specific requirements**
- Budget

HE Programme Guide

HE Online Manual

HE General Annexes

HE Annotated Model Grant Agreement



EU Grants
AGA – Annotated Model Grant Agreement
2017 Funding Programme 2021-2027



Part A

Part B

Proposal structure

Application Form

Horizon Europe
Application forms (Part A)

Topic:
Type of action:
Type of Model Grant Agreement:
Proposal number:
Proposal acronym:

Table of contents

1. Executive summary

1.1. Objectives and activities

1.2. Methodology

1.3. Impact

1.4. Project results (concrete impact)

Proposal template Part B: technical description
Title or title Part B

Use of participants

| Participant No. * | Participant registration name | Country |
|-------------------|-------------------------------|---------|
| 1 (Coordinator) | | |
| 2 | | |
| 3 | | |

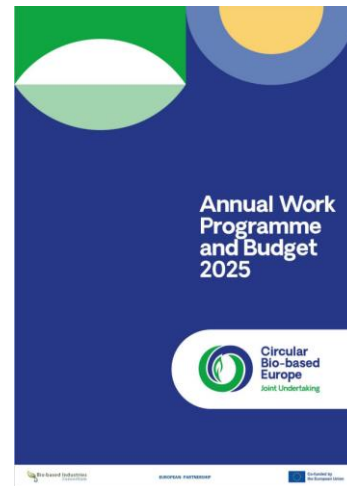
1. Executive summary

1.1. Objectives and activities

1.2. Methodology


1.3. Impact

1.4. Project results (concrete impact)



| 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 <ul style="list-style-type: none"> • Identification of environmental issues • Estimation of environmental sustainability performance • Estimation of carbon removal potential | RIA and IA, incl. FLAG | Part B – 1.2 Methodology |
| b) Ex-post assessment <ul style="list-style-type: none"> • Dedicated task for RIA • Dedicated task or WP (LCSA) for IA non-FLAG | RIA IA, incl. FLAG | Part B - 3.1 Workplan and 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:  <ul style="list-style-type: none"> <i>Qualitative</i> business case <i>Quantified</i> business case and business model Executive summary of the business plan, including the underlying business case and business model Business plan | RIA IA non-FLAG FLAG FLAG | Part B – 2.2 Measures to maximise impact – D&E&C 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 |

Any questions so far?



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



Page limit

- 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)**.

→ **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 |

$$\text{Percentage IKOP} = \frac{\text{€ 200,000}}{\text{€ 4,390,000}} = 4,5\% < 5\% \quad \text{👎}$$

(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)**.

→ **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 (BIC member) | N | academia | € 800,000 | 100% | € 600,000 | € 200,000 |
| TOTAL | | | € 4,390,000 | | € 3,990,000 | € 400,000 |

$$\text{Percentage IKOP} = \frac{\text{€ 400,000}}{\text{€ 4,390,000}} = 9.1\% < 5\% \quad \text{👍}$$

(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 <https://bic.elisca.app/membership/certificate/registration>
- 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

What are your options?

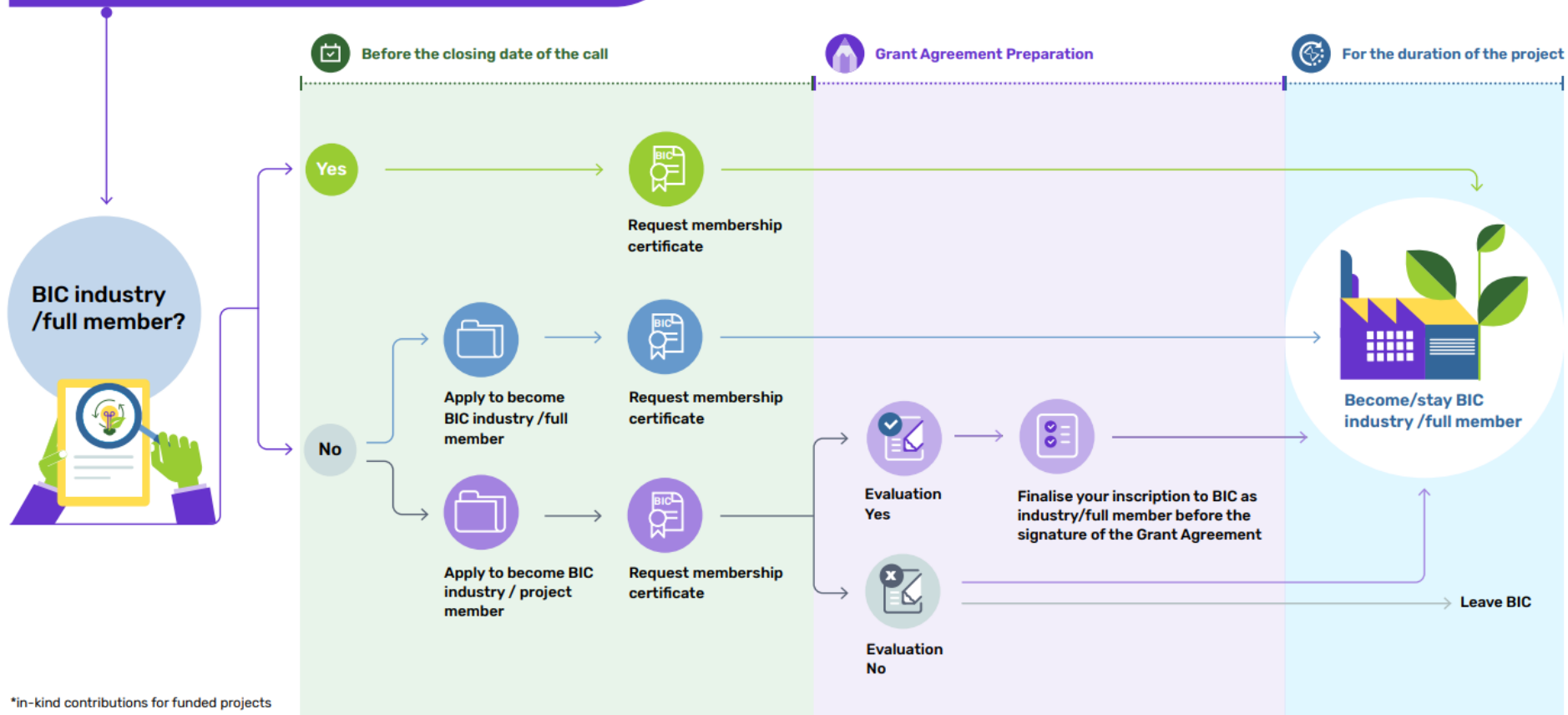


Table of contents

- The Circular Biobased Europe Joint Undertaking
- CBE JU vs. Horizon Europe: similarities & differences
 - Call 2025 topic overview & structure
 - 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

3

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!

Call 2024 – evaluation outcomes

- **Call 2024: 289 evaluated proposals**
 - Using the 3 main Horizon Europe evaluation criteria: Excellence, Impact and Implementation
 - Each main criterion is further split into different evaluation **sub**criteria
 - Horizon Europe scoring principles are used
 - Max. score: 5 points per criterion, so max. 15/15 for whole proposal
 - Score per criterion is defined by how many (minor) shortcomings and/or weaknesses are identified by expert-evaluators
- **Analysis of evaluation outcomes**
 - Check which are the most common shortcomings and weaknesses...
 - ...for all proposals, for RIAs, and for IAs (to check if there is a difference or not)
 - No analysis for CSAs and Flagships, because (too) limited amount of proposals to draw statistically relevant conclusions

Outcomes – IAs incl. Flagships

| Rank | Most common weaknesses | Most common shortcomings |
|------|--|--|
| 1 | Impa – Expected outcomes in topic text | Impa – Expected outcomes in topic text |
| 2 | Exc – Methodology | Impl – Work plan (overall structure, tasks, milestones, deliverables,...) |
| 3 | Exc – ambition (going beyond the state of the art) + appropriate TRLs | Exc – ambition (going beyond the state of the art) + appropriate TRLs |
| 4 | Impa – Business case | Impl – Risk table incl. mitigation measures |
| 5 | Impa – Business model | Exc – Methodology |

(**Exc** = Excellence, **Impa** = Impact, **Impl** = Implementation)

Outcomes – RIAs

| Rank | Most common weaknesses | Most common shortcomings |
|------|--|--|
| 1 | Impa – Expected outcomes in topic text | Impa – Expected outcomes in topic text |
| 2 | Exc – Methodology | Exc – Methodology |
| 3 | Exc – ambition (going beyond the state of the art) + appropriate TRLs | Impl – Work plan (overall structure, tasks, milestones, deliverables,...) |
| 4 | Exc – is the proposal (fully or partially) in scope | Impl – Risk table incl. mitigation measures |
| 5 | Impl – Work plan (overall structure, tasks, milestones, deliverables,...) | Exc – ambition (going beyond the state of the art) + appropriate TRLs |

(**Exc** = Excellence, **Impa** = Impact, **Impl** = Implementation)

Conclusions

- **‘Expected outcomes in the topic text’** source of the most common shortcomings and weaknesses in all proposals, as well as IAs and RIAs
- 2-3/5 **most common weaknesses** are **linked to Excellence** (Methodology, ambition, in scope)
- Top 5 **most common shortcomings** are the **same for all types proposals**, only in a different order
- In particular, **Risk & mitigation measures** are top 3-4/5 in shortcomings in all types of actions
- **Economic aspects** (business case / business model or economic viability) in the top 5 of weaknesses for IAs/Flagships + the 2 most common shortcomings in all types of proposals scoring between 13.5-14.5.

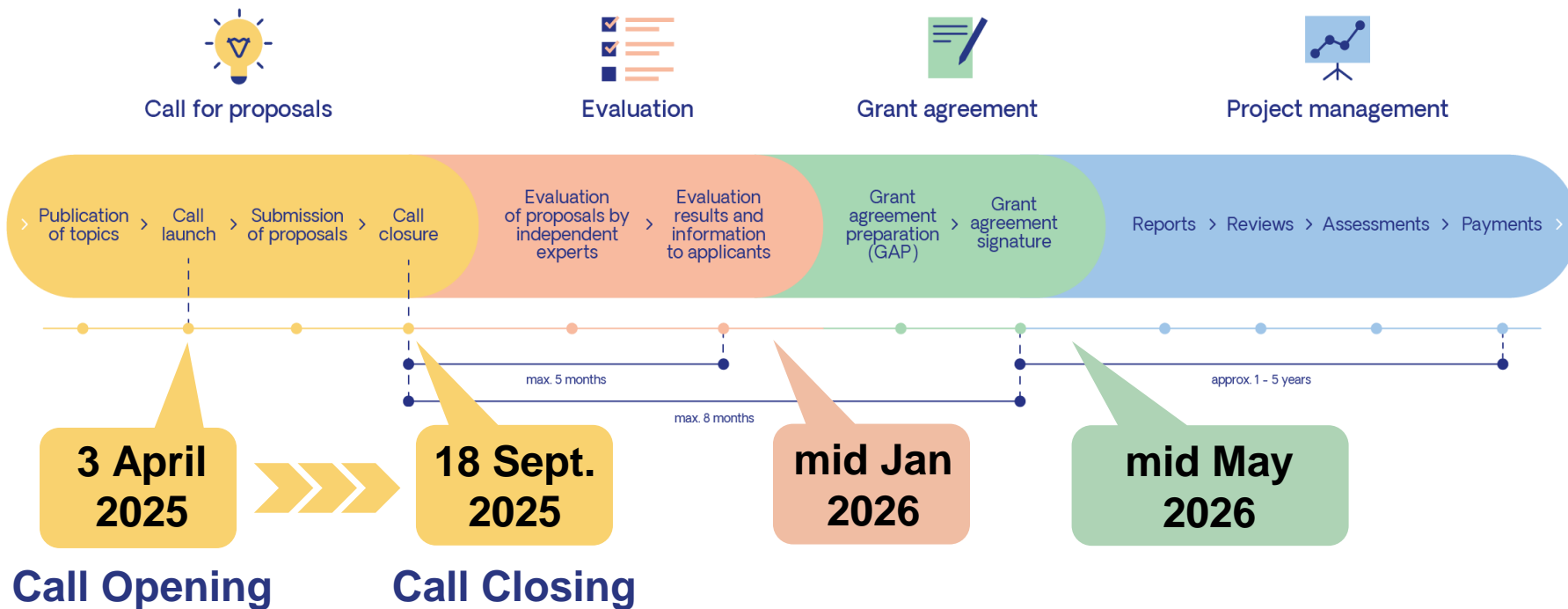
CBE JU Call 2025:

Timing, Tips & tricks and
networking opportunities

4

Estimated project start = May-June 2026

Proposal preparation



A good and convincing CBE JU proposal



Ensure that the proposed work is within the **scope of the topic**



Demonstrate that the idea is **ambitious** and goes beyond the **state of the art**



Your **methodology** must take into account open science practices and interdisciplinarity (+ gender dimension, if applicable)



Show clearly how the proposed work could contribute to the **outcomes and impacts** described in the work programme (the pathway to impact)



Describe the planned measures to **maximise the impact** of the project ('plan for dissemination & exploitation including communication activities')



Demonstrate the quality of the **implementation**, including work plan, resources and participants

Read carefully the **AWP2025** and the **Strategic Research and Innovation Agenda (SRIA)**, for a good understanding of the context and long-term objectives of CBE JU !!!

Build a strong consortium

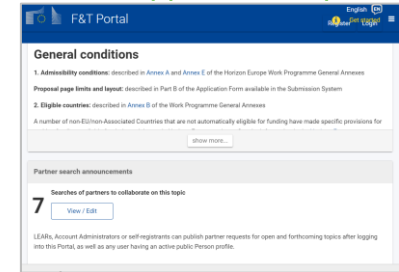
Are there any **competence** gaps in the consortium?

- Match elements of Topic (and Proposal) to individual partners in the consortium.

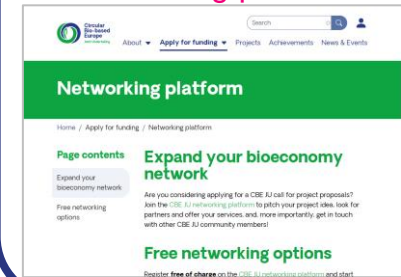


Use the **networking opportunities** offered by i) the **Funding & Tenders Portal**, ii) **CBE networking platform** and iii) **BIC member networking events**

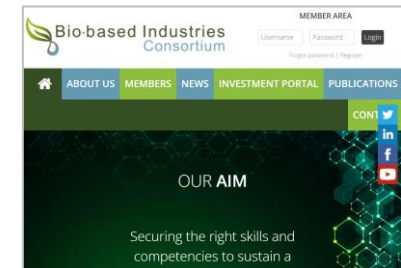
ec.europa.eu/info/funding-tenders/opportunities/portal



cbe.europa.eu/networking-platform



biconsortium.eu



CBE JU networking platform 2025



Join the platform

Register now!

Engage with other European bio-based economy actors
Find the right partners for your proposal

Build a strong consortium

Are there any **competence** gaps in the consortium?

- Match elements of Topic (and Proposal) to individual partners in the consortium.

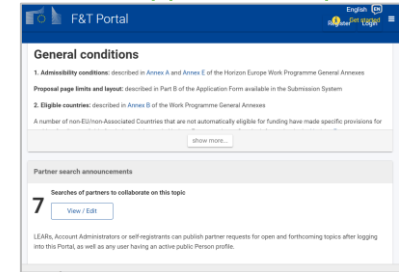


Use the **networking opportunities** offered by i) the **Funding & Tenders Portal**, ii) **CBE networking platform** and iii) **BIC member networking events**

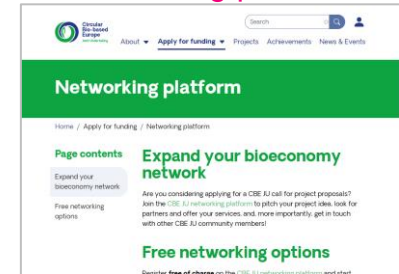
During proposal writing:

- Significant level of upfront **commitment** from all partners is crucial, as costs are not eligible before project start.
- High level of **confidence** between partners is key.
- Talk early about handling of **IPR** – these will need to be confirmed formally in the Consortium Agreement before signature of the Grant Agreement.

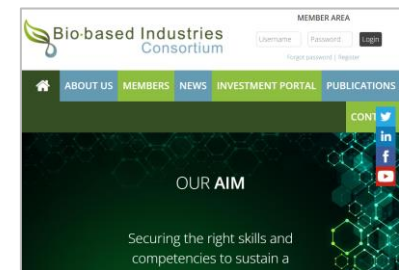
ec.europa.eu/info/funding-tenders/opportunities/portal



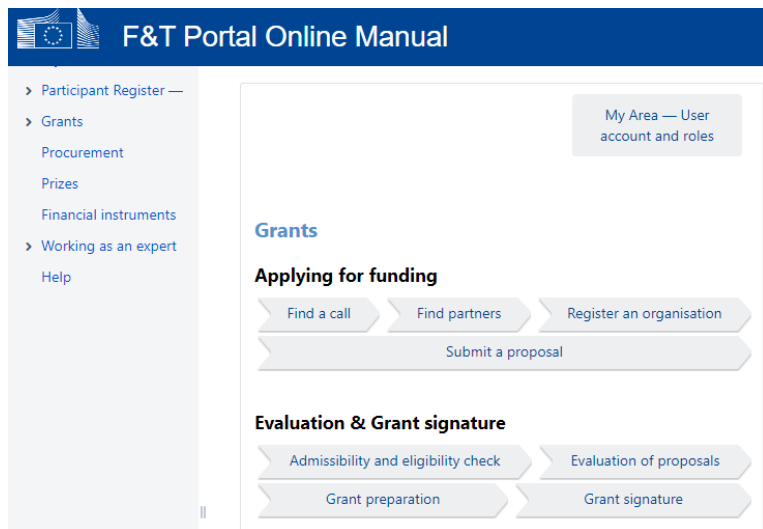
[cbe.europa.eu/
networking-platform](https://cbe.europa.eu/networking-platform)



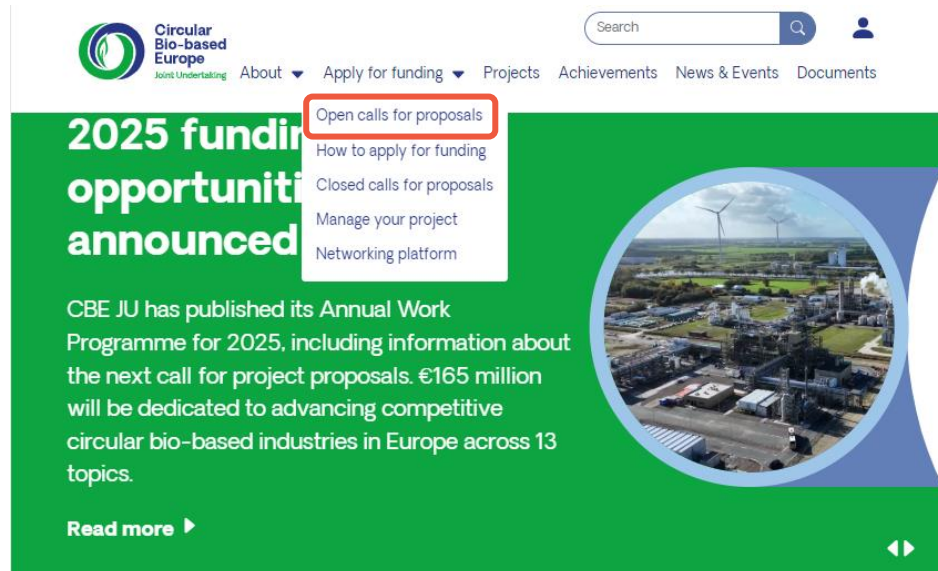
biconsortium.eu



Two main sources of information



<https://webgate.ec.europa.eu/funding-tenders-opportunities/display/OM/Online+Manual>



<https://www.cbe.europa.eu/open-calls-proposals>
(Incl. FAQ for applicants, link to networking platform,...)

How to approach a successful proposal in CBE JU

2 April 2025, 9:00 – 13:30
Brussels



Target Group: 50 potential applicants from widening countries

◆ **Registration** [here](#) - free but compulsory: *first come, first served!* More info: [click here](#)

💡 **What to expect?**

Two participatory sessions on **Excellence** and **Impact**

Participants will gain practical insights for their proposals by **engaging with NCPs, CBE and BIC officers, and experienced applicants.**

📌 **Don't miss the opportunity to enhance your proposal-writing skills & network with key players in the field!**

CBE JU Info Day 2025



3 April, Brussels

Register now!

#CBEInfoDay

Any questions?





**Circular
Bio-based
Europe**
Joint Undertaking

Contact us

info@cbe.europa.eu
www.cbe.europa.eu

Follow us



Subscribe



Bio-based Industries
Consortium



Co-funded by
the European Union