

Who we are

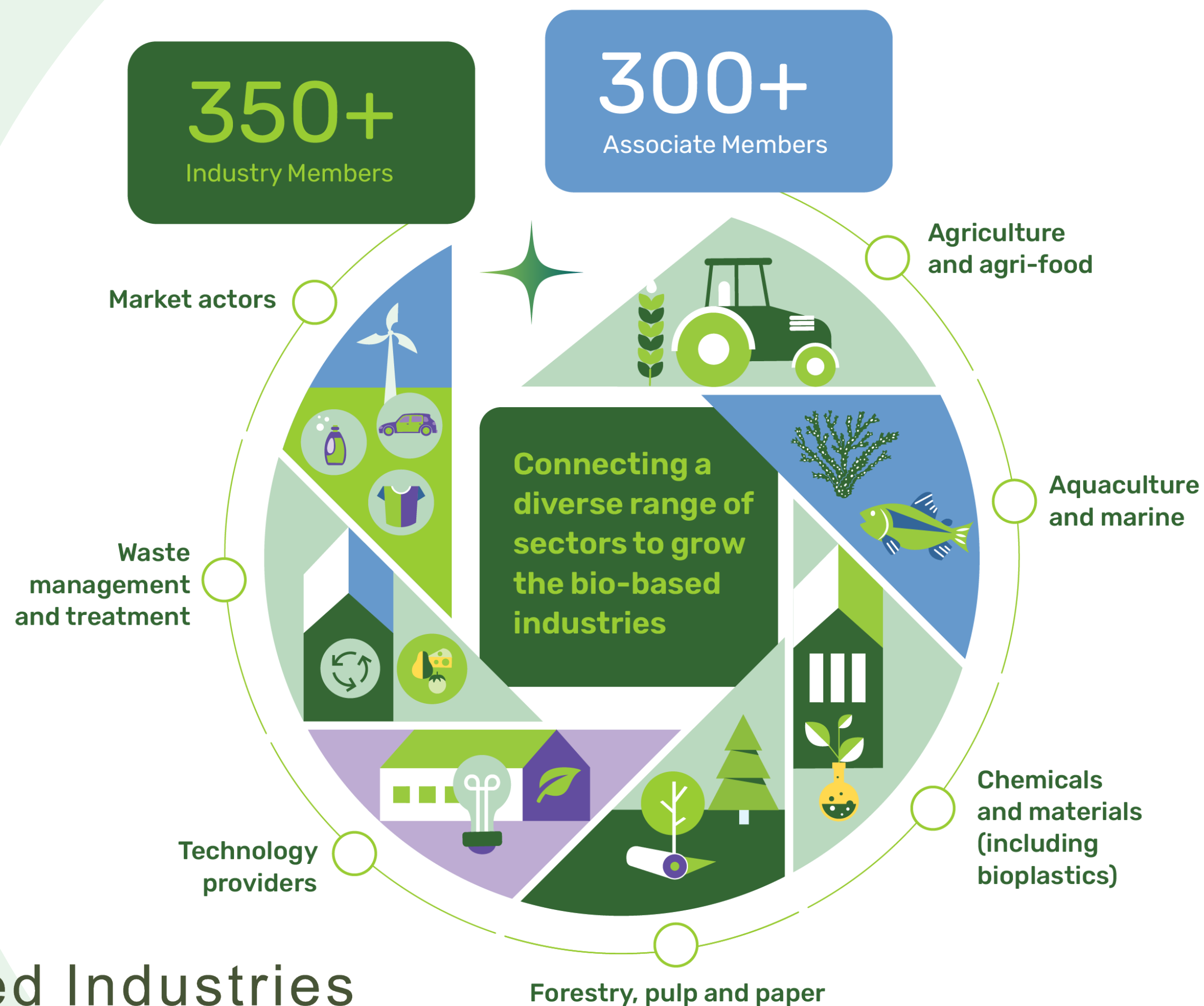
Leading Europe's sustainable, circular, bio-based transition

The Bio-based Industries Consortium (BIC)

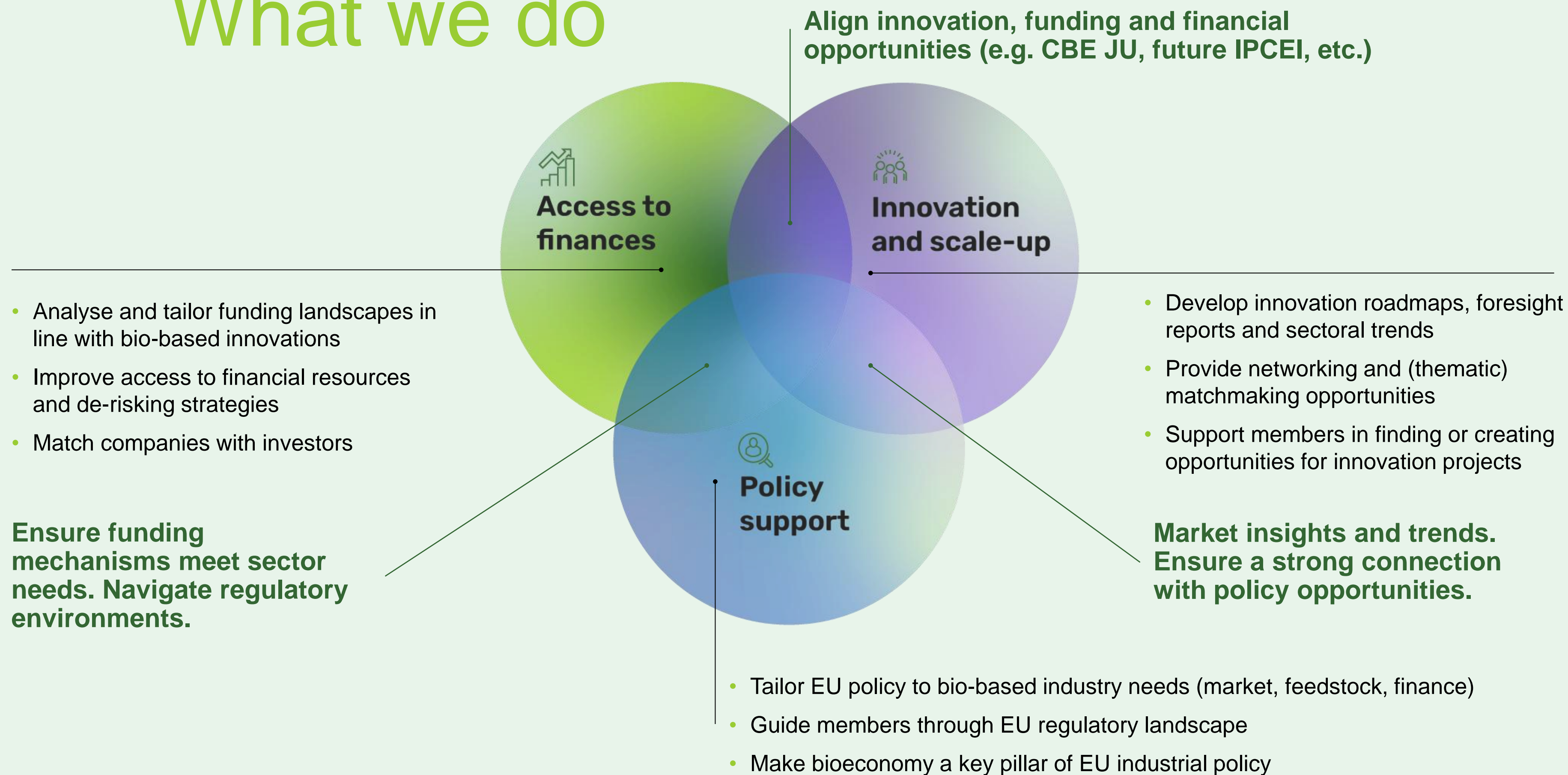
is a non-profit organisation connecting industry, academia, regions and citizens to transform bio-based feedstocks into novel sustainable products and applications, and create circular bioeconomy ecosystems through investments, innovation and know-how.

biconsortium.eu

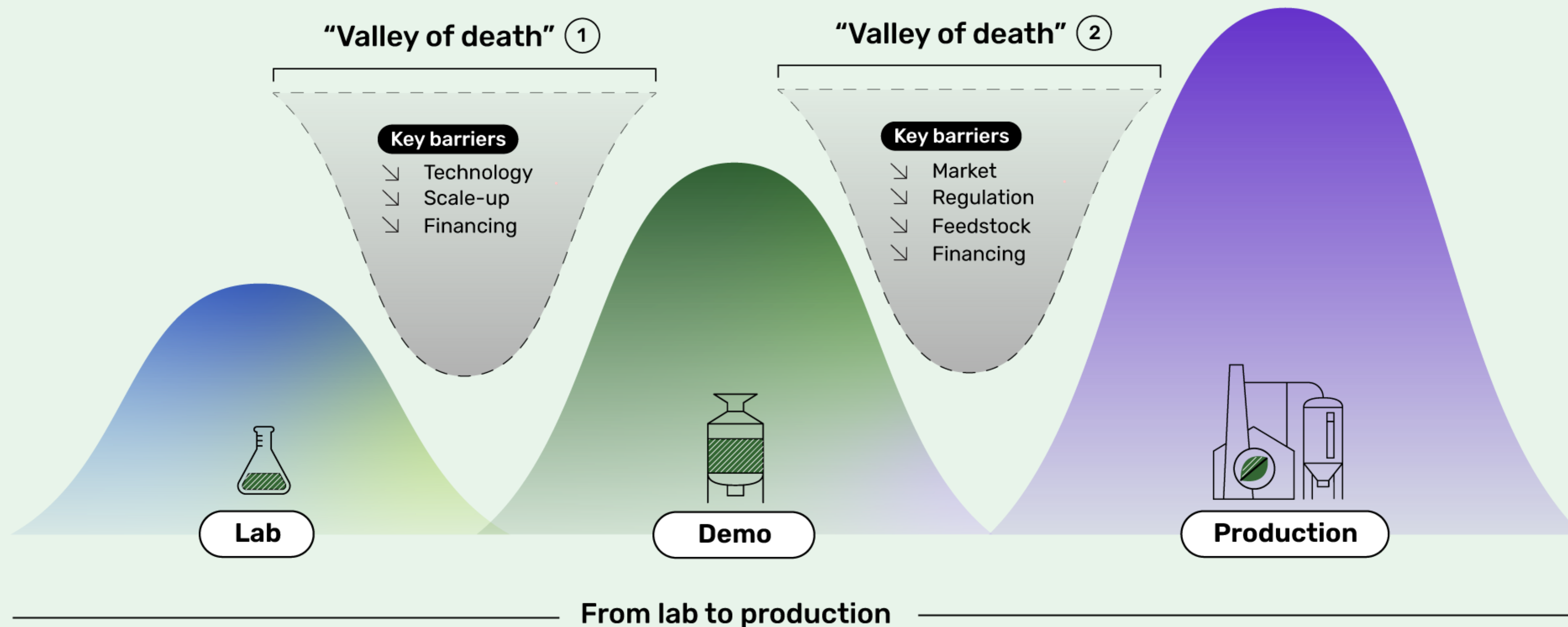
 **Bio-based Industries Consortium**



What we do



Why we do it



Supporting bio-based industries going from "lab" to "fab"

Open: 23 April

Deadline: 22 September

CBE 2026 topics



Topic	N	Total M€
IAFlag-01: Boosting biorefinery competitiveness through biotech	1	20
IAFlag-02: SSbD bio-based alternatives for fertilising and/or crop protection products	1	20
IAFlag-03: SSbD bio-based solutions for home and/or personal care	1	20
IAFlag-04: Diversification of nutritional food ingredient sources for increased EU resilience and strategic autonomy	1	20
IA-01: Biotech routes for valorisation of residual biomass	2	14
IA-02: Bio-based additives as alternatives to unlock and increase recyclability	2	14
IA-03: Bio-based chemicals and/or materials from woody residues	2	14
IA-04 High-performance, circular-by-design, bio-based thermosets	2	14
IA-05: Films and coatings for circular packaging	2	14
RIA-01: Addressing separation and purification challenges in biorefineries	2	6.5
RIA-02- SSbD bio-based polymers from alternative sources	2	6.5
RIA-03-Develop breakthrough and sustainable bio-based textile fibres	2	6.5
CSA-01: Supporting industry in the switch to sustainable and circular bio-based products and processes	1	1.2

CBE 2026 topics – Flagship topics

Topic	N	Total M€
IAFlag-01: Boosting biorefinery competitiveness through biotech	1	20
IAFlag-02: SSbD bio-based alternatives for fertilising and/or crop protection products	1	20
IAFlag-03: SSbD bio-based solutions for home and/or personal care	1	20
IAFlag-04: Diversification of nutritional food ingredient sources for increased EU resilience and strategic autonomy	1	20

Funding: **20 M€ for 1 project**. Funding rate: **60%** for companies, **100%** for non-profit entities

IKOP threshold: at least 20% of eligible costs of the project as a whole

With a funding rate of 60%, this means that at least 50% of the eligible costs must be allocated to companies that are (or become via “project membership”) BIC members

End **TRL 8** for the main stream of activities

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

Quantified business model and business plan including replication potential (Annex)

Environmental impact and SSbD assessment

HORIZON-JU-CBE-2026-IAFlag-01: Boosting biorefinery competitiveness through biotech

Funding	20 M€ for 1 project selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	8
Scope (overview)	<ul style="list-style-type: none"> • Demonstrate (at TRL 8) a sustainable and robust biomanufacturing route to obtain biobased product(s). The proposal should focus on processes in which biotechnology is the key enabling technology; the integration of (upstream and/or downstream) supporting unit operations based on technologies other than biotechnology is in scope. Products in scope include chemicals, intermediates, polymers, ingredients and enzymes. <u>Food and feed ingredients as main application are out of scope</u>. Optimisation of selected cells, enzymes and/or microorganisms is also in scope provided that the starting TRL is at least 6. • Demonstrate (at TRL 8) the further conversion or use of the obtained biorefinery product(s) into at least one end-product driving the business case; validate it (TRL 6 and above) in relevant market applications. Additional end-product(s) with high prospective market potential can be targeted, reaching at least TRL 6.

HORIZON-JU-CBE-2026-IAFlag-02: SSbD bio-based alternatives for fertilising and/or crop protection products

Funding	20 M€ for 1 project selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	8
Scope (overview)	<ul style="list-style-type: none"> • Demonstrate (at TRL 8) the efficient industrial production of SSbD bio-based solutions as alternatives to current fertilising <u>and/or</u> crop protection products. <u>Bioactive molecules and/or biotechnology solutions for bio-fertilisers, bio-stimulants and/or pest/disease control (e.g., bioherbicides, biopesticides, bioinsecticides), or a combination thereof, are in scope</u>. Products in scope can be applicable at any crop(s) cycle stage. • Validate (at TRL 6 and above) at scale the produced bio-alternatives into the <u>formulation of end-product(s) and test their agronomic efficiency, safety and sustainability</u> to prove the achievement of similar or improved properties compared to defined benchmarks available in the market (synthetic and/or mineral). In case of bio-based fertilisers, put in place a solid production validation procedure to ensure reduced nutrient variability of the N/P/K content in end-products. • <u>Test the developed product(s) with primary producers on the field (demo farms)</u> for selected crops and monitor their effects on soil health and quality, as well as on water. Cover different climatic and soil conditions, taking into account different farming systems, including organic agriculture. If controlled release mechanisms are employed, the proposed innovations should avoid microplastics accumulation in soil

HORIZON-JU-CBE-2026-IAFlag-03: SSbD bio-based solutions for home and/or personal care

Funding	20 M€ for 1 project selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	8
Scope (overview)	<ul style="list-style-type: none"> • Demonstrate (at TRL 8) the production of SSbD bio-based solution(s) as an alternative to conventional chemicals, ingredients and combinations thereof, that are currently used in the formulation of home and/or personal care products (including cosmetics). <u>SSbd biobased chemicals/ingredients and biotechnology solutions are both in scope</u>. Materials entering the end product formulation (e.g., granulates, powders, microbeads, micro/nano cellulose) are also in scope, while other materials related to home and personal care applications (e.g., nonwovens, other wipes, packaging) are out of scope. • Demonstrate (at TRL 7 and above) the application of the bio-based solution(s) into the <u>formulation of market relevant end-product(s)</u>. Assess <u>technical performances of endproduct(s)</u>, ensuring that their final properties meet market application requirements. Adding new functionalities for specific applications is also in scope. While the topic focuses primarily on home and personal care applications, the demonstrated solution(s) could also be applicable to industrial production processes. When this is the case, validation (at TRL 6) of the industrial use case should be addressed. • <u>Test that the release and accumulation of pollutants and harmful substances in the water is being avoided, including microplastics</u>. When biodegradable solutions are targeted, validate biodegradability according to applicable EU/international standards, depending on the substance group and the final application(s).

HORIZON-JU-CBE-2026-IAFlag-04: Diversification of nutritional food ingredient sources for increased EU resilience and strategic autonomy

Funding	20 M€ for 1 project selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	8
Scope (overview)	<ul style="list-style-type: none"> • Demonstrate (at TRL 8) the efficient production of nutritional ingredients for food applications. Proteins, lipids, specialty carbohydrates, and fibres are in scope. Target at least one of these as the main product driving the business case. Structural or functional ingredients such as colourants, preservatives, stabilisers, texturisers, enzymes are not in scope as the main product. Synergistic co-production of multiple and different food and feed ingredients and other biobased products is also in scope following the cascading approach. <u>All sources of bio-based feedstock are in scope.</u> Direct production of food from food crops, livestock, fisheries and aquaculture is not in scope. The use of industrial grade feedstock from agricultural crops is in scope for conversion into food grade ingredients. • Validate (at TRL 6 and above) the use of the obtained nutritional food ingredient(s) into the <u>formulation of at least 1 food product</u> proving quality, stability, nutritional and sensorial properties. Additional aspects related to prevention of intolerances/allergies, improved palatability and digestibility, health benefits, etc. are also in scope depending on the ingredient(s), formulation(s) and product(s) developed. • Address resource efficiency and circularity aspects to increase economic and socioenvironmental added value. When pursuing circular models, ensure that neither pathogens nor contaminants are injected back in the loop, to avoid negative toxicological effects.

CBE 2025 topics – Innovation Actions

Topic	N	Total M€
IA-01: Biotech routes for valorisation of residual biomass	2	14
IA-02: Bio-based additives as alternatives to unlock and increase recyclability	2	14
IA-03: Bio-based chemicals and/or materials from woody residues	2	14
IA-04 High-performance, circular-by-design, bio-based thermosets	2	14
IA-05: Films and coatings for circular packaging	2	14

Funding: 14 M€ for 2 projects. Funding rate: **60%** for companies, **100%** for non-profit entities

IKOP threshold: at least 15% of eligible costs of the project as a whole

With a funding rate of 60%, this means that at least 37,5% of the eligible costs must be allocated to companies that are (or become via “project membership”) BIC members

End **TRL 6-7** for the main stream of activities

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 model and business case, including potential for upscaling

Environmental impact and SSbD assessment

HORIZON-JU-CBE-2026-IA-01: Biotech routes for valorisation of residual biomass

Funding	14 M€ for 2 projects selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Demonstrate (at least TRL 6) efficient biotechnology based processes to convert residual biomass streams into bio-based chemicals, intermediates, polymers, materials, ingredients and/or enzymes. The topic focuses on processes in which biotechnology is the key enabling technology; the integration of supporting unit operations <u>based on technologies other than biotechnology</u> is in scope. Optimisation of selected cells, enzymes and/or microorganisms, including microbiomes, is also in scope. The feedstock in scope includes: <ul style="list-style-type: none"> ○ Forestry and agricultural residues and/or side streams from the processing of forestry and agricultural biomass (including livestock-based ones such as manure and animal byproducts), ○ residues from aquatic biomass, including from fisheries, micro/macro algae production and aquaculture, ○ urban and/or industrial bio-based waste and side-streams (including food industry waste and side-streams, cellulose from post-consumer and post-industrial waste, urban biowaste and sewage sludge, and other bio-based waste/side-streams from industrial operations including wood and pulp and paper industry) ○ mixed streams from the above

HORIZON-JU-CBE-2026-IA-01: Biotech routes for valorisation of residual biomass

Funding	14 M€ for 2 projects selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope (overview)	<ul style="list-style-type: none"> • Integrate optimised biomass pretreatment/fractionation processes tailored to selected residual biomass and optimise (energy)-efficient separation and/or purification process step(s) across the value chain. The valorisation of by-products and side streams across the value chain via the cascading approach is in scope. • <u>Validate (at TRL 5 and above) conversion (or use) of biorefinery product(s) into endproducts</u> proving to fulfil market requirements for selected applications sectors. • Address resource efficiency and circularity. When pursuing circular models, ensure that neither pathogens nor contaminants are injected back in the loop, to avoid negative effects on human health and the environment.

HORIZON-JU-CBE-2026-IA-02: Bio-based additives as alternatives to unlock and increase recyclability and/or biodegradability

Funding	14 M€ for 2 projects selected
Fund rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Demonstrate (at least at TRL 6) innovative processes for the synthesis of bio-based SSbD additives that: <ol style="list-style-type: none"> i. Enable a circular EoL for materials and/or products that are currently not recyclable and/or not biodegradable, <u>or</u> ii. Improve circularity of materials and/or products, e.g., by requiring resources/energy efficient and safe conditions for recycling or facilitating biodegradation. <p>In the context of this topic, circular EoL includes <u>recycling and/or biodegradation</u>. Justify the choice of the proposed solution(s) in addressing existing bottlenecks in the circular EoL of targeted materials and/or products including where embedded additives play a fundamental role in hindering circularity.</p> <p>Provide alternative solutions that prevent the release of harmful chemicals during the product life cycle (including from products produced from recyclates) of materials and/or products, while enabling the relevant EoL options. <u>Application of the demonstrated biobased additives could be relevant for bio-based, partly bio-based or non-bio-based end products.</u></p>

HORIZON-JU-CBE-2026-IA-02: Bio-based additives as alternatives to unlock and increase recyclability and/or biodegradability

Funding	14 M€ for 2 projects selected
Fund rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Demonstrate (at least at TRL 6) the <u>compatibility and processability</u> of SSbD bio-based additives within the formulation/manufacturing of materials and/or products. Validate the technical performances of materials/products incorporating the novel bio-based additive(s) and proving to fulfil market requirements for selected application sector(s). Target at least two distinct market sectors in cooperation with end-users. • <u>If targeting biodegradability</u> of end-products, assess that the additives, as well as the endproduct, biodegrade safely in different environments (soil and water) according to existing EU/International standards, methods and protocols. • <u>If targeting recyclability</u> as the EoL, test and validate it, including assessing the effect of the additives on the waste management system (encompassing sorting, separation and recycling). Any recycling route is in scope: mechanical, chemical, organic, enzymatic (including their possible combination).

HORIZON-JU-CBE-2026-IA-03: Bio-based chemicals and/or materials from woody residues

Funding	14 M€ for 2 projects selected
Fund rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none">• Demonstrate (TRL 6 and above) innovative technologies to obtain bio-based chemicals and/or materials from woody residues. Feedstock in scope includes <u>woody residues generated at forestry and/or at industrial processing sites</u>, including, but not limited to, bark, sawdust or residues from wood harvesting and processing. Demonstration should cover the optimal combination of innovative and scalable technologies aimed at maximising yield, selectivity and productivity across upstream pretreatment/fractionation, further conversion into chemicals/materials, separation/purification processes. The proposed technologies should address flexibility to feedstock quality variability.• Validate (TRL 5 and above) the <u>obtained chemicals/materials into end products</u>. Assess the products' performance and ensure that they fulfil technical performance requirements according to the end market application(s).• Apply the eco-design principles, in line with the Ecodesign for Sustainable Products Regulation, to the end-product(s) for <u>sustainable EoL</u> and test it at TRL5 and above. Incineration is not in scope.

HORIZON-JU-CBE-2026-IA-04 High-performance, circular-by-design, biobased thermosets

Funding	14 M€ for 2 projects selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Demonstrate (at least at TRL 6) the resource-efficient production of innovative bio-based thermosets, targeting both high performances and circularity. Functionalisation by introducing bio- or non-bio-based additives is also in scope. • Demonstrate (at least at TRL 6) the developed bio-based thermosets <u>conversion into circular end-products</u>, proving that technical performance (e.g., mechanical and thermal stability properties, fire resistance, corrosion resistance, durability, etc.) meets market requirements and is compatible with existing manufacturing equipment. • Apply eco-design principles, in line with the Ecodesign for Sustainable Products Regulation, to enable <u>circularity of the thermoset materials</u>, addressing major challenges of EoL for the targeted end-use. • <u>Test the selected EoL alternatives (at TRL 5 and above)</u>. Landfilling or incineration are out of scope.

HORIZON-JU-CBE-2026-IA-05: Films and coatings for circular packaging

Funding	14 M€ for 2 projects selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Demonstrate (at least TRL 6) innovative technologies for obtaining bio-based films and/or coatings suitable for improving performance of packaging products. <u>Both food and nonfood packaging are in scope. At least one non-food packaging application should be addressed.</u> While coatings and films must be bio-based, any (bio-based and/or non-bio based) material is in scope as a substrate. • Demonstrate (at least TRL 6) the applicability of the developed solution(s) in the <u>manufacturing of packaging product prototypes</u>, ensuring compatibility with industrial packaging manufacturing processes. • <u>Assess targeted products properties according to the intended application(s)</u> under conditions occurring during the use phases, including transport and storage. Such properties may include mechanical, barrier, surface properties, resistance to low or high temperatures, weathering, moisture and/or corrosion; compatibility with food contact requirements (when addressing food packaging), printability.

HORIZON-JU-CBE-2026-IA-05: Films and coatings for circular packaging

Funding	14 M€ for 2 projects selected
Fund. rate	60% for companies, 100% for not-for-profit entities
End TRL	6-7
Scope overview	<ul style="list-style-type: none"> • Apply the eco-design principles, in line with the Ecodesign for Sustainable Products Regulation, to <u>reduce overpackaging and enable/facilitate sustainable at EoL.</u> • <u>Test the selected EoL alternatives (at TRL 5 and above).</u> Circular EoL includes mechanical, chemical and/or enzymatic recycling, and composting and their possible combinations. Reuse and remanufacturing are also in scope when compatible with the application and common practices. Landfilling or incineration are out of scope.

CBE 2025 topics - RIA

Topic	N	Total M€
RIA-01: Addressing separation and purification challenges in biorefineries	2	6.5
RIA-02- SSbD bio-based polymers from alternative sources	2	6.5
RIA-03-Develop breakthrough and sustainable bio-based textile fibres	2	6.5

Funding: **6.5 M€ for 2 projects**. 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 entities, 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 showing promise when upscaled

Environmental impact assessment (based on preliminary data)

SSbD assessment only when specified

HORIZON-JU-CBE-2026-RIA-01: Addressing separation and purification challenges in biorefineries

Funding	6.5 M€ for 2 projects selected
Fund rate	100% for companies, 100% for not-for-profit entities
End TRL	5
Scope overview	<ul style="list-style-type: none"> • Develop scalable separation and purification technologies and test the developed innovative solutions on <u>at least 3 use cases</u> from biorefinery processes at industrial or demo scale. <u>Each technology should address at least two of the following</u>: <ul style="list-style-type: none"> ○ increase efficiency when using available green solvents (including water), or develop novel ones and in both cases minimise the use of harsh solvents; ○ applying process intensification including through reduction of process steps; ○ reducing thermal and/or electric energy and water consumption. • Address compatibility of the innovative separation and purification solutions with existing upstream technologies <u>or</u> develop solutions that address simultaneously the upstream and downstream challenges. • <u>Test and validate</u> the performance of targeted technologies and their effect on selected bio-based product(s). Both novel (not yet available on the market) and well-established bio-based products are in scope.

HORIZON-JU-CBE-2026-RIA-02- SSbD bio-based polymers from alternative sources

Funding	6.5 M€ for 2 projects selected
Fund. rate	100% for companies, 100% for not-for-profit entities
End TRL	5
Scope overview	<ul style="list-style-type: none"> • Develop (at TRL 5) efficient processes for synthesis and/or extraction of bio-based polymer(s) from the alternative sources in scope, targeting high yield and selectivity. <u>Primary biomass from agriculture and forestry is out of scope</u>; for other applicable feedstock the CBE JU SRIA and its Annex V can be consulted. When relevant, develop adequate pretreatment/fractionation of targeted feedstock. Both new bio-based polymers and already established ones (but currently produced at scale from primary feedstock) are in scope. • Integrate further <u>isolation and purification (when relevant)</u> of obtained bio-based polymer(s) according to specific application requirements. Functionalisation of purified bio-based polymers to achieve targeted properties is also in scope.

HORIZON-JU-CBE-2026-RIA-02- SSbD bio-based polymers from alternative sources

Funding	6.5 M€ for 2 projects selected
Fund. rate	100% for companies, 100% for not-for-profit entities
End TRL	5
Scope overview	<ul style="list-style-type: none"> • <u>Test (at least at TRL 4) the suitability of obtained bio-based polymers in circular-by-design final applications targeting at least two market sectors.</u> Validate the technical performances of developed bio-based polymers materials/products and proving to fulfil market requirements for selected application sector(s). • <u>Test (at least at TRL 4) for suitable, safe and sustainable EoL options</u> (recycling, biodegradation, re-use and/or re-manufacturing). When targeting biodegradable bio-based polymers, test biodegradability according to existing standards and methods.

HORIZON-JU-CBE-2026-RIA-03-Develop breakthrough and sustainable bio-based textile fibres

Funding	6.5 M€ for 2 projects selected
Fund rate	100% for companies, 100% for not-for-profit entities
End TRL	5
Scope overview	<ul style="list-style-type: none"> • Develop breakthrough processes to yield bio-based textile fibres from sustainably sourced biomass feedstock. Bio-based textile waste is eligible as feedstock. <u>Bio-based man-made (synthetic and semi-synthetic) fibres and/or the extraction, refinement and functionalisation of natural fibres are in scope.</u> • Ensure <u>compatibility</u> with existing textile manufacturing processes and equipment to facilitate market penetration. • Design the bio-based fibre(s) to improve <u>specific technical requirements</u> against state-of-the-art benchmarks, e.g., tenacity, flexibility, spinning quality, elasticity/plasticity, thermal resistance, flammability and durability. Test these properties according to existing standards/methods to assess the compatibility with end-products requirements. • Design the bio-based textile fibres for <u>sustainable end of life</u>. Assess the actual feasibility of the targeted end of life option(s) . Prevent release of microplastics and other harmful substances along the whole product life cycle.

CBE 2025 topics - CSA

Topic	N	Total M€
CSA-01: Supporting industry in the switch to sustainable and circular bio-based products and processes	1	1.2

Funding: **1.2 M€ for 1 project**. 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

HORIZON-JU-CBE-2026-CSA-01: Supporting industry in the switch to sustainable and circular bio-based products and processes

Funding	1.2 M€ for 1 project selected
Fund. rate	100% for companies, 100% for not-for-profit entities
End TRL	N/A
Scope overview	<ul style="list-style-type: none"> • Perform a consultation among non-bio-based and partially bio-based industries to identify barriers preventing them to adopt/diversify bio-based feedstock and processes in their operations. <u>Include at least 3 industrial sectors</u> that are critical for the green transition. Make sure to include a representative sample of industries with different size (including SMEs and startups) and position in the value chain and covering regions with different specialisations. • Analyse the outcomes from the consultation <u>to identify barriers to bio-based transition and propose possible solutions</u>. Validate the results with end users/consumers to include their perspectives. • Identify <u>case studies and success stories</u> showcasing best practices leading to adoption of bio-based solutions and assess their replication potential in the non-bio-based and partially bio-based sectors in scope.

HORIZON-JU-CBE-2026-CSA-01: Supporting industry in the switch to sustainable and circular bio-based products and processes

Funding	1.2 M€ for 1 project selected
Fund. rate	100% for companies, 100% for not-for-profit entities
End TRL	N/A
Scope overview	<ul style="list-style-type: none"> • <u>Create a forum</u> bringing together bio-based industries, feedstock providers, non-bio-based and partially bio-based industries, investors, policymakers, demand-side actors (e.g., large retailers, end-users, public procurers, etc.) as well as existing or upcoming stakeholders' groups under the CBE JU, to facilitate the dialogue among the stakeholders and identify possible pathways for cooperation. • Develop and publish <u>sectoral and cross-sectoral roadmaps</u> towards the 'switch to biobased' for the (at least 3) targeted non-bio-based or partially bio-based industrial sectors, also identifying de-risking opportunities.