State of the

CBE JU call for proposals 2024

Overview of the funding opportunities



CBE 2024 topicsDEADLINE 18 SEPTEMBER

Type of action		Topics HORIZON-JU-CBE-2024	Million EUR
IA– Flagship	IAFlag-01	Bio-based value chains for valorisation of sustainable oil crops	20
	IAFlag-02	Bio-based dedicated platform chemicals via cost-effective, sustainable and resource-efficient conversion of biomass	20
Tiagship	IAFlag-03	Bio-based value chains for valorisation of sustainable natural fibre feedstock	20
	IA-01	Bio-based materials and products for biodegradable in soil applications	15
	IA-02	Sustainable microalgae as feedstock for innovative, added-value applications	15
	IA-03	Enlarging the portfolio of commercially produced "Safe and Sustainable by design" (SSbD) solvents	15
IA	IA-04	Circular and SSbD bio-based construction & building materials with functional properties	15
	IA-05	Selective and sustainable (co)-production of lignin-derived aromatics	15
	IA-06	Innovative bio-based adhesives and binders for circular products meeting market requirements	15
	IA-07	Innovative conversion of biogenic gaseous carbon into bio-based chemicals, ingredients, materials	15
	R-01	Valorisation of polluted/contaminated wood from industrial and post-consumer waste streams	7
	R-02	Biotech routes to obtain bio-based chemicals/materials replacing animal-derived ones	7
RIA	R-03	Sustainable, bio-based alternatives for crop protection	10
	R-04	SSbD bio-based coating materials for applications under demanding and/or extreme conditions	7
	R-05	Innovative bio-based food/feed ingredients	7
CSA	S-01	New forms of cooperation in agriculture and the forest-based sector	4
	S-02	Mobilise inclusive participation in bio-based systems and supporting the CBE JU widening strategy and its action plan	3
	S-03	Supporting the CBE JU Deployment Group on Primary Producers	3

CBE 2024 topics - FLAGSHIP

Type of action	Topics HORIZON-JU-CBE-2024		Million EUR
	IAFlag-01	Bio-based value chains for valorisation of sustainable oil crops	20
IA– Flagship	IAFlag-02	Bio-based dedicated platform chemicals via cost-effective, sustainable and resource-efficient conversion of biomass	20
	IAFlag-03	Bio-based value chains for valorisation of sustainable natural fibre feedstock	20

- One project funded per topic, going all the way to industrial scale (TRL 8)
- Typically, 4 to 8 proposals per topic
- Funding only covering the "innovation core", overall investment usually much higher
- IAFlag-01: important role of agri. Biorefinery can be based on new/upcoming or established oil crops, provided their cultivation has environmental, climate benefits
- IAFlag-02: dedicated platform chemicals = those not having an identical fossil-based counterpart on the market
- IAFlag-03: both fibre crops and wood-based fibres in scope. Modification of fibrous feedstock is in scope too (i.e. modified cellulose is in scope). Synthetic fibres such as PE, PP, PET etc are not in scope

All IAFlag topics

- Funding: **20 M**€. Funding rate: **60%** for companies, **100%** for non-profit entities
- At least 20% of eligible costs must be IKOP => At least 50% of eligible costs must come from BIC industry (full) members, either current ones or new "project" members
 - A majority, and preferably all, companies should be or become a BIC member
 - Also, since BIC members will have to pay the project contribution of 4-8% of the received grant, if all companies are BIC members they all share the cost equitably
- 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 involves
- Links and complementarities to previous / ongoing projects: see topic for specific projects
- Projects may consider opening facilities to researchers, SMEs for visiting, training or testing
- Contribution to CBE specific requirements: see topic for specific details
- Business model and business plan including replication potential
- Environmental impact and SSbD assessment

CBE 2024 topics – Innovation Actions

Type of action		Topics HORIZON-JU-CBE-2024	Million EUR
	IA-01	Bio-based materials and products for biodegradable in soil applications	15
	IA-02	Sustainable microalgae as feedstock for innovative, added-value applications	15
IA	IA-03	Enlarging the portfolio of commercially produced "Safe and Sustainable by design" (SSbD) solvents	15
	IA-04	Circular and SSbD bio-based construction & building materials with functional properties	15
	IA-05	Selective and sustainable (co)-production of lignin-derived aromatics	15
	IA-06	Innovative bio-based adhesives and binders for circular products meeting market requirements	15
	IA-07	Innovative conversion of biogenic gaseous carbon into bio-based chemicals, ingredients, materials	15

- Two projects funded per topic
- Should reach demo scale (TRL 6-7) during the project as a stepping stone towards full industrial scale
- IA-01: e.g. agri (mulch films, tarps) but also geotextiles, geomembranes. Must be biodegradable, can also be recyclable
- IA-02: make microalgae-based products cost-competitive to break through non-niche markets
- IA-03: solve toxicity, env. sustainability issues of solvents with smart drop-ins <u>or</u> alternative molecules
- IA-04: products with tailored functional properties for large-scale applications in construction and renovation of buildings
- IA-05: yield and selectivity of the process are key features
- IA-06: safer and more sustainable adhesives and binders must meet performance, cost requirements
- IA-07: direct conversion of CO₂, CO, CH₄ from bio-based operations

All IA topics

- Funding: **7.5 M**€. Funding rate: **60%** for companies, **100%** for non-profit entities
- At least 15% of eligible costs must be IKOP => At least 37.5% of eligible costs must come from BIC industry (full) members, either current ones or new "project" members
 - A majority, and preferably all, companies should be or become a BIC member
 - Also, since BIC members will have to pay the project contribution of 4-8% of the received grant, if all companies are BIC members they all share the cost equitably
- 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
- Business model including potential for upscaling
- Environmental impact and SSbD assessment

CBE 2024 topics - RIA

Type of action		Topics HORIZON-JU-CBE-2024	Million EUR
	R-01	Valorisation of polluted/contaminated wood from industrial and post-consumer waste streams	7
RIA	R-02	Biotech routes to obtain bio-based chemicals/materials replacing animal-derived ones	7
	R-03	Sustainable, bio-based alternatives for crop protection	10
	R-04	SSbD bio-based coating materials for applications under demanding and/or extreme conditions	7
	R-05	Innovative bio-based food/feed ingredients	7

- Two projects funded per topic
- Breakthrough innovation at lab or small pilot scale (end TRL 4-5)
- R-01: decontamination is key to allow safe and high yielding conversion
- R-02: in non-food markets such as cosmetics, textile, leather, chemical and material production. Co-production of food/feed is in scope in a cascading approach
- R-03: it is about crop protection (pesticides, herbicides etc.). Fertilisers and biostimulants are out scope as such, but formulations working in synergy are allowed.
- R-04: safer and more sustainable coatings must meet performance, cost requirements
- R-05: many projects on proteins already, so proposals should focus on other functions than the bulk nutritional function.
 That being said, formulations involving proteins working in synergy are in scope

All RIA topics

- Funding: 3.5 5 M€ per project. Funding rate: 100% for all participants
- 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
- Economic viability assessment showing promise when upscaled
- Environmental impact assessment (based on preliminary data)
- SSbD assessment only when specified

CBE 2024 topics - CSA

Type of action		Topics HORIZON-JU-CBE-2024	Million EUR
	S-01	New forms of cooperation in agriculture and the forest-based sector	4
CSA	S-02	Mobilise inclusive participation in bio-based systems and supporting the CBE JU widening strategy and its action plan	3
	S-03	Supporting the CBE JU Deployment Group on Primary Producers	3
	•	Total	213

- One project funded per topic
- S-01: field demonstration of improved cooperation models, not just a theoretical exercise
- S-02: increase participation of stakeholders from widening countries (Central-Eastern Europe, some Southern European countries) to bridge the gap versus North and Western players
- S-03: manage and steer the activities of the DEG of primary producers

All CSA topics

- Funding: 3 4 M€ per project. Funding rate: 100% for all participants NB: 2025 is exceptional, budget is usually lower
- 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

The Bio-based Industries Consortium (BIC)

The only industry-led European bioeconomy association pioneering investment and creating synergies for a sustainable European circular bioeconomy



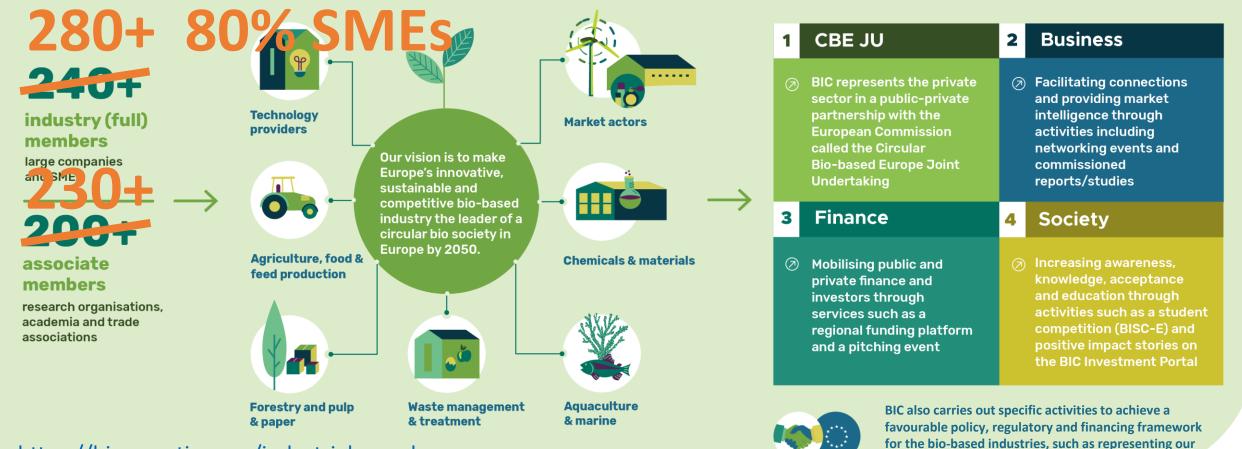
Bio-based Industries Consortium

biconsortium.eu

members interest vis-à-vis the EU Institutions.



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.



https://biconsortium.eu/industrial-members

CBE JU – BIC's role

Advancing competitive, sustainable circular bio-based industries in Europe



Public-private partnership



Formulate the Strategic Research & Innovation Agenda (SRIA) with

the EC



CBE JU

Develop with EC the Annual Work Programmes



Play an active role in CBE governance



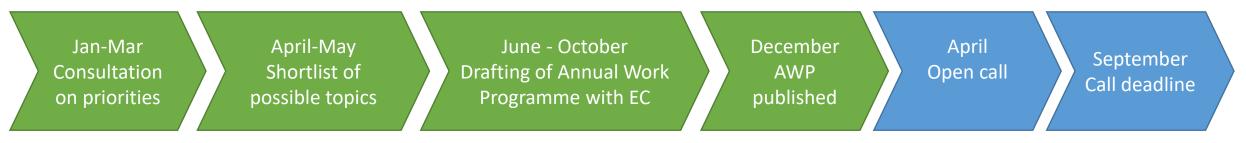
Cooperate with CBE JU advisory bodies and Programme Office

CBE JU – 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)

CBE JU

- 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
- 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.



Networking and matchmaking events ¹ CBE JU Business (BIC members only)

BIC Annual matchmaking event

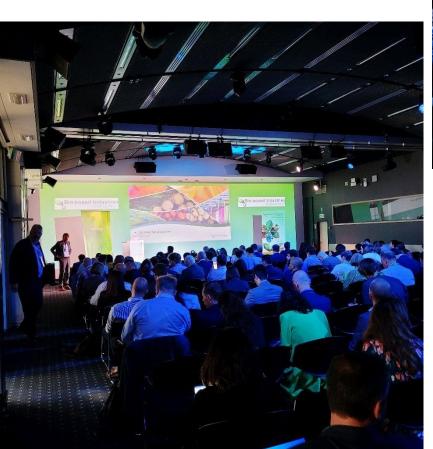
8 February 2024

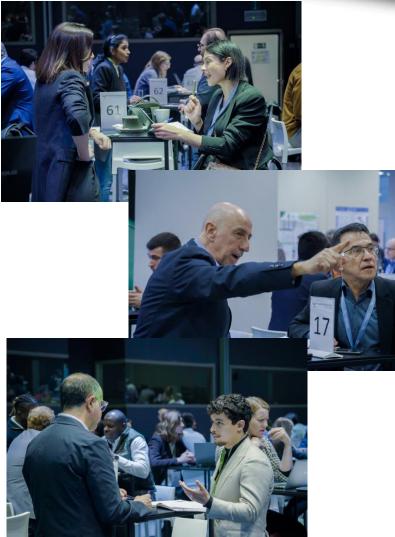
~ 300 participants from industry and university/research Keynote speeches

Thematic workshops on topics Pitches of proposal concepts Over 800 one-to-one meetings

Matchmaking continues on the online platform!

https://www.youtube.com/watc h?v=k6XX6RXo8xI



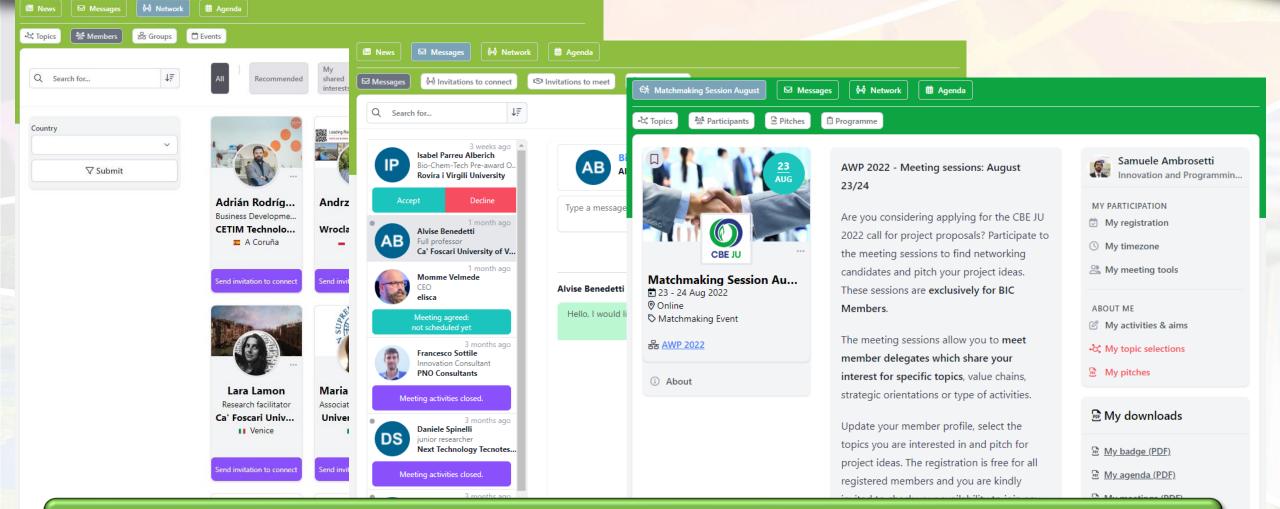


Online partnering platform (BIC members only)

CBE JU

Business

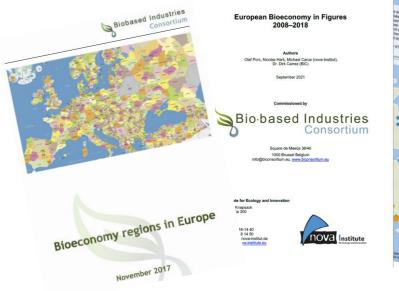
2



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

Digital library and commissioned studies





EU bioeconomy studies

https://biconsortium.eu/knowledge-hub











Biowaste study

Bio-based Industries Consortium

Biowaste generation

in the EU: Current capture levels and future potential

Open Innovation Competition (BIC members only)



Business

2



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 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



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 <u>https://techtour.com/events/2024/4/event-tech-tour-</u> <u>circular-2024%5B3%5D.html</u>

April 2024 Ghent, Belgium November 2024 Wuppertal, Germany



2023 - Investment Event Programmes - 2024

Meet the top 30-36 game-changers in Circular Economy, seeking deployment and growth as well as investments, financing and partnerships





BIC bioeconomy regions 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.adrnordestro/index.php?page=RIS3-Nord-Est-2014-2020&language=1 you can find more information about RIS3 strategy.

Financial incentives available for bio-based investment

R&D 0% income tax for employees 0% income tax for R&D companies for the next 10 years Deduction of R&D eligible expenses: • Depreciation of R&D equipment, salaries for R&D personnel; • 50% of these expenses can be deducted from the taxable income IT&C 0% income tax for employees Eligibility criteria: • Bachelor's degree in one of the 14 technical specializations available; • The employee is hired on a software engineer/programmer/software analyst position; • Annual revenue per exempted employee must be over USD 10 000. OTHER 0% profit tax for the reinvested profit in new tachnological equipment used for business purposes • If a company benefits from an exemption on the income tax for reinvestment it will not benefit from accelerated depreciation. STATE AID - GD 807/ 2014 The State Aid Scheme 807/2014 has a budget of EUR m 900 foreseen for the 2014-2020 period. It aims at supporting major CAPEX investment ELIGIBLE COSTS • Construction of new buildings • Renting costs for existing buildings • CAPEX aimed at technical installations and tools • Acquisition of intellectual property ELIGIBILITY CRITERIA FOR INVESTMENTS • Minimum value: EUR 1 million investment • To be viable and determine the operational efficiency of the company • To prove the stimulating effect of the state aid • To generate contributions to regional development • To facilitate extra investments in the region ELIGIBILITY CRITERIA FOR COMPANIES • Net profitability for existing companies: > 0% • Equity for new companies≥ RON 100,000

Types of industry sectors interested in attracting investment from



Automotive; Agri-food; IT&C; Tourism; Manufacture; Wood processing (furniture, timber);

Feedstock 1

Hardwood

Tonnes produced per year

3

Finance

626,000

Feedstock 2

Softwood

Tonnes produced per year

3,544,000

Feedstock 3

Sawdust

Tonnes produced per year

247,604

Advocacy and PA

How the bio-based industries can contribute to a circular economy in Europe



Society

As part of the BIC public affairs work, we engaged with the European Commission on the so-called Packaging and Packaging Waste Regulation (PPWR) and which was published 30 November.

The bio-based sector contributes to the EU's ambition towards a circular and carbon neutral economy by bringing reusable and recyclable packaging on the market.

In general, BIC believes the PPWR provides a framework to grow the bio-based industry in Europe and it should explicitly recognise the benefits of using recyclable and renewable feedstock in packaging solutions. There is no one-size-fits-all solution in the field of circular packaging. BIC believes that the PPWR should recognise there is a clear need for different types of packaging and the packaging materials should be chosen to fit the purpose. BIC welcomes the inclusion of sustainably sourced bio-based carbon to replace fossil carbon in the EU Communication on sustainable carbon cycles. The EU bioeconomy is contributing towards sustainable carbon cycles. Carbon removal certification can better demonstrate that contribution. The bio-based sector is instrumental to the EU's ambition of sustainable carbon cycles and climate mitigation by reducing atmospheric carbon and generating circular bio-based loops.

The war in Ukraine has had myriad economic effects in Europe, effects which have hit supply chains particularly hard. However, it has spurred the bloc on in efforts to become more self-sufficient and innovative. BIC believe that the bio-based industry can play a larger role in these efforts as BIC's Marco Rupp explained in a blog post in Agro & Chemistry.



BIC is a member of the European Bioeconomy Alliance and the group produced a report outlining how the bioeconomy can contribute to European Green Deal objectives and ensuring food security.

READ THE REPORT \rightarrow

BIC Trend report and Manifesto 2024



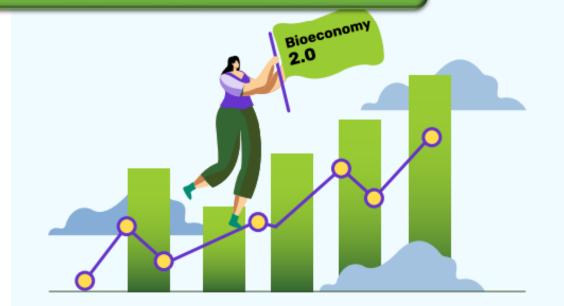
The bioeconomy is part of the solution to master the green transition

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.

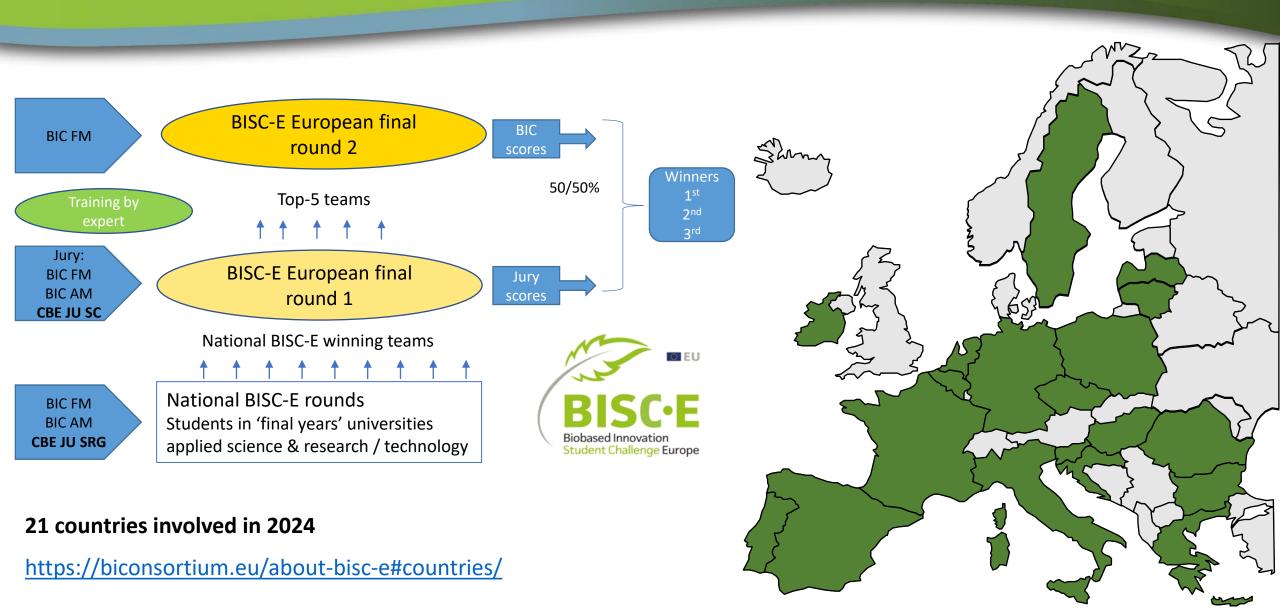
Download at https://biconsortium.eu/knowledge-hub



Society

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.

BISC-E student competition



Society

4

Why join BIC

1 CBE JU

Join peers in bio-based industries to create a critical mass for priorities/topics in CBE

Get access to CBE working documents in advance

Find potential partners in proposals: feedstock suppliers, technology providers, end users

Business

Access our network of 240+ industries and 200+ research institutes across EU and beyond

Participate to BIC events (physical and online)

Gain insight and information from studies and webinars

Submit your challenges for the open innovation competition <u>Read</u> about what we did for our members and Europe's bio-based industries in 2023

3 Finance

- Seek cooperation with ECBF, EIB and major private and public funding sources
- Scout startups and hightech SMEs for your own corporate capital investment
- Access regional funds from 50+ regions across EU

Society

- Benefit from BIC's communication and outreach campaigns
- □ Join the PA working group for advocacy
- Strengthen cooperation with universities across EU (joint PhD, MSCA) to attract new talents



Bio-based Industries

Annual Report 2023 Growing seeds for the green transition

Thank you!

Samuele Ambrosetti

Programme and Innovation Manager samuele.ambrosetti@biconsortium.eu

Join BIC: https://biconsortium.eu/membership

Download our trend report and manifesto: https://biconsortium.eu/knowledge-hub





