



Innovate
UK

Horizon Europe: The Circular Bio-based Europe Joint Undertaking

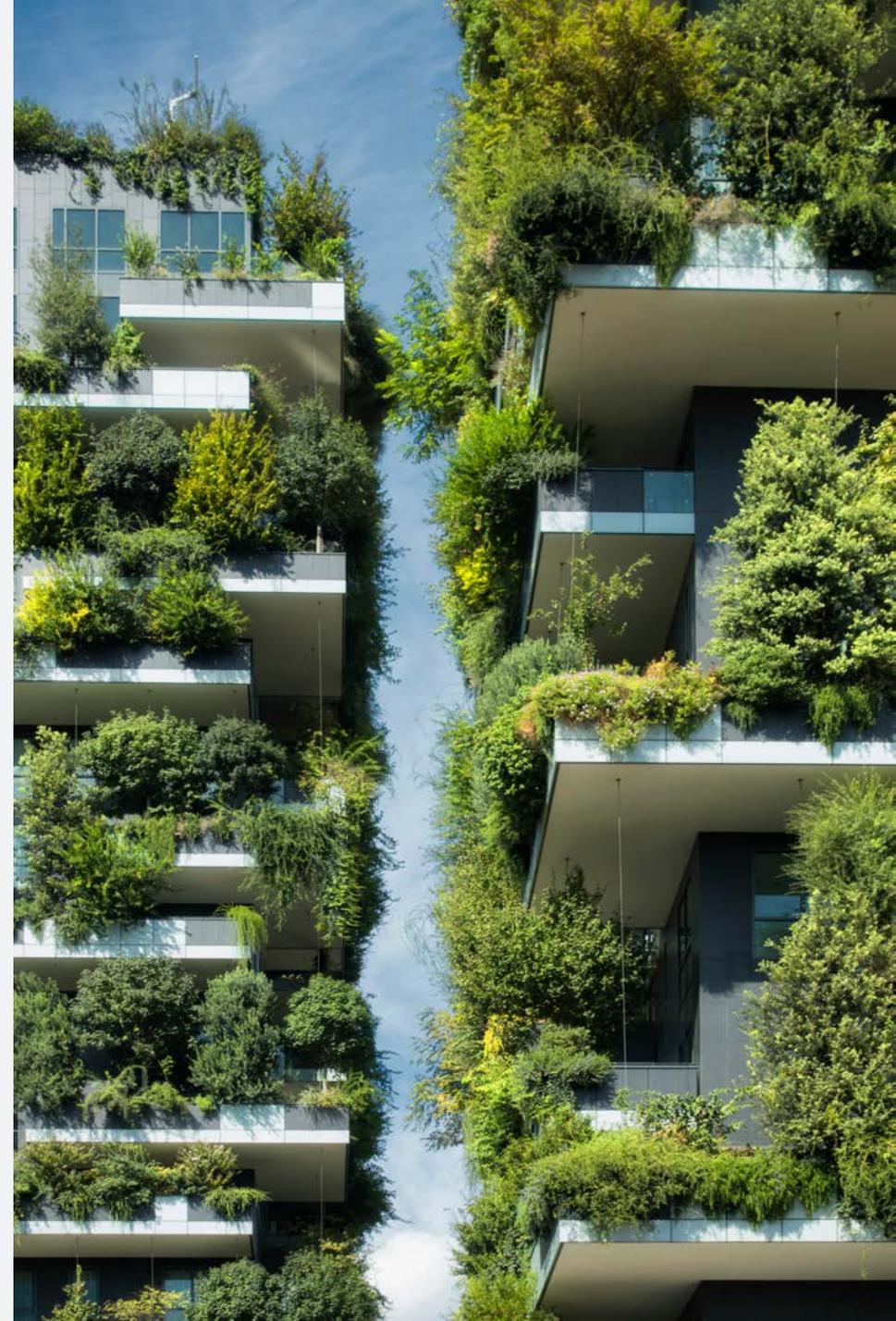
Host: Belen Rebollo-Garcia
Knowledge Transfer Manager- Europe

STARTING SOON...

Introduction

House Keeping

- **Microphone off** unless speaking please.
- Please post Q using the **Q&A FUNCTION**.
- Use the **Zoom-Chat for connections**.
Save the zoom chat – we will not be sharing this.
- Please message **Michael Foster** in the Zoom chat if you are having technical issues.
- **The webinar is being recorded** and will be shared with the slides afterwards.



Why are we here?

- What is Horizon Europe and the Circular Bio-based Europe Joint Undertaking (CBE-JU)?
- What is the CBE-JU Work-programme for 2024 and the 'Call Topics'?
- Who (UK and international) is interested in collaborating?
- What support is there to help me start building a CBE-JU project consortium?



**Circular
Bio-based
Europe**
Joint Undertaking



Introduction



Agenda

Time (UK timings)		Speakers
10:00	Welcome and aims of the day	Belen Rebollo - Knowledge Transfer Manager, Innovate UK Business Connect
10:05	Overview of CBE and success stories	Dieter Brigitta - Circular Bio-based Europe Joint Undertaking (CBE-JU)
10:20	CBE upcoming calls and UK participation	Paul Bello - Innovate UK
10:35	Q&A	
10:40	Key note speaker: Collaboration case Study: Food & BioCluster Denmark (EEN)	Anders Skeem - Food BioCLuster Denmark
10:50	Key note speaker: Collaboration case study: CETAQUA; Spain	Teresa Alvariño - CETAQUA
11:00	BREAK	
11:05	Support for UK applicants: Travel awards	Belen Rebollo - Innovate UK Business Connect
11:15	Pitching	Facilitated by IUK Business Connect Team
11:35	Breakout rooms: -NCP Consultation room (Paul) -Pitchers rooms Thematic Rooms (classification based on CBE Feedstock origin): -AgriFood -Aquatic -Biogenic gaseous carbon -Forest based -Industrial & Municipal Waste	Facilitated by IUK Business Connect Team
11:55	Next steps & Key Dates	Belen Rebollo & Paul Bello, Innovate UK
12:00	CLOSE	

Call 2024, achievements & engagement

Dieter BRIGITTA

Call Coordinator

29/02/2024



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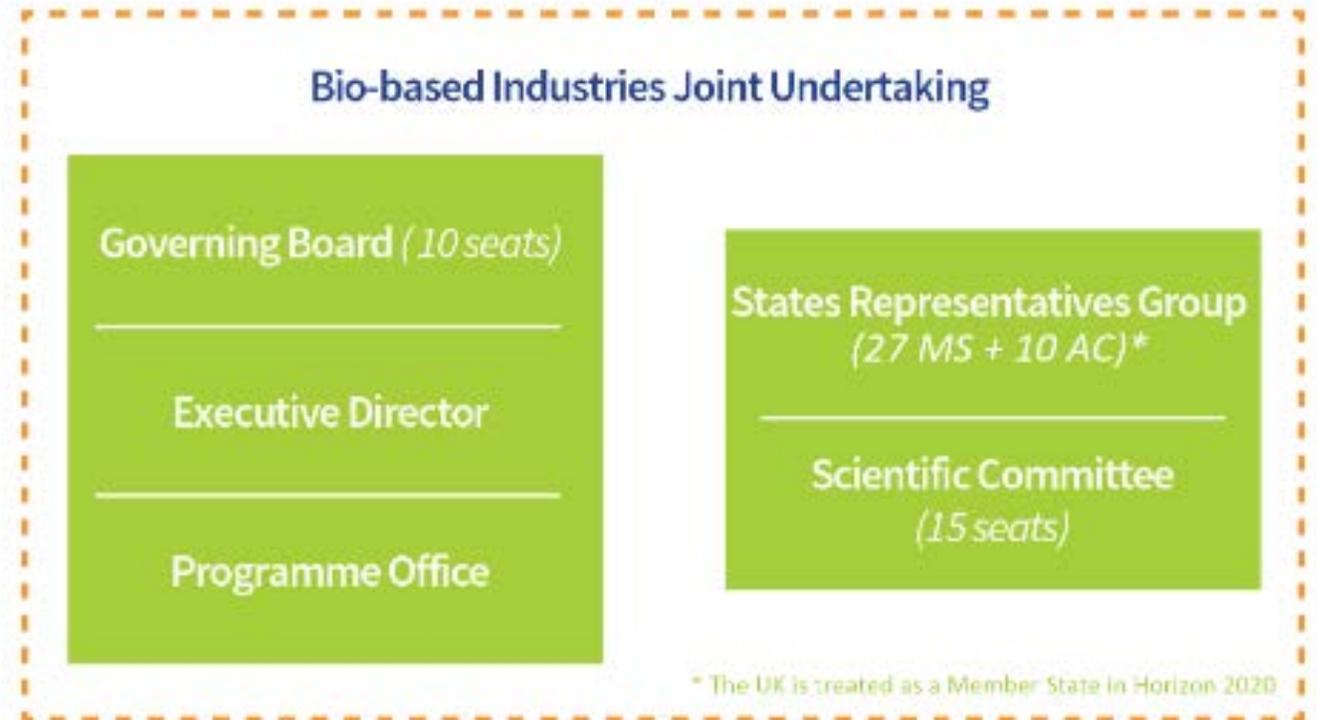
- **What is CBE JU?**
 - From BBI JU to CBE JU
 - CBE topic creation process
 - Call 2024 topic overview & timing
 - CBE specifics & terminology (incl. IKOP)
- **Main achievements**
 - Project portfolio
 - BBI/CBE JU vs. UK
- **How to engage with BIC & CBE JU**

What is CBE JU?

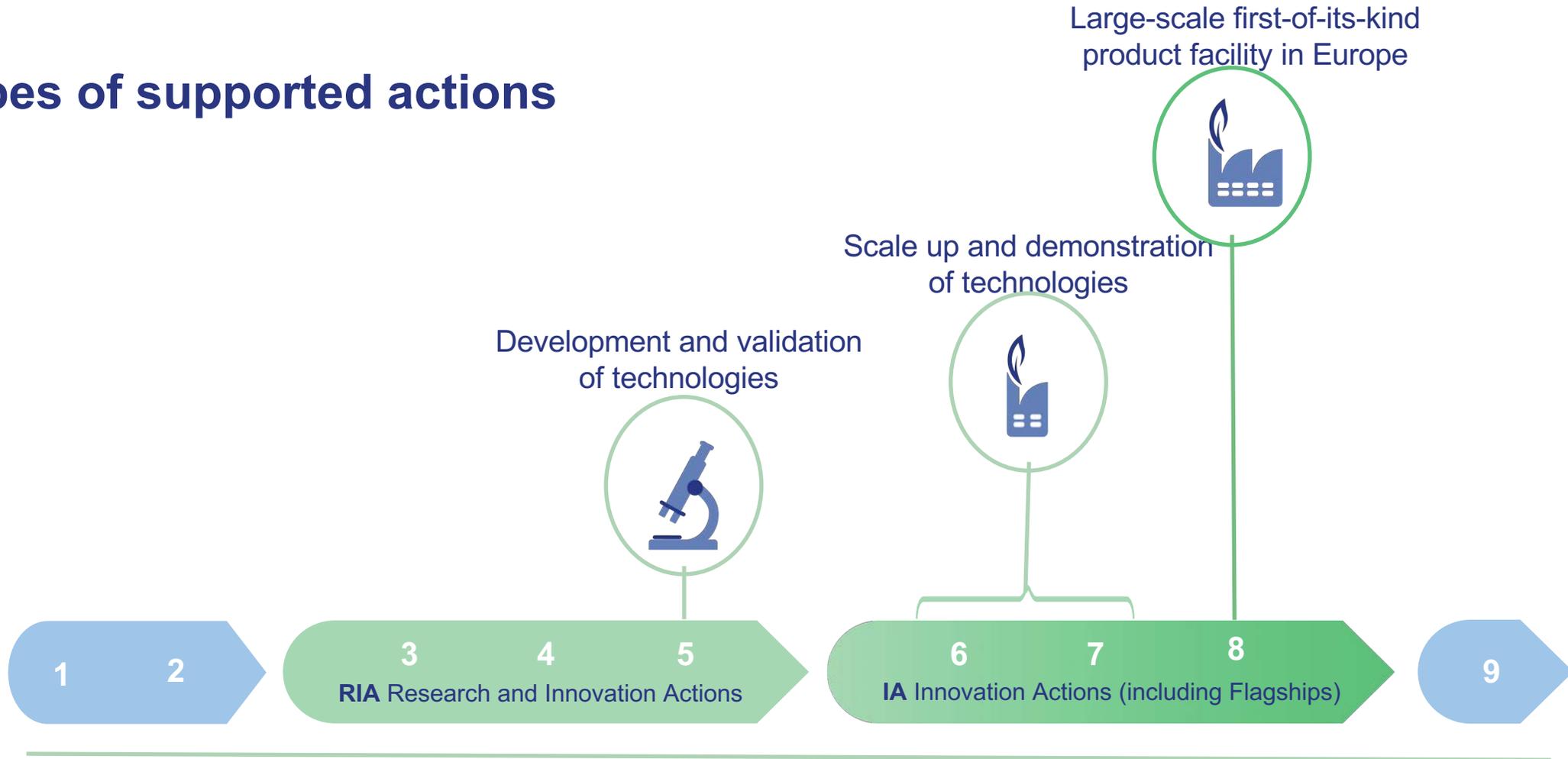
1

2014-2020: BBI JU
2021-2027: CBE JU

- Public-private partnership
- EU (represented by EC) as public partner
- BIC as private partner



Types of supported actions



Technology Readiness Level (TRL)

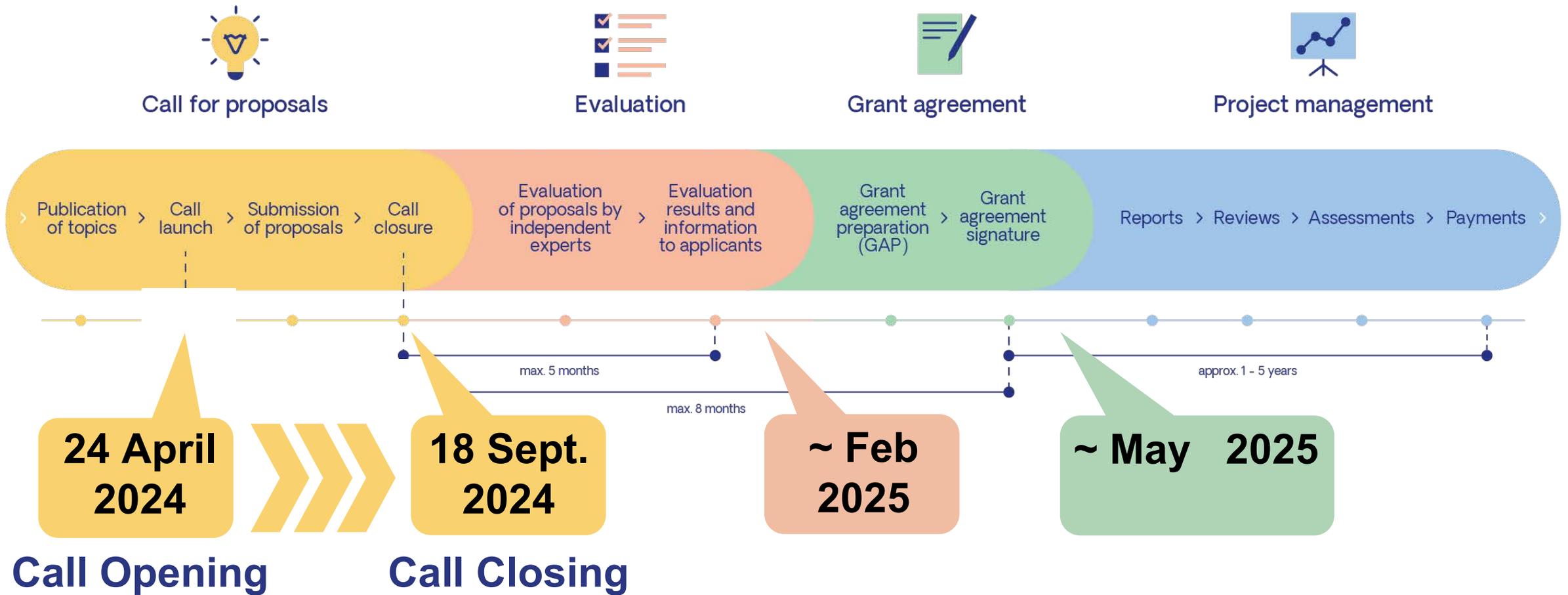
CSA: Coordination and Support Actions (no link with TRLs)

18 topics and their budget

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
	IAFlag-03	Bio-based value chains for valorisation of sustainable natural fibre feedstock	20
IA	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-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
RIA	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
	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

Total 213

Proposal preparation



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
- IA: + Impact **Ability to ensure 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**



Score weighting factor

- IA: Impact x **1,5**

IKOP vs BIC membership

- **IKOP?**

- Total eligible costs minus total requested funding (of BIC members)
- Only applicable to Innovation Actions (IAs) incl. Flagships
- CBE JU evaluation subcriterion (15% or 20% threshold)

- **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

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Achievements

2

2014-2022 (excl. 30 Call 2023 projects)



163
projects



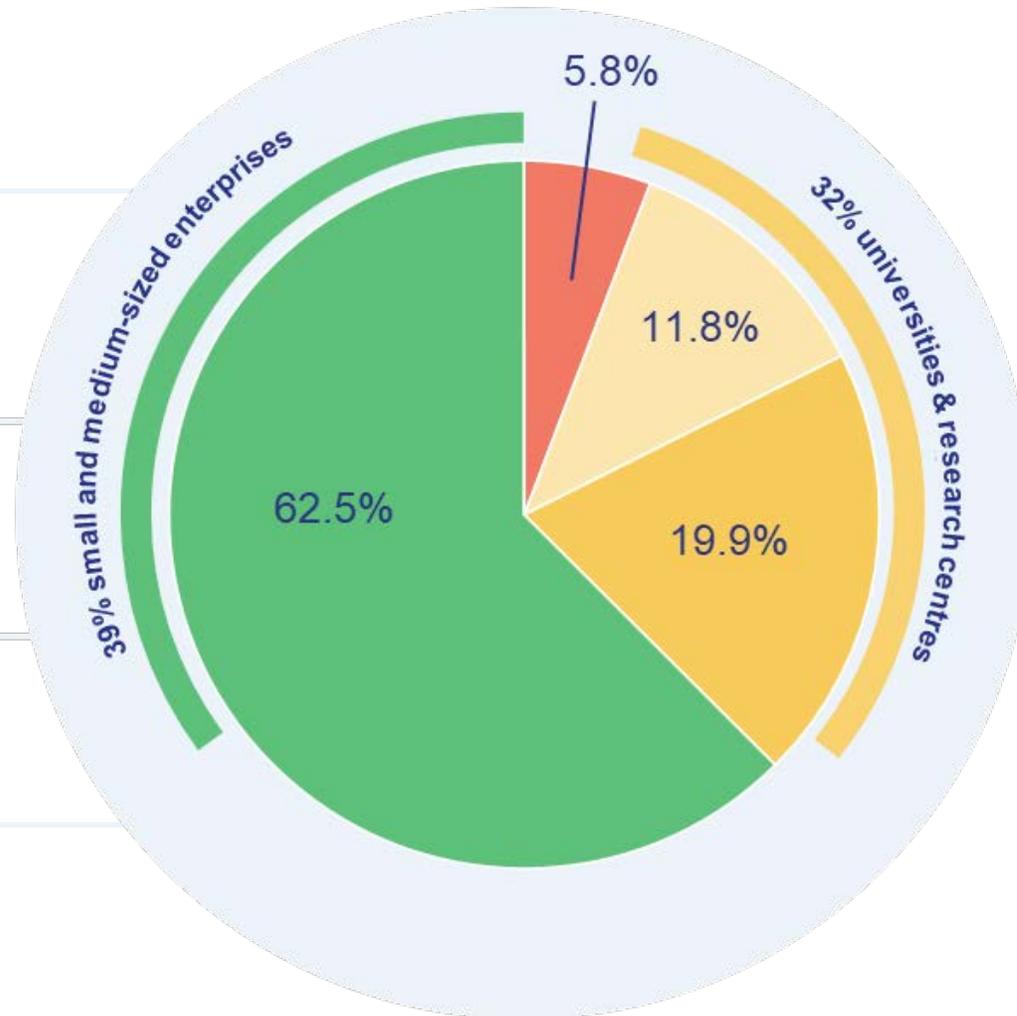
1,198
beneficiaries



€937 million
CBE JU funding



39
countries



CBE JU funding per type of beneficiary (unique)



Data: CORDA, May 2023

CBE JU-funded:



Demonstration plant



Flagship biorefinery



United Kingdom



 Demonstration plant

Opportunities for the bioeconomy

Socio-economic benefits

INNOVATION

Main resources in CBE JU projects



FORESTRY RESIDUES



AGRO RESIDUES



MUNICIPAL WASTE



Check all the projects in the country

€35 million
CBE JU funding in United Kingdom



 Private companies  Universities & research centres  Other

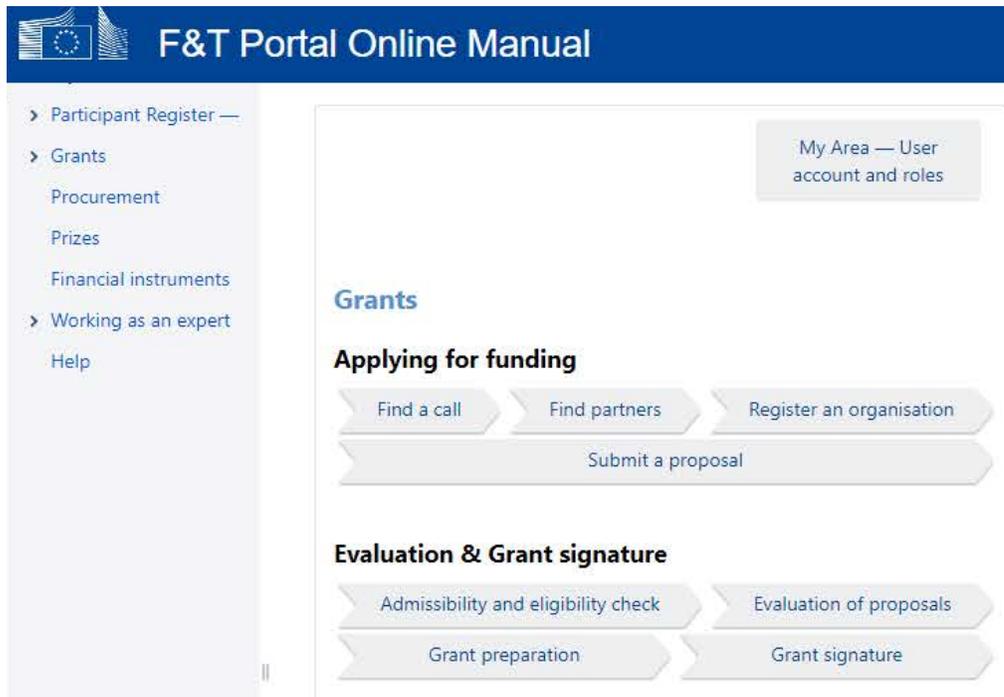
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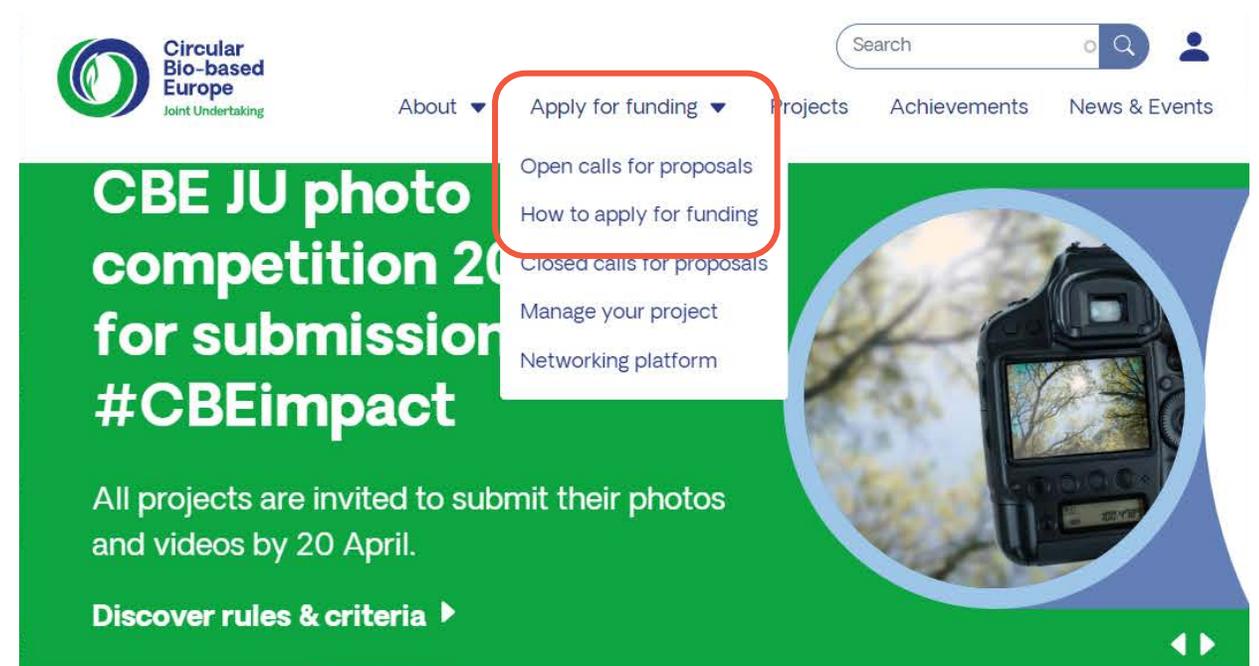
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Two main sources of information



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



<https://www.cbe.europa.eu/open-calls-proposals>
(Incl. FAQ for applicants v1, link to networking platform,...)

CBE JU Info Day 2024

23 April, Brussels

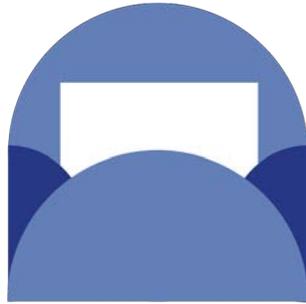
Register now!

#CBEInfoDay



Find more:
cbe.europa.eu/infoday24

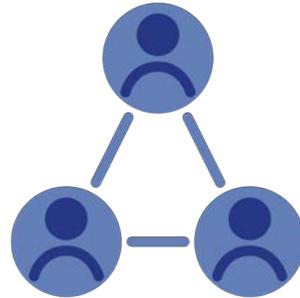
More information



Subscribe to
CBE JU newsletter



cbe.europa.eu



Become a **BIC**
Member



biconsortium.eu



Horizon Europe **Funding**
and **Tender portal**



europa.eu/!jH76RF



**Circular
Bio-based
Europe**
Joint Undertaking

Contact us

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

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 Bio-based Industries
Consortium

 Co-funded by
the European Union



Innovate
UK

Horizon Europe

Circular Bio-based Europe – Joint Undertaking (CBE-JU)

Briefing Webinar

Date: 29th February 2024

Paul Bello

Innovation Lead and Associate NCP – Industrial Biotechnology, Bioeconomy
Innovate UK (UKRI) Materials & Manufacturing Sector Team



Innovate UK

- We are the UK's innovation agency
- We support **business-led** innovation in all sectors, technologies and UK regions
- A key delivery body of the Government's Innovation Strategy

Our Mission

To **help UK businesses grow** through the development and commercialisation of new products, processes, and services, supported by an outstanding innovation ecosystem that is agile, inclusive, and easy to navigate.



Background



Innovate
UK



A programme of support for innovative UK companies to 'go global'

- **Innovate UK** supports UK businesses to 'go global' in activities that will help their growth and may also help solve global challenges in partnership with other countries
- **Innovate UK** does this through an ever-evolving **toolkit** of support ...

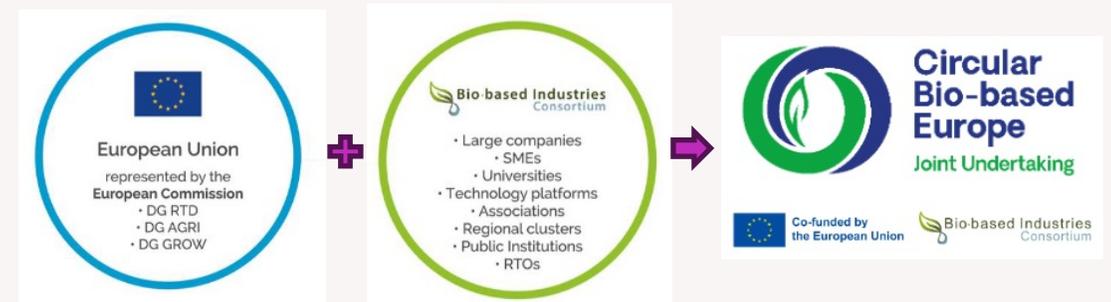
Horizon Europe, Global Missions, Bi- & Multi-lateral CR&D funding programmes, Nation co-fund programmes (EUREKA, Mission Innovation) ...

CBE-JU programme - What

- Operates under the **Horizon Europe** rules for participation as per [Regulation \(EU\) No 2021/695 of the European Parliament and of the Council of 28 April 2021](#)



- Established and implemented in Nov 2021
- **€2 billion** partnership between the **European Union** and the **Bio-based Industries Consortium (BIC)** that funds projects **advancing competitive circular bio-based industries (2021-2027)**
- 'institutionalised partnerships' implementing part of the Horizon Europe Pillar II programme, here, [Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment](#)



CBE-JU programme - What (2)

- Builds on the success of the **€3.7 billion Horizon 2020 Bio-based Industries-JU partnership**



163

projects



1198

beneficiaries from 39 countries



39%

of beneficiaries are small businesses

CBE-JU aims to:

- Contribute significantly to the **2030 climate targets** set out in **European Green Deal** and paving the way for climate change neutrality by 2050
- Increase the **sustainability and circularity** of production and consumption systems ('cascading principle')
- develop and expand the **sustainable sourcing** and conversion of **biogenic feedstocks into bio-based products****



Accelerate the **innovation** process and development of bio-based innovative solutions



Accelerate **market deployment** of the existing mature bio-based innovative solutions



Ensure a high level of **environmental performance** of bio-based industrial systems

CBE-JU programme - Actions, Funding Rates

Coordination and Support Action (CSA)

- Working groups, communities, networking, regulation review, comms, EU conference organisation, ...
- Collaboration preferred, must have one MS member
- All partners 100% eligible direct costs plus 25% indirect

Research and Innovation Action (RIA)

- Typically TRL 3-5, basic research, new technology
- At least 3 different legal entities from 3 different countries, must have one MS participant
- All partners 100% eligible direct costs plus 25% indirect

Innovation Action (IA, IA-flagship)

- Typically TRL 6-8, scale up activities from prototype to product validation and market replication. Flagships, an important and specific type of IAs, deploying a first-of-its-kind innovation on the European market
- At least 3 different legal entities from 3 different countries, must have one MS participant
- All not-for-profit partners 100% of eligible direct costs plus 25% indirect
- All for-profit partners 60% of eligible direct costs plus 25% indirect

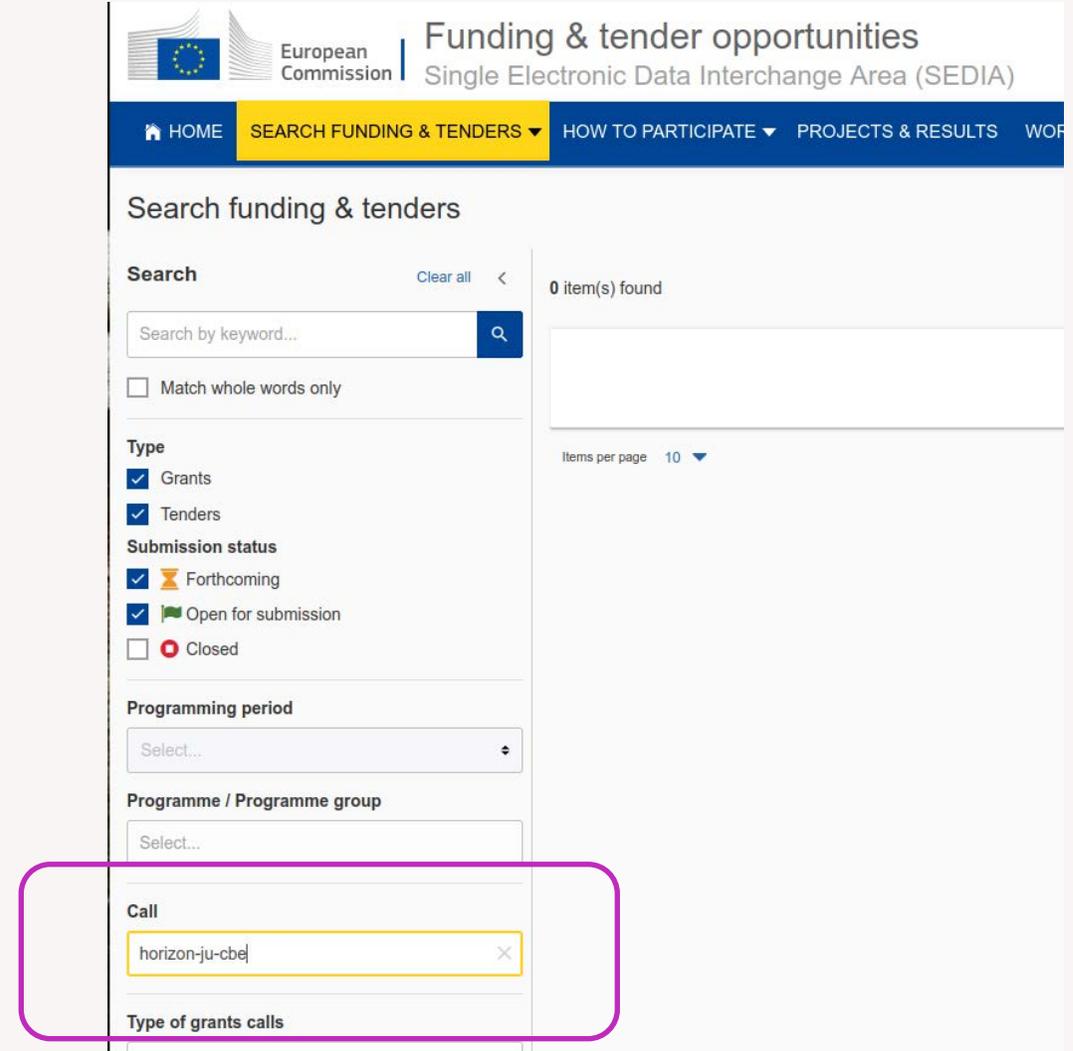
CBE-JU programme – Call for proposals 2024

Call details

- Identifier: **HORIZON-JU-CBE-2024**
- Launch: **24 April 2024**
- Deadline: **18 September 2024 17:00 CET**
- Apply: [EC Funding & tender opportunities](#) (24 Apr*)
- Info Day: [23 April 2024 Brussels](#)

38 Topics and €213 million indicative Budget

- 3x CSAs €10 million, 5x RIAs €38 million, 3x IA-Flagships €60 million, 7x IAs €213 million



European Commission | Funding & tender opportunities
Single Electronic Data Interchange Area (SEDIA)

HOME SEARCH FUNDING & TENDERS HOW TO PARTICIPATE PROJECTS & RESULTS

Search funding & tenders

Search Clear all <

Search by keyword...

Match whole words only

Type

- Grants
- Tenders

Submission status

- Forthcoming
- Open for submission
- Closed

Programming period

Select...

Programme / Programme group

Select...

Call

horizon-ju-cbe

Type of grants calls

0 item(s) found

Items per page 10

UK & CBE-JU



Innovate
UK



CBE-JU programme - UK Eligibility & Support

UK status in Horizon Europe

- As of Sep 2023, the UK is now **fully associated** to the **€95 billion** Horizon Europe programme
- Eligible to apply to most Horizon Europe programmes, including **CBE-JU** (BIC membership requirements)
- UK organisations can **coordinate proposals and projects**
- UK organisations are classed as a legal entity from an eligible country, but still requiring at least one MS partner
- UK representatives can now join the governance of EU programmes

Travel Grants

- Innovate UK Business Connect is offering [Travel Awards](#) to UK innovation companies with a technology offer that matches the call priorities and can engage with potential partners

[UKRI Pump Prime Awards](#) (2024 programmes)

- Proposal development • Explore and test possible new partnerships and collaborative opportunities
 - identification of Horizon Europe opportunities for innovative CR&D
 - Costs to attend meetings, information days, brokerage events, consortia meetings
 - Membership fees in European Partnerships, **Joint Undertakings** and sector-specific organisations

Contact

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Knowledge Transfer Manager – European Programmes

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Customer Support Services

0300 321 4357 (Monday - Friday 9-5pm)

support@iuk.ukri.org

Collaboration Case Study

Anders Skeem

International Manager

Food & Bio Cluster Denmark

Enterprise Europe Network DK

as@foodbiocluster.dk

<https://www.foodbiocluster.dk>

**Horizon Europe Event:
The Circular Bio-based Europe Joint Undertaking
29/02/2024**

My agenda (10 minutes)

Food & Bio Cluster Denmark intro

The Bio-based Industries Consortium (BIC) incl.
Danish members

Projects: Circular Bio-based Europe Joint Undertaking
(CBE JU) (+ Bio-Based Industries Joint Undertaking (BBI JU) -
Horizon 2020)

Collaboration Case Study: WaSeaBi project

Enterprise Europe Network intro

Food & Bio Cluster Denmark (FBCD)

Danish national cluster for food and bioresources

We help companies accelerate innovation and sustainable development in food and bioresources

We do this through inspiration, networks, collaborations and business development in partnership with e.g. knowledge institutions, investors and public authorities

Food & Bio Cluster Denmark (FBCD)

Support development of more innovative companies, both by assisting new startups and by stimulating innovation activities in established companies

Increase innovation speed, quality and frequency in Danish food and bioresource companies

Support lasting increased capacity for innovation in the companies we work with

Strengthen the building of an ecosystem that promotes innovation for our target groups

Take the initiative for major development steps in the food and bioresource cluster and contribute to new research-based knowledge being commercialized and utilized for radical innovation

FBCD - 4 strategic benchmarks:

Deliver sustainable food that is tasty, healthy and safe to a growing world population

Deliver the solutions for sustainable production and efficient utilization of bioresources at the highest possible value

Ensure a sustainable green transformation of the cluster towards climate neutrality

Make full use of the opportunities in technology development within e.g. biotech, digitisation and automation

FBCD networks for members:

Side Streams from Food Processing

Green Proteins

Innovative Beverages

Livestock Production

Taste

Food & Beverage Footprint and Reporting

Sustainable Packaging

Food Safety

Data Driven Business Development

Climate Controlled Plant Production

Regenerative Agriculture

Pyrolysis & Biochar

The Bio-based Industries Consortium (BIC)

Non-profit organisation set up in Brussels in 2013 to represent the private sector in a Public-Private Partnership (PPP) with the European Commission, focused on strengthening the bio-based industries sector in Europe.

BIC's industry members cover the whole value chain, from primary production to market.

Members represent multiple and diverse sectors, such as agriculture and agri-food, aquaculture and marine, chemicals and materials (including bioplastics), forestry, pulp and paper and technology providers and waste management and treatment. BIC also has associate members such as research organisations, academia and trade associations.

The Bio-based Industries Consortium (BIC)

-> 2020 - BIC's partnership with the European Commission – the Bio-based Industries Joint Undertaking (BBI JU)

2021 -> - Second partnership with the European Commission – the Circular Bio-based Industries Joint Undertaking (CBE JU)

Membership: 240+ industry and 200+ associate members

FBCD is member of the industry subgroup “SMEs in regional clusters”
Industry DK: Biosyntia, DLG Food Oil, Novozymes (merger with Chr. Hansen - now called Novonesis)

Associate DK: Aarhus University/Danish Centre for Food and Agriculture, Danish Technological Institute, Danish Industry Biosolutions, DTU Biosustain/Centre for Biosustainability at the Technical University of Denmark

FBCD is engaged in a number of Horizon Europe projects
(mostly Cluster 6 - Food, Bioeconomy, Natural Resources,
Agriculture and Environment)

but also projects under
Circular Bio-based Europe Joint Undertaking (CBE JU)
+ Bio-Based Industries Joint Undertaking (BBI JU)
(Horizon 2020)

FBCD is/has been involved in the following CBE/BBI projects including other Danish project partners:

WaSeaBi - Optimal utilization of seafood side-streams through the design of new holistic process lines
(Technical University Of Denmark, Jeka Fish, Royal Greenland)

ProEnrich - Development of novel functional proteins and bioactive ingredients from rapeseed, olive, tomato and citrus fruit side streams for applications in food, cosmetics, pet food and adhesives
(Danish Technological Institute, Tailorzyme, Emmelev)

BRILIAN - Empowering Rural Areas Through Cooperative And Circular Business Models
(Danish Technological Institute, DLG (Dansk Landbrugs Grovareselskab))

FBCD is/has been involved in the following cluster-oriented CBE/BBI projects as sole Danish partner:

BioSwitch - Encouraging Brand Owners To Switch To Bio-Based

BIObec - Leveraging Education To Unlock The EU Bioeconomy's Full Potential

MPowerBIO - Empowering Clusters To Bring SMEs Across The Financial Valley Of Death

UrBioFuture - Mapping Current European Educational Offers In Bio-based Activities

WaSeaBi

Optimal utilization of seafood side-streams through the design of new holistic process lines

Visit at Jeka Fisk in Lemvig, Denmark

”Can you help the industry to find a solution for the valuation of our side-streams?”

Meeting with 3 clusters from France, Spain, and Portugal asking the fish industry in the 4 countries

”Results ready to use ASAP i.e. high TRL”

Established a working group in Denmark:

Technical University of Denmark (DTU) + Danish Seafood Association + Seafood Supply + Højmark Group + Food & Bio Cluster Denmark

DTU accepted to be coordinator of the proposal writing process and project coordinator

Established an international consortium

WaSeaBi

Optimal utilization of seafood side-streams through the design of new holistic process lines

Call for proposal: H2020-BBI-JTI-2018

Topic: BBI.2018.SO1.R1 - Resolve logistical, infrastructural and technological challenges to valorise residual and side streams from aquaculture, fisheries and the aquatic biomass processing industries

1 May 2019-31 October 2023

Enterprise Europe Network <https://een.ec.europa.eu/>

The world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions

Launched 15 years ago by the European Commission

Food & Bio Cluster Denmark is one of 6 Danish consortium partners

Network partners in EU, Europe and beyond (among them free trade agreement countries).

UK: <https://een.ec.europa.eu/local-contact-points/gb>

Partnering opportunities:

Search for business or academic partners to manufacture, distribute, co-develop and supply products, ideas and services

Advice & support

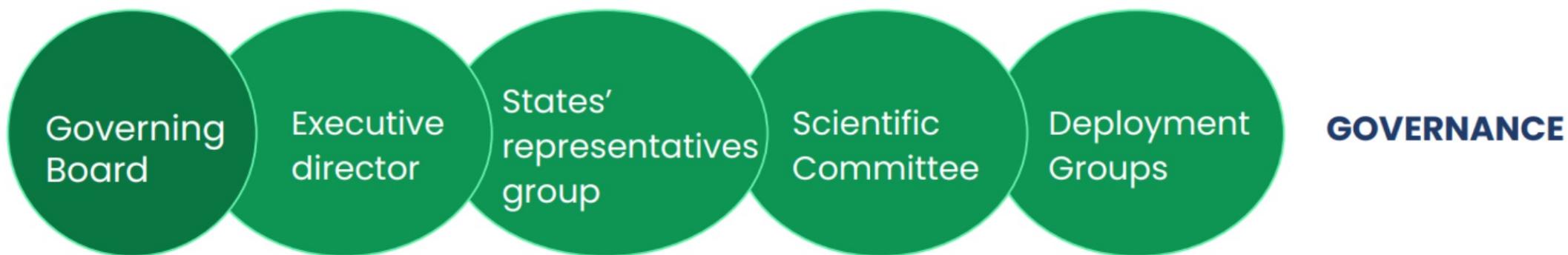
Helping SMEs grow faster through tailored support, new commercial partnerships and access to finance

Circular bio-based sector: Cetaqua experience

Teresa Alvariño, Cetaqua Galicia manager
February 2024

WHERE
INNOVATION
HAPPENS

THE SCIENTIFIC COMMITTEE



An advisory body of the CBE JU

- Provides advice on the **scientific priorities** to be addressed in the CBE JU's work programme
- Helps **highlight scientific achievements** of the programme
- Suggests **corrective measures for the programme implementation** when necessary
- Provides **independent scientific advice** on specific issues at the request of the Governing Board

CETAQUA, PIONEERING PUBLIC-PRIVATE PARTNERSHIP MODEL

We are the result of a unique model of public-private collaboration, aimed at proposing new R&D&I solutions to guarantee the sustainability and efficiency of the water cycle, taking into account local needs.

CETAQUA
BARCELONA



CETAQUA
ANDALUCÍA



CETAQUA
GALICIA



CETAQUA
CHILE



LEADERS IN EUROPEAN COMPETITIVE FUNDING

We understand the meaning and purpose of the calls for proposals and we generate solid proposals aimed at achieving tangible results.

PROJECTS WITH PUBLIC FUNDING

28 LIFE projects

37 EU R&D framework programme

19 Other EU projects
(e.g. PRIMA, INTERREG,
EIT, UIA)

34 Nacional projects
(e.g. ERDF funds)

*(2022 data)

CETAQUA SUCCESS RATIO

38% in the most recent Horizon 2020 calls* **VS** 13% European average

50% in the most recent LIFE project calls* **VS** 18% European average

STRATEGIC ALLIANCES

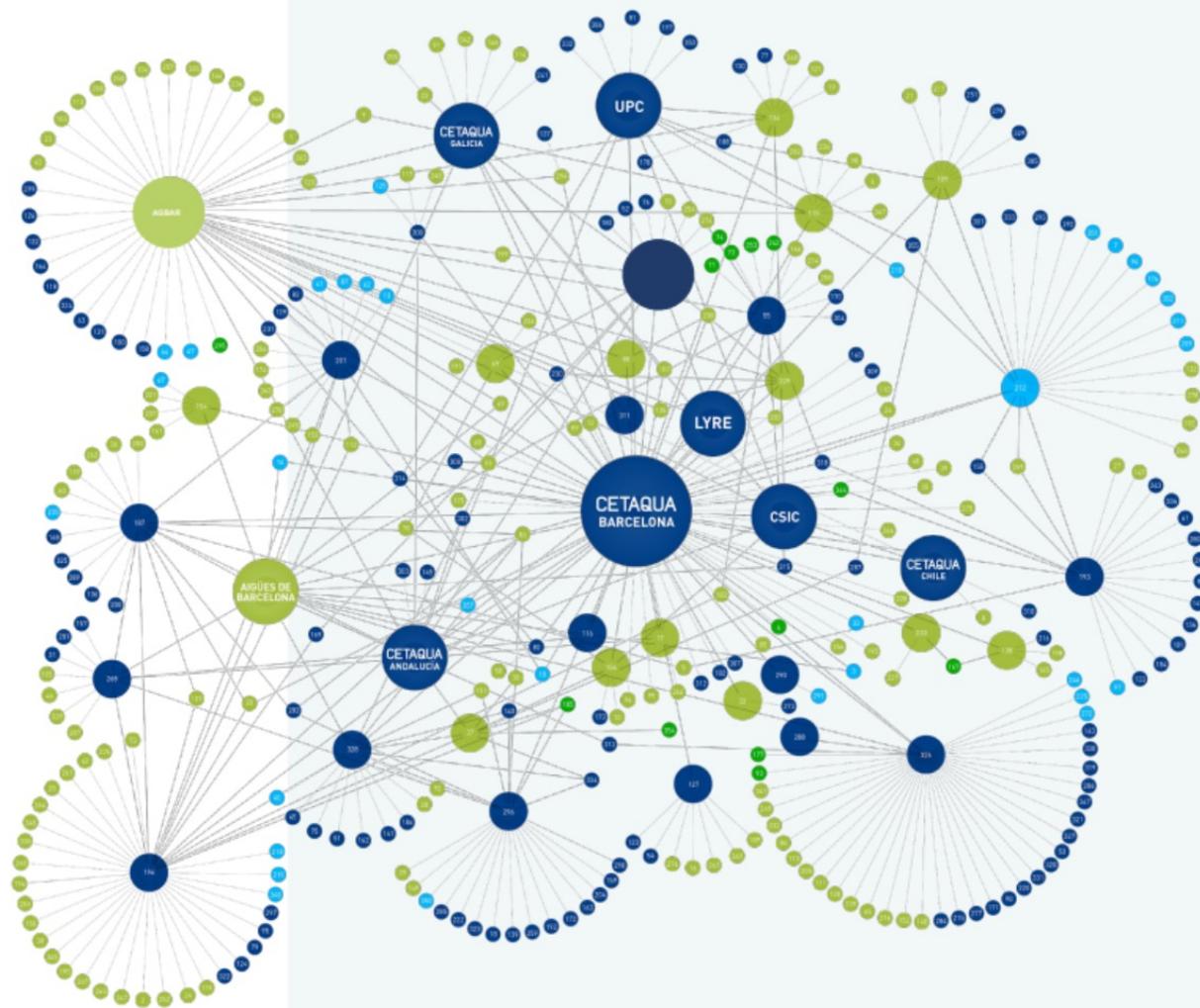
The relationships we establish guarantee that we are working on strong, relevant and innovative solutions that generate value for society

+300 COMPANIES

+150 UNIVERSITIES
AND RESEARCH CENTRES

+50 PUBLIC BODIES

+50 ASSOCIATIONS



OUR SOLUTIONS

A1.

Resources planning
and management



A2.

New resources and
production



A3.

Zero Waste and
decarbonisation



Waste to product

A4.

Social and territorial
sustainability



Circularity and
sustainability
assessment

A5.

Efficient, safe and
digital operation



7 ongoing European funded projects on Circular Bio-Based Products



Industrial symbiosis



Circular cities



Antioxidants recovery



Alternative circular fertilizers



Alternative circular fertilizers



Alternative circular fertilizers

BIOLOGICAL RESOURCES CERTIFICATION SCHEMES

Horizon Europe Project

Innovation action (IA)

 **03** years

 **5M€** budget

 **04** demonstrative sites

07 countries

16 partners



Universities and technological centers



Private companies and business clusters



Standardization, certification and communication bodies



ABOUT BIORECER

This european project will **encourage the establishment of new biobased value chains**, promoting the use of biological feedstocks as secondary raw materials to replace fossil based raw materials.

Check the web



Focused on value chain that **do not transform this feedstocks into food, feed and/or energy.**

Cetaqua has interest in the following CBE topics

- **HORIZON-JU-CBE-2024-IA-01 Bio-based materials and products for biodegradable-in-soil applications**
 - ✓ Development of technologies to produce volatile fatty acids (VFAs) from organic waste streams.
 - ✓ Process optimization to increase yield and concentration of VFAs

- **HORIZON-JU-CBE-2024-IA-07 Innovative conversion of biogenic gaseous carbon into bio-based chemicals, ingredients, materials**
 - ✓ Holistic and sustainable Nature Based Solutions (NBS) combined with cutting-edge technology to manage the integral water cycle.
 - ✓ Use of microalgae in combination with municipal and industrial wastewaters treatment.
 - ✓ Optimization of the aquatic environment for microalgae (reactor design, operation and the development of algal biomass) as an effective solution for CO2 capture

United Kingdom



 Demonstration plant

Opportunities for the bioeconomy

Socio-economic benefits

INNOVATION

Main resources in CBE JU projects



FORESTRY RESIDUES

AGRO RESIDUES

MUNICIPAL WASTE



Check all the projects in the country

€35 million

CBE JU funding in United Kingdom



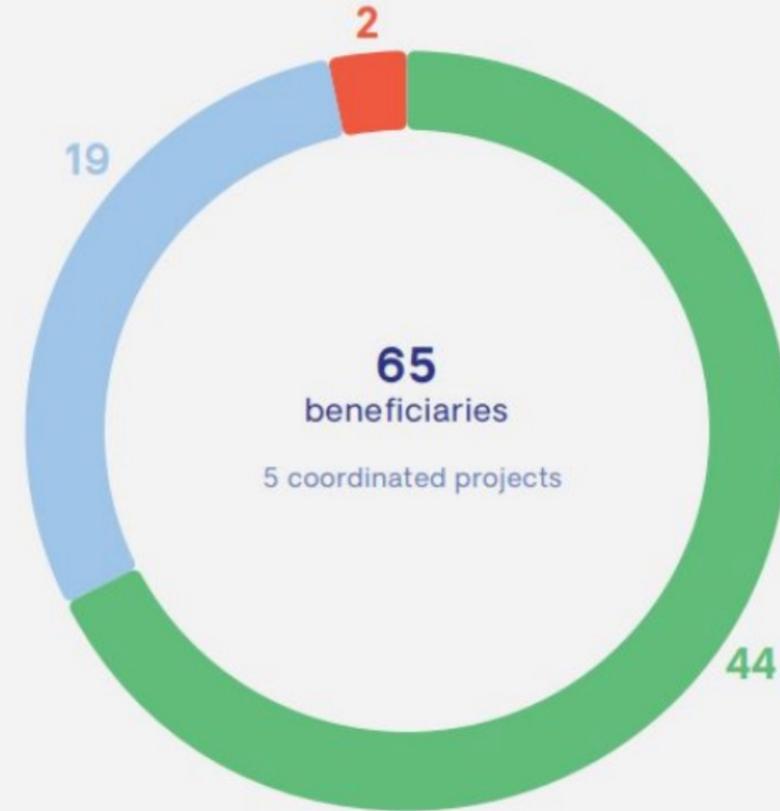
€22M

€12M

€1M



€15M
SME funding



 Private companies

 Universities & research centres

 Other

CETAQUA

WATER TECHNOLOGY CENTRE



WWW.CETAQUA.COM

teresa.alvarino@cetaqua.com

Barcelona

Ctra. d'Esplugues, 75, 08940 Cornellà de Llobregat,
Barcelona Tel. 93 312 48 00



Galicia

Aquahub - A Vila da Auga | Rúa de José Villar Granjel, 33,
15898 Santiago de Compostela, A Coruña | Tel. 881 02 50 40



Andalucía

Calle Severo Ochoa, 7 29590 Málaga | Tel. 952 02 85 92



Chile

Los Pozos 7340, Piso 2, Comuna de Las Condes, Santiago
de Chile | Tel. +56 22569 2407





Innovate
UK

Horizon Europe: The Circular Bio-based Europe Joint Undertaking

Host: Belen Rebollo-Garcia
Knowledge Transfer Manager- Europe

**We are in the
BREAK.**

Back in 5 min



Innovate
UK

Support for partnering: "Business Connect Travel Awards"

Belen Rebollo
Knowledge Transfer Manager
European Programmes

Innovate UK Business Connect Team

From innovate UK Business Connect we help you accelerate your innovation. We do this by connecting ideas, people and communities to respond to challenges and drive positive change. We can make introductions to new business partners and funders, help you find collaborators for grants and project delivery and introduce you to new market opportunities.

How we can help



SCAN ME



**Make powerful
connections**



Secure funding



**Get expert
insight**



**Keep up
to date**



**Innovate
UK**



European Travel Awards



SCAN ME

Travel Support available for UK-based R&D SMEs to attend European events

Posted on: 31/08/2023



Innovate UK “European Travel Awards” support attendance of UK based R&D performing SMEs to specific targeted events for the purpose of increasing engagement with potential partners.

Characteristics:

- Application for each specific event gets advertised @ Innovate UK KTN website
- A maximum of £700 can be claimed as a contribution towards travel costs incurred for the purpose of attending the specific event. Only 1 representative per SME.
- In addition to the funding bespoke pro-active support from IUK teams to progress project idea to application into European Programmes (Eureka & Horizon Europe)



Innovate
UK

Pitching session

Pitches running order



Organisation	Presenter
AlGreen	Zee Wang
BDC - University of York	Jamie Wood
DRANCO	Nathan Deman
IDELUX	Marie-Aline Pierrard
Net Zero Industry Innovation Centre - Teeside University	Richard Lord
NIAB - Imperial College London	Elena Dieckmann
NiTech Solutions	Ruaraidh Wells
Octoply	Nithin Rai
SilviBio	Philip Shelton, Alicja Dzieciol
Xampla	James Ravenscroft

Proposed Approach & Experience

Algreen provides the most sustainable solutions to petrol-based polyurethanes. Polyurethanes represent 8% of world plastics. They are widely used in cosmetic, packaging and fashion industries for making cosmetic microplastics, packaging films/coating/adhesives, sequins, shoes/bra foam, shoes/underwear adhesives and waterproof coating. Conventional polyurethanes come from carbon intensive petrol refineries and end their life in landfill, releasing microplastics or are incinerated generating significant Greenhouse Gases.

Algreen invents fully biobased and biodegradable polyurethanes designed to eliminate petrol-based polyurethanes.

The global polyurethane market will be 29.2 million tons (2029). By replacing 1% of petrol-based polyurethane, Algreen eliminates 88bn kgCO₂eq annually.

Partners

We're interested in all kinds of partners, who is passionate to phase out the negative impacts from petrol chemicals.

Organisational Capabilities

Algreen invents a fully bio-based polyurethane that phases out petrol-based polyurethane in favour of a decarbonised and scalable substitute. Algreen polyurethane is derived from agricultural wastes and non-edible plant oils. Our fully biobased precursors are synthesised into Algreen PU via organic solvent-free processes to reduce carbon emissions. Based on our novel product and process, Algreen polyurethane is projected to achieve a significant CO₂ reduction compared to conventional polyurethanes. Meanwhile, the current market available decarbonised polyurethane competitors can only achieve a 30% CO₂ reduction.

Administrative Information

We're a UK-based SME and we would like to be either a Coordinator or a Partner.

Your contact details including:

Zee Wang, zwang@algreen.tech, +44(0)7422900785
United Kingdom

Your organisation's [Participant Identification Code \(PIC\)](#) if your organisation has one

Citric acid production from sustainable feedstocks

<p>Proposed Approach & Experience</p> <p>Technical capacity for citric acid production from second generation feedstocks</p> <p>Example previous projects: Reducing industrial waste from sugar processing in India (Newton-Bhabha project, 2017-2021) BetaBeet: distributed processing and citric acid production from locally farmed Sugar Beet (SBRI Phase I, Autumn 2020)</p>	<p>Partners</p> <p>If you are looking for partners, what type of partners are you looking for?</p> <p>Looking for partners for funding, collaboration and capacity to facilitate scale-up from intermediate to commercial scales (TRL 5->9).</p>
<p>Organisational Capabilities</p> <p>Feedstock assessment and pretreatment Enzyme selection for hydrolysis Strain development and testing Mathematical modelling Omics acquisition and integration Fermentation and scale up Down-stream processing Whole process integration Project management, stakeholder engagement, regulations</p>	<p>Administrative Information</p> <p>Professor Andrew James (Jamie) Wood, jamie.wood@york.ac.uk</p> <p>What country are you from: UK</p>

Innovative conversion of biogenic gaseous carbon into bio-based chemicals, ingredients, materials



<p>Proposed Approach & Experience</p> <p>DRANCO specializes in dry anaerobic fermentation technology for converting organic waste streams into valuable resources such as biogas, electricity, and heat. We developed the Carboxylic Acid Platform (CAP) technology, which enables the conversion of organic waste streams into volatile fatty acid (VFA)-rich solutions. Our understanding lies in integrating these technologies to create a comprehensive waste treatment and resource recovery system, aiming for energy neutrality or even energy positivity. We can contribute expertise in designing and engineering anaerobic fermenters, as well as in the development and implementation of CAP technology.</p> <p><u>Previous similar H2020 projects</u> : VOLATILE & CAFIPLA, which focused on converting organic waste streams into VFA-rich solutions and fiber recovery. This prior experience positions us well to lead or contribute significantly to the proposed project.</p>	<p>Partners</p> <ul style="list-style-type: none">• capable of converting VFA-solutions into useful products such as bioplastics, microbial protein, industrial detergents, or glues.• Experts in purifying VFAs from solutions to obtain high-quality feedstocks for chemical production.• with the capability to convert fibers derived from solid waste fractions into valuable materials, such as insulation.• Partners experienced in conducting life cycle assessments (LCAs), social life cycle assessments (sLCAs), and techno-economic analyses (TEAs) to evaluate the environmental and economic sustainability of the proposed processes.• Legal experts familiar with regulations and standards related to the production of chemicals and materials from organic waste streams.
<p>Organisational Capabilities</p> <p>DRANCO brings several critical assets to the project:</p> <ul style="list-style-type: none">• Extensive experience in designing and engineering dry anaerobic fermenters for organic waste treatment.• Expertise in developing and implementing the Carboxylic Acid Platform technology for the valorization of organic waste streams.• A dedicated laboratory equipped with various reactor setups and analytical capabilities necessary for testing and optimizing anaerobic fermentation processes.• Proficiency in analyzing parameters such as Kjeldahl nitrogen (Kj-N), chemical oxygen demand (COD), ammonium concentration (NH₄), phosphorus (P), micronutrients, VFA spectrum, and other relevant indicators.	<p>Administrative Information</p> <p>DRANCO nv Preferably partner, if needed coordinator. Big business Dok-Noord 4C bus 3 9000, Ghent Belgium Nathan Deman Nathan.deman@dranco.be +32 478 57 47 76 PIC 975070191</p>

Biomass/waste/gas waiting for a better valorisation

Proposed Approach & Experience

We wish to better valorise the household waste highlighting its value while reducing our environmental impact

Previous relevant work:

- We already ran a pilot plant during CAFIPLA project able to treat 1,5t/week in order to transform household organic waste into carbon new raw materials
- We are WP leader in the project RECOVER dealing with the biodegradation of the plastics inside the compost

Partners ([we would gladly join a consortium](#))

- Interested to incorporate our biomasses in their new products development
- Willing to use the CO₂ from our AD plant
- capable of converting rigid plastics in bulky mixture (PE, PP) or experts in converting agricultural plastic films (LLDPE, LDPE)
- with the capability to convert fibers derived from solid organic waste fractions into valuable materials

Organisational Capabilities : Waste management from their collection to their recycling.

What we offer:

- Different waste streams & biomasses for lab test or bigger volumes for a pilot plant.
- To welcome a pilot on site to test the process developed in industrial conditions.
- Green electricity and heat through biogas production and cogeneration or solar panels.
- A “real case” industrial partner sharing detailed business facts (LCA, BCA, etc.).
- Knowledge and experience with several kind of waste streams and network in the field of waste management
- Our facilities include:
 - ✓ Platforms of sorting paper & cardboard, agricultural covers (LLDPE, LDPE),
 - ✓ 1 refused derived fuels (RDF) from municipal solid waste preparation unit,
 - ✓ 2 recycling of inert waste platforms,
 - ✓ 1 sludge drying unit,
 - ✓ 1 anaerobic digester,
 - ✓ 2 composting platforms,
 - ✓ 2 waste landfill facilities with their Waste Water Treatment Plants.

Administrative Information

IDELUX Environnement is a large public non-profit industrial company.

We are planning to be a partner.

Your contact details :

PIERRARD Marie-Aline, marie-aline.pierrard@idelux.be

0032 498 83 34 99

BELGIUM

[Participant Identification Code \(PIC\)](#): 897748096

We are located in a rural area of the province of Luxembourg in Belgium that wish to develop.

- Valorisation of polluted/contaminated wood from industrial and post-consumer waste streams (RIA)
- Bio-based materials and products for biodegradable in soil applications (IA)
- Bio-based dedicated platform chemicals via cost-effective, sustainable and resource-efficient conversion of biomass (IA-flagship)



<p>Proposed Approach</p> <ul style="list-style-type: none"> • Flexible Net Zero Energy-driven Biorefineries (Flexi-Net-ZED-Bio), Industrial Symbiosis, Circular Economy, targeting SAF and Hydrogen, with Bio-CCS and/or biochar • Nature-Based Solutions for geo-environmental engineering, including phyto-remediation, phyto-stabilisation, novel wool-based geotextiles, biochar and biowaste use for soil carbon addition, biodiversity net-gain • High-temperature looping cycles for bio-based chemicals production <p>Experience</p> <ul style="list-style-type: none"> • Work package leader for CERESiS H2020 Project - ContaminatEd land Remediation through Energy crops for Soil improvement to liquid biofuel Strategies www.ceresis.eu growing, characterising & converting contaminated biomass (fast pyrolysis & super-critical water gasification) 2020-2024 • Led 4 x investment work packages for Interreg NWE SURICATES (Sediment Use as a Resource In Circular And Territorial EconomieS) Project 2017-2023 • Innovate UK KTN Circular Economy Wool Innovation Network Steering committee member 2022- • Won Best of Life Project 2010 for BioReGen (Biomass, Remediation, reGeneration) 	<p>Partners</p> <p>Seeking SME and industrial partners for collaborative research proposals, co-funding for IA, and pathways-to-impact through commercialisation.</p> <p>Would like to join existing EU-wide consortia in trans-national research and innovation projects following UK's association to Horizon Europe from 2024 onward</p>
<p>Organisational Capabilities</p> <ul style="list-style-type: none"> • Successful track-record of bidding, managing and delivery on EU projects (ERDF, Life, Interreg, H2020) • Net Zero Industry Innovation Centre – A £13.1 M research & innovation facility at the heart of the Tees Valley industrial cluster https://www.tees.ac.uk/netzero/ • State-of-the-art research laboratory and scale-up facilities 	<p>Administrative Information</p> <p>Academic institute willing to act as Coordinator and/or Partner Dr Richard Lord Professor of Geochemistry & Geo-environmental Engineering r.lord@tees.ac.uk +44(0)7815703567 UK, PIC: 999662504</p>

Viticulture Futures (Reference)



Proposed Approach & Experience

What is your understanding of the part of the problem/challenge you can solve?
What previous, relevant, work or track record can you bring to the team?

Ideas:

- Circular Economy for Vineyards: climate change challenges in different climatic regions, circular economy, winery waster & management.
- Net Zero Vineyards and Wineries: equipment, technology solutions
- **Regenerative Practices and Technology in Viticulture**: whole systems approaches, socio-technical interactions
- **Data analysis landscape**: development of bespoke database structures suitable to track the flow of material throughout the production cycle
- **AI and machine learning**: development of bespoke algorithms to identify/quantify features from images, leading to maps and further analyses

Partners

If you are looking for partners, what type of partners are you looking for?

- international agri-businesses that supply & manufacture equipment & tech for vineyards
- manufacturers in the Wine production supply chain
- research institutes involved in viticulture & oenology research
- companies/researchers focused on addressing tech/equipment needs of grape growers

Organisational Capabilities

What skills, capabilities, facilities does your organisation have that will be vital for this project?

NIAB: UK's only Research Vineyard- Fermentation Research, Pilot-Production Equipment for Batch Production, Analytical Equipment, Agricultural plots for growth trials

Imperial:

Grantham Institute:

Dyson School of Design Engineering: Additive Manufacturing and Materials Design/ Prototyping, Biomanufacturing

Centre for Environmental Policy: Socio/Economic/Environmental Analysis

Centre for Sustainable Infrastructure Materials: Advanced Materials Analysis Suite, Materials Processing Facilities

Administrative Information

Research Institute (NIAB), Academic Institution (Imperial)
Partner

Your contact details including:

- Belinda Kemp (Belinda.Kemp@niab.com), NIAB East Malling Viticulture
- Tilly Collins (t.collins@imperial.ac.uk), Centre for Environmental Policy
- Elena Dieckmann (emd113@ic.ac.uk), Dyson School of Design Engineering
- Chris Cheeseman (c.Cheeseman@ic.ac.uk) Center for Sustainable Infrastructure Materials
- Yves Plancherel (y.plancherel@imperial.ac.uk), Earth Sciences and Engineering
- Ebba Engström, (e.engstrom22@imperial.ac.uk), CEP

UK, Kent & London

Circular Bio-based Europe Joint Undertaking

NiTech Continuous Flow Equipment



SAFER
GREENER
FASTER
CHEAPER

Proposed Approach & Experience

- Biotech and bio-based processing often involve methods with immiscible phases, solids/cells, or gases. These processes are often limited by mass transfer when using large scale batch processing equipment.
- NiTech's continuous flow reactor technology allows for enhanced heat and mass transfer for faster processing times for reactions and crystallisations. The technology could be utilised for many applications including reactive extraction, bio-catalysis, and cell lysis.
- Technology is scalable and available at Lab, Pilot, and Production scale.
- NiTech have previous experience in successful implementation of COBR/C technology in:
 - Biological production of methane (BioGrid project)
 - CBD isolate crystallisation (CBDContiCryst)
 - Interfacial reactions (CRODA)

Organisational Capabilities

NiTech provides patented simple, yet innovative, continuous flow process technology to meet today's need for safer, greener, faster and cheaper manufacturing processes

- 20 years' experience in continuous flow processing.
- Extensive tech transfer knowhow, derived from over 100 successful reactions and crystallisations using COBC technology.
- Lab-scale equipment ready for exploratory investigations.
- Linear scale-up allowing for fast implementation of high-volume manufacturing solutions.

Partners

NiTech is looking for partners interested in implementing innovative processing methods to enhance production throughputs, minimise energy consumption, and reduce greenhouse gas emissions.

NiTech would be happy to have exploratory discussions with interested parties to determine continuous process feasibility.



Administrative Information

NiTech is an SME based in Edinburgh. We would be interested in being a partner in projects.

Please contact us with any queries:

Ruaraidh Wells

ruaraidh.wells@nitechsolutions.co.uk

sales@nitechsolutions.co.uk

+447818130564

Edinburgh, UK

Waste liquid, separation storage and biotransformation on a midriver floating hostel



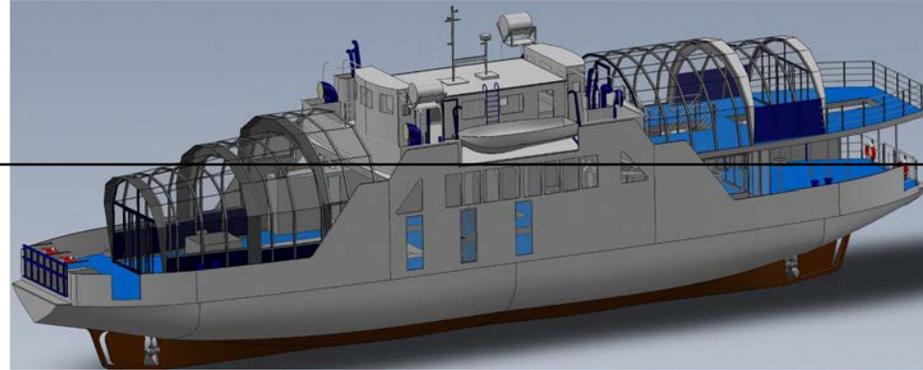
Octoply Ltd.

SME, UK,

Partner; Nithin Rai

Nithin@octoply.co.uk;

www.octoply.com | +447782502140



Proposed Approach & Experience

Develop and evaluate large-scale storage solutions for ammonia and biogas as marine fuels, utilising a bio-FPSO model within an inshore setting, with hospitality serving as the primary revenue stream to benchmark the efficacy and commercial prospects against terrestrial systems.

- Company has developed a complete system process flow, including lab studies and small-scale models featuring algal bioreactors, anaerobic digesters, and biomaterials to investigate the feasibility of large floating platforms for storing and processing liquid waste into low-emission marine fuels.
- Our motivation is driven by the imperative to decarbonise maritime operations and manage increasing volumes of organic liquid waste by adapting terrestrial biobased technologies within a marine environment.

Partners (in some or all of the following)

Commercial or technical expertise in

- algal bioreactors
- anaerobic digestors
- porous media
- fermentation technology and engineering
- rubber manufacturers and moulders
- waste water treatment
- cryogenic coolers
- naval architecture
- project management.
- tidal energy manufacturers.
- oil producers

Organisational Capabilities

- Expertise: Multidisciplinary team includes marine technicians, data scientists, software developers, hospitality crew and a biophysical chemist.
- Infrastructure: We possess a fully-equipped fabrication workshop capable of constructing and maintaining specialised marine equipment. Our static vessel on the Thames serves as a testbed for deploying and refining our technologies in a controlled, real-world setting. Additionally, we have access to a midriver mooring that allows for extended field testing in marine conditions.
- Instrumentation: Field sampling, sensors and measuring devices designed for precise chemical and biological monitoring, enabling us to collect high-quality data for assessing the efficiency of waste processing and fuel production.
- Integration and Development Facilities: Beyond the individual capabilities, our organisation is adept at integrating these diverse skill sets and facilities to innovate and push the boundaries of current maritime waste processing technologies. We are continually seeking ways to enhance our systems through ongoing research and development.

IA-flagship–Bio-based value chains for valorisation of sustainable natural fibre feedstock



Proposed Approach & Experience

SilviBio wants to create a wood fibre processing facility and methodology that is ideal for horticultural use. Current horticultural wood fibre has high nitrogen immobilisation issues and is not optimal for plant propagation.

SilviBio has

- Peat free growing media expertise
- Statistically rigorous experimental design and trials
- Experience developing innovative processing methodologies for peat-free media raw materials

Track record:

- Successfully delivered multiple R&D projects
- Have ongoing peat-free projects in the UK
- Delivered field trials in the UK and Germany

Partners Required

- Foresters and Forestry companies
- Research institutes
- Raw material suppliers, such as sawmills
- Glasshouse growers willing to trial peat-free media
- Universities/researchers with wood fibre expertise
- Processing equipment experts for wood fiberisation

SilviBio's Capabilities

- Peat free growing media expertise
- Growing media design and validation
- Dedicated R&D facility and network of innovative growers
- Pre-established network of distributors and industry stakeholders across the UK and EU

Administrative Information

SilviBio is a Scottish SME and can either be a Coordinator or Partner

Contact:

Philip Shelton, Alicja Dzieciol
philip@silvibio.co.uk, alicja@silvibio.co.uk
+44 73 775 57009

**Bio-based value chains for valorisation of sustainable oil crops;
Bio-based materials and products for biodegradable in soil applications**



Proposed Approach & Experience

What is your understanding of the part of the problem/challenge you can solve?
What previous, relevant, work or track record can you bring to the team?

Xampla are experts in drop-in high performance biodegradable polymers made from plant proteins.

We can produce a range of applications such as:

- Packaging films and coatings to replace plastics
- Microcapsules to replace plastics
- Agricultural seed coatings and microcapsules
- Edible films and edible microcapsules

Partners

If you are looking for partners, what type of partners are you looking for?

Xampla are looking to build a consortium around utilization of proteins in waste/byproduct biomass.

We are looking for experts in plant protein extraction, or partners who have a high protein waste stream that could be valorised.

Administrative Information

Xampla Ltd is an SME based in Cambridge, UK

Contact Details:

James Ravenscroft – Project Manager

Email: james.ravenscroft@xampla.com

07710801348

PIC: 902793939

Website: <https://xampla.com/>



Innovate
UK

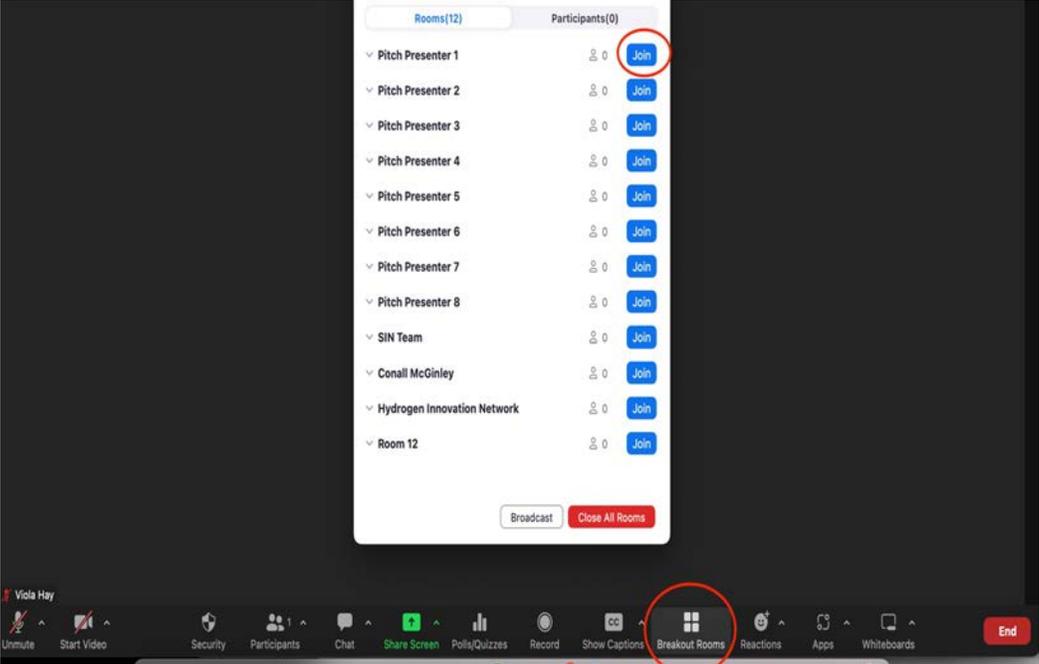
Networking session

Time (UK timings)		Speakers
10:00	Welcome and aims of the day	Belen Rebollo - Knowledge Transfer Manager, Innovate UK Business Connect
10:05	Overview of CBE and success stories	Dieter Briigitta - Circular Bio-based Europe Joint Undertaking (CBE-JU)
10:20	CBE upcoming calls and UK participation	Paul Bello - Innovate UK
10:35	Q&A	
10:40	Key note speaker: Collaboration case Study: Food & BioCluster Denmark (EEN)	Anders Skeem - Food BioCLUSTER Denmark
10:50	Key note speaker: Collaboration case study: CETAQUA; Spain	Teresa Alvaríño - CETAQUA
11:00	BREAK	
11:05	Support for UK applicants: Travel awards	Belen Rebollo - Innovate UK Business Connect
11:15	Pitching	Facilitated by IUK Business Connect Team
11:35	Breakout rooms: -NCP Consultation room (Paul) -Pitchers rooms Thematic Rooms (classification based on CBE Feedstock origin): -AgriFood -Aquatic -Biogenic gaseous carbon -Forest based -Industrial & Municipal Waste	Facilitated by IUK Business Connect Team
11:55	Next steps & Key Dates	Belen Rebollo & Paul Bello, Innovate UK
12:00	CLOSE	

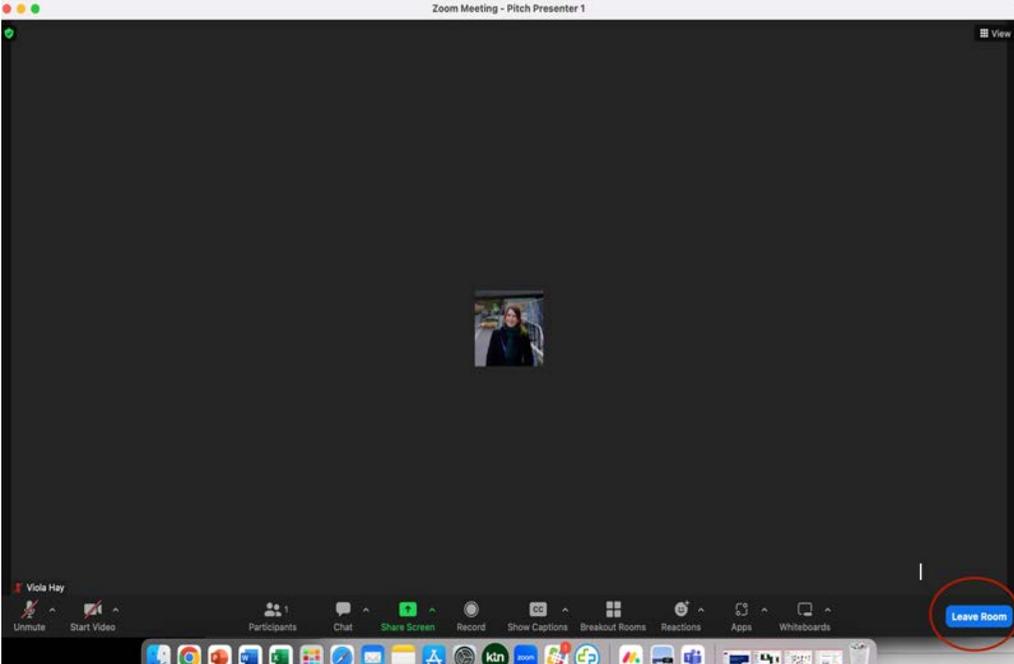
List of breakout rooms

Organisation	Presenter
AlGreen	Zee Wang
BDC - University of York	Jamie Wood
DRANCO	Nathan Deman
IDELUX	Marie-Aline Pierrard
Net Zero Industry Innovation Centre - Teeside University	Richard Lord
NIAB - Imperial College London	Elena Dieckmann
NiTech Solutions	Ruaraidh Wells
Octoply	Nithin Rai
SilviBio	Philip Shelton, Alicja Dzieciol
Xampla	James Ravenscroft

How to JOIN a breakout room



How to LEAVE a breakout room



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Xampla	James Ravenscroft



Innovate
UK

Key Dates & Key messages

UK Engagement with CBE-JU



CBE JU
Info Day 2024

23 April, Brussels
Register now!
#CBEInfoDay

Find more:
cbe.europa.eu/infoday24

Circular Bio-based Europe Joint Undertaking

Bio-based Industries Consortium

Funded by the European Union

The graphic features a dark blue background with a green semi-circle on the left and a red arrow pointing down to a QR code. Logos for Circular Bio-based Europe, Bio-based Industries Consortium, and the European Union are included.

Travel Support available for UK-based R&D SMEs to attend European events

Posted on: 31/08/2023



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