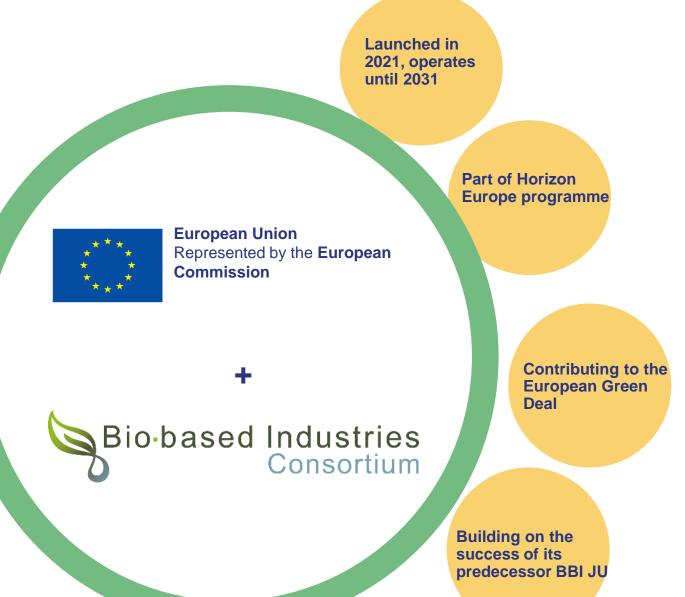


Circular Bio-based Europe Joint Undertaking

Paloma Mallorquin
Policy Officer Bio-based Systems
DG RTD.B1

Circular Bio-based Europe Joint Undertaking



2 billion euros public-private partnership



Established by the Council regulation (EU) 2021/2085 of 19 November 2021

Along with 8 other institutionalised partnerships



















Supporting the European Green Deal

Scope: industrial sectors of the bioeconomy: biobased products, chemicals and materials. Except biofuels, bioenergy, pharmaceuticals and medical devices (food and feed ingredients are in scope)



Contributing significantly to the 2030 climate targets, paving the way for climate neutrality by 2050



Increasing the sustainability and circularity of production and consumption systems



Developing and expanding the sustainable sourcing and conversion of biomass into bio-based products



...Supporting the deployment of bio-based innovation regional level, with a view to reviving rural and coastal regions

SRIA: General and specific objectives



From BBI JU to CBE JU

BBI JU 2014-2020

- Bio-Based Industries Join Undertaking
- Part of Horizon 2020 programme
- €3.7 billion public-private initiative
- 142 projects, 1000+ unique beneficiaries across Europe & beyond
- Last BBI JU call for project proposals in 2020
- Horizon Europe: new EU R&I funding programme (2021-2027)

CBE JU 2021-2027

- CBE JU Circular Bio-based Europe Joint Undertaking
- Part of Horizon Europe new EU R&I funding programme
- €2 billion public-private initiative building on the success of BBI JU
- Established by the Council of the EU on 19 November 2021
- Entry into force on 30 November 2021

CBE governance and bodies

Similar to BBI JU

- Governing Board (GB) 50% BIC 50% EC
- Executive Director and Programme Office
- Scientific Committee (15 members)
- States Representatives Group (MS and AC)

New / updated

- At least once per year: strategic (= expanded)
 meeting of the GB
- Deployment Group a third advisory body
 - One or more Deployment Groups to be established
 - Purpose: advise the GB on issues critical to market uptake of bio-based innovation; promote deployment of sustainable bio-based solutions
 - Output: provide recommendations on the issues related to the deployment of bio-based innovation upon a request from the GB or at their own initiative

More info: https://www.cbe.europa.eu/governance

Main tasks of CBE JU

Similar to BBI JU

Programming of R&I activities of public & private partners (e.g. call for proposals)

Support high impact multidisciplinary R&I projects (i.e. project portfolio management + follow up impacts)

Promote communication and collaboration between R&I actors and industrial stakeholders

New / updated

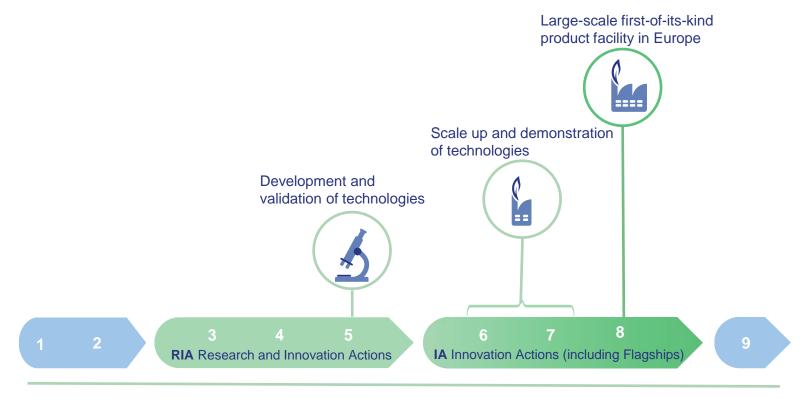
Wider participation of involved actors (e.g. rural, coastal, urban areas and regions with unexploited potential; national and regional authorities)

Focus and monitoring on environmental performance including biodiversity while respecting the principles of circularity, sustainability and planetary boundaries

Broader, more explicit communication mandate (e.g. target policy makers, industry, NGOs and consumers at large)

Financial contribution from private partner

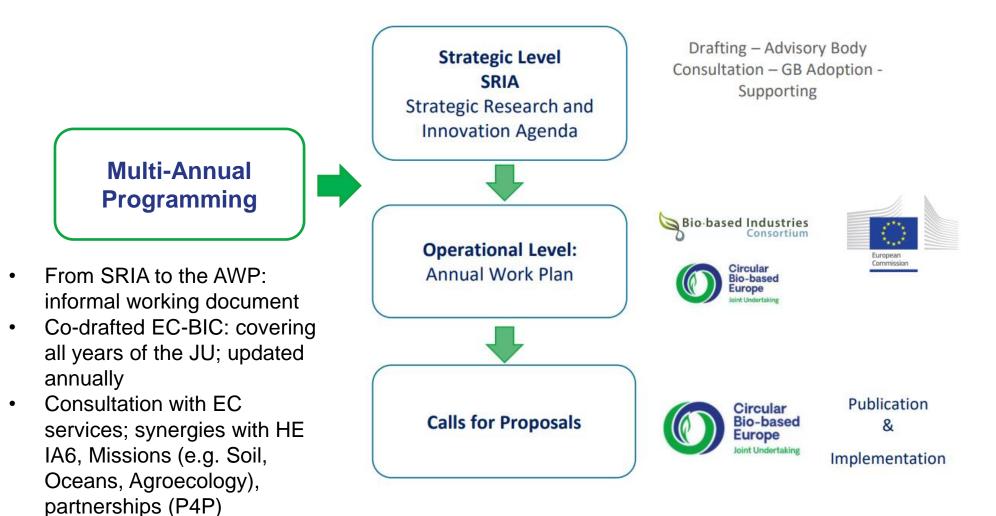
Types of supported actions



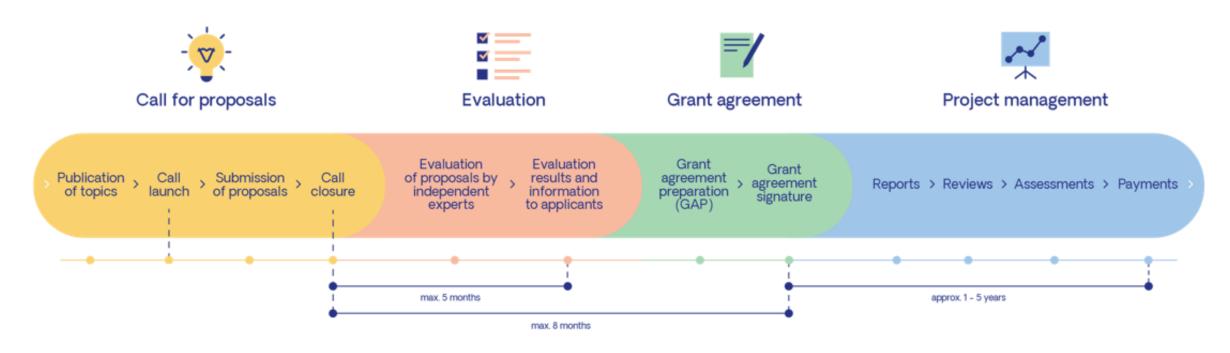
Technology Readiness Level (TRL)

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

From SRIA to Calls

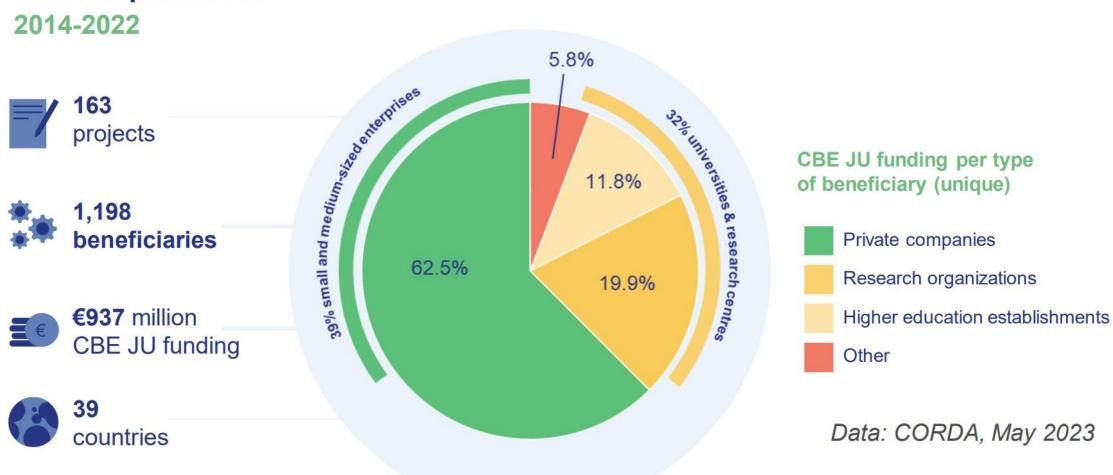


From call to project



Building on the success of BBI JU

CBE JU portfolio:



CBE JU flagship projects Feedstock & final product 10 15 Flagship Call 2022

- AgriChemWhey Dairy sidestreams
- Lactid adic, minerals for food and fertilisers

SWEETWOODS

PLENITUDE

Lignin & hardwood residues

4 High-quality C5/C6

sugars & dried lignin

- Cellulose ┗ MFC - MicroFibrillated
- - VIOBOND

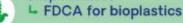
EXILVA

Cellulose

- Forest-based □ Bio-based resins

PEFerence

Crop residues



Sidestreams from sugar beet

- Flavourings, fragranges, hygiene

AFTERBIOCHEM

FARMŸNG Mealworms & agri-food sidestreams

Residues of cereal crops

└ Mycoproteins

- Proteins for animal feed & organic fertiliser
- ReSolute
- Sidestreams from pulp & paper industry
- La Biodegradable, harmless & bio-based solvent: Cyrene
- **CIRCULAR BIOCARBON**
- Municipal solid waste 4 High-value products from
- fertilisers to 5G technology
- LIGNOFLAG
 - Crop residues
- 4 2G bioethanol biofuel building block
 - SYLPLANT

Agri-based & wood based

for food & feed ingredients

- products, pharmaceuticals, antimicrobials & polymers
- SCALE
- Microalgae for food, feed and cosmetics
- FIRST2RUN
 - Underutilised oil crops
- **└** Building blocks for polyester production & vegetable oils
- SUSTAINEXT



Crops & agro-industrial side-streams

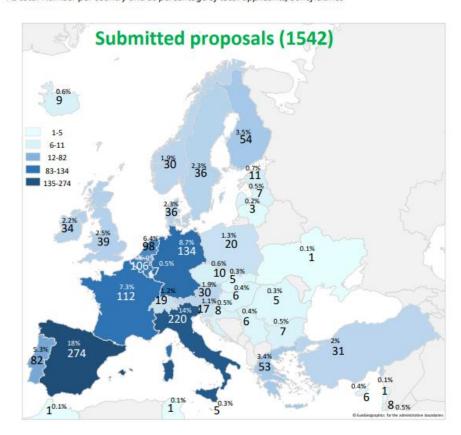
Ingredients for food, feed, cosmetics & fertilisers

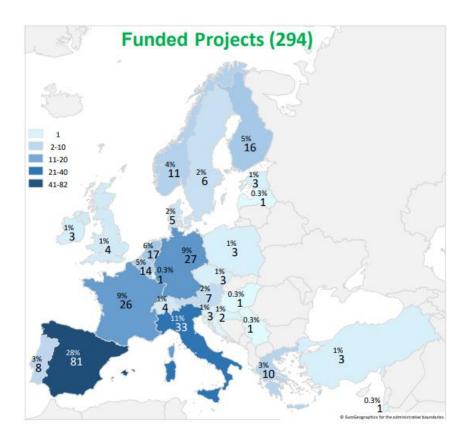


CBE JU Call 2022

Number of Participants per Country*

*As total Number per country and as percentage of total applicants/beneficiaries

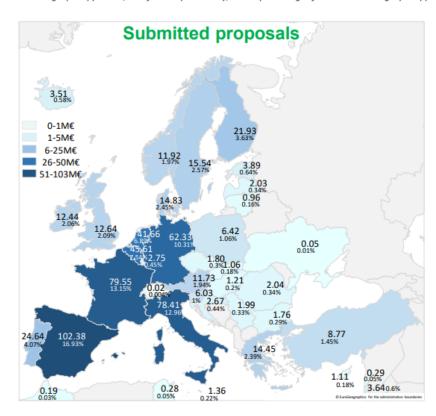


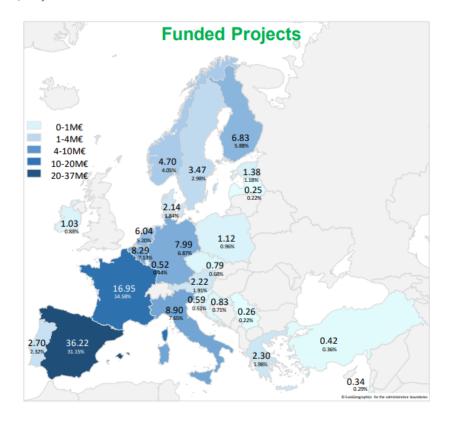


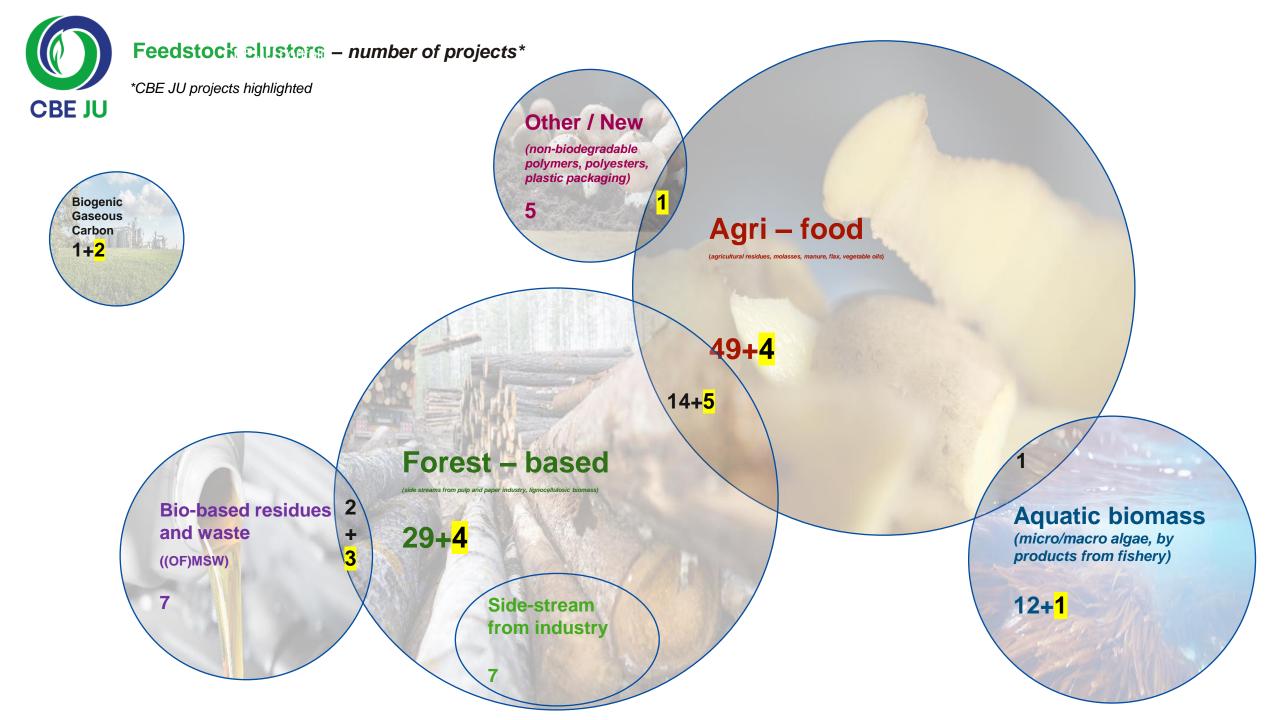
CBE JU Call 2022

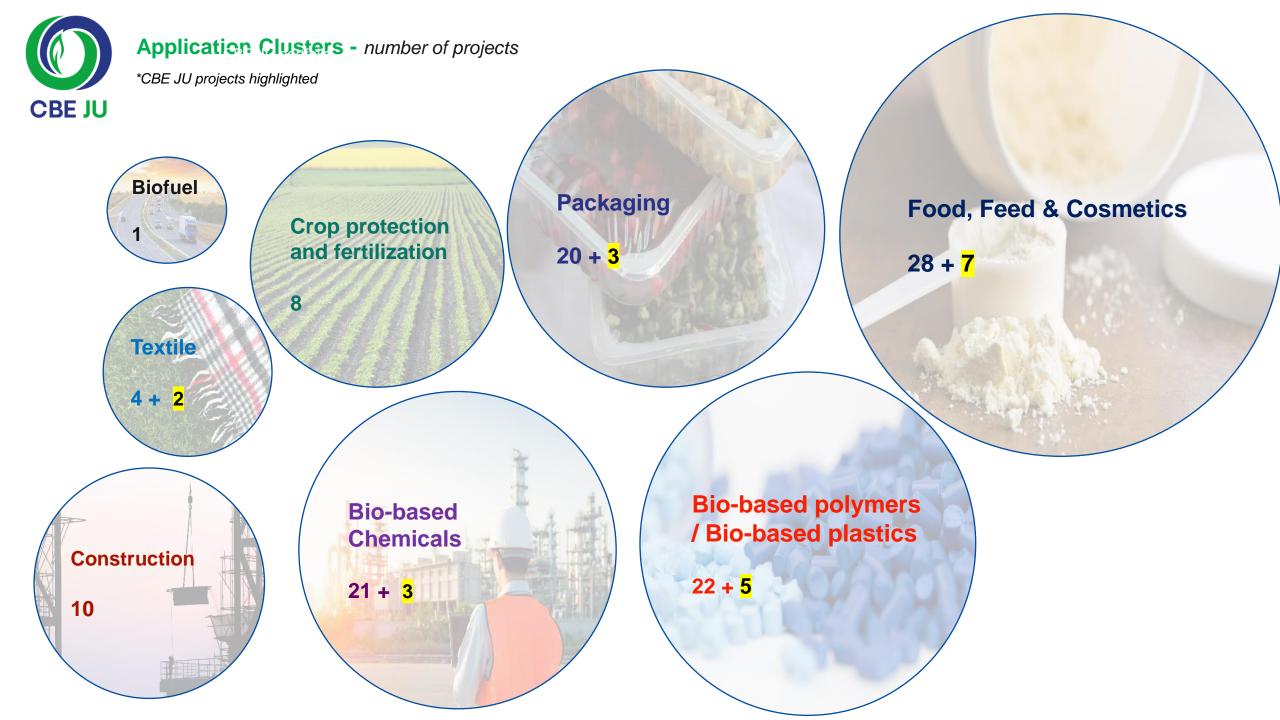
CBE JU Budget per Country

*CBE JU budget per applicants/beneficiaries per country, and as percentage of total CBE JU budget per applicants/beneficiaries









CBE JU Call 2023

Type of action		Topics HORIZON-JU-CBE-2023	Million EUR						
	IAFlag-01	Optimised and integrated wood-based value chains	17						
IA- flagship	IAFlag-02	Expansion and/or retro-fitting of biorefineries towards higher-value bio-based chemicals and intermediates	17						
	IAFlag-03	Bio-based packaging materials with improved properties: barrier, food contact, forming, printability, safety, recyclability/circularity-by-design							
	IAFlag-04	Valorisation of aquatic biomass waste and residues							
	IA-01	Small scale biorefining in rural areas							
	IA-02	Production of safe, sustainable, and efficient bio-based fertilisers to improve soil health and quality	15						
	IA-03	Improve fermentation processes (including downstream purification) to final bio-based products	15						
IA	IA-04	Recycling bio-based plastics increasing sorting and recycled content (upcycling).							
	IA-05	Development of scalable, safe bio-based surfactants, with an improved sustainability profile							
	IA-06	Selective, sustainable production routes towards bio-based alternatives to fossil-based chemical building blocks							
	IA-07	High performance, circular-by design, bio-based composites	15						
	R-01	Phyto-management; curing soil with industrial crops, utilising contaminated and saline land for industrial crop production							
	R-02	Optimised forest-based value chains for high value applications and improved forest management							
RIA	R-03	Robust and optimised industrial biotech and chemical/industrial biotech processes							
	R-04	Development of novel, high-performance bio-based polymers and co-polymers							
	R-05	Pre-normative research to develop standards for biodegradability of bio-based products in controlled and in open environments	5						
CCA	S-01	EU-wide network of pilot plants and testing facilities, improving SMEs and start-ups' access to scale-up							
CSA	S-02	Supporting the capacity of regions in environmental sustainability assessment for the bio-based sectors	3						

Total 215.5

Who is eligible for funding?



EU COUNTRIES

- Member States (MS) including their outermost regions
- The Overseas
 Countries and
 Territories (OCTs)
 linked to the MS.



NON-EU COUNTRIES

- Countries associated to Horizon Europe (AC)
- Low and middle income countries: See <u>HE</u> <u>Programme Guide</u>.
- Other countries when announced in the call or exceptionally if their participation is essential (No exception reflected in CBE JU WP 2023)



SPECIFIC CASES

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO)
 - International European research organisations are eligible for funding.
 - Other IO are not eligible (only exceptionally if participation is essential)
 - IO in a MS or AC are eligible for funding for Training and mobility actions and when announced in the call conditions

CBE JU specific conditions

Main features in the Horizon Europe proposal







FIELDS IN PART A

- Researchers table needed to follow up researchers careers (HE indicator)
- Role of participating organisation
- Self-declaration on gender equality plan

MOVED FROM PART B TO PART A

- Ethics self-assessment
- Security questionnaire (NEW! in all HE proposals)
- Information on participants' previous activities related to the call

PART B

- Glossary of terms.
- Consistency on the use of terminology is ensured in all project phases (from WP to proposal and reporting)
- Extensive explanations on what exactly should be included in each section.
- Specific CBE requirements (More info on the Additional Requirements section of the WP 2022).
- Annex: Declaration of BIC membership linked with specific evaluation sub-criteria for Innovation Actions
- Annex: description conditions for the financial support to third parties

CBE JU Funding rates

Type of action	Funding
Research and Innovation Action (RIA)	100%
Innovation Actions, including Flagships (IA)	60% (100% for non-profit entities)
Coordination and Support Actions (CSA)	100%

CBE JU specific conditions: evaluation criteria for IAs

ATTENTION! Innovation Actions: additional CBE JU sub-criteria

'Ability to ensure the level of in-kind contribution to operational activities (IKOP) defined in the call/topic as % of total projects eligible costs (IAs 15% and IA-Flagship 20%)'

WHAT IS CONSIDERED IKOP:

- In accordance with the Council Regulation establishing CBE JU, IKOP is defined as contributions by private members, constituent entities or the affiliated entities of either, by international organisations, consisting of the eligible costs incurred by them in implementing indirect actions less the contribution of that joint undertaking to those costs.
- In CBE JU, the only private member is the Bio-based Industries Consortium (BIC). Meaning that the minimum percentage of IKOP needs to be reflected in the budget of BIC members, and affiliated entities.
- Consortium need to include the declaration provided by BIC regarding its membership as an Annex to the proposal.
- BIC has set up an open and fast procedure to become an industry member, either as "full" member, or as temporary "project member" until the evaluation has been performed. This is a fast procedure that will ensure that any application is proceeded in a fast-track manner before the closure of the call. This process is managed by BIC: https://biconsortium.eu/membership

= BIC full members or associate members, not limited to private members

Criteria	Threshold	IAs factor (ranking)
Excellence	3/5	n/a
Impact	4/5	x 1,5
Implementation	3/5	n/a
TOTAL	11/15	n/a

Example impact sub-criteria

EXAMPLE INNOVATION ACTION – FLAGSHIPS

TRESHOLD EVALUATION SUB-CRITERIA 20% IKOP

Requesting less CBE JU contribution will increase the IKOP

Example 1 IA-FLAGSHIP)	JU member	industry/ academia	To	otal eligible costs	Funding rate	C	CBE JU ontribution		IKOP
Coordinator (BIC member)	Y	industry	€	7,000,000.00	60%	€	4,200,000.00	€	2,800,000.0
Beneficiary 1	N	academia	€	590,000.00	100%	€	590,000.00		
Beneficiary 2 (BIC member)	Y	industry	€	5,000,000.00	60%	€	3,000,000.00	€	2,000,000.0
Beneficiary 3	N	industry	€	3,000,000.00	60%	€	1,800,000.00		
Beneficiary 4	N	academia	€	800,000.00	100%	€	800,000.00		
TOTAL			€	16,390,000.00		€	10,390,000.00	€	4,800,000.0
CENTANGE IKOP (eligible costs incurred by private members in implementing indirect actions less the stribution of CBE JU)								29.3%	

Example impact sub-criteria

EXAMPLE INNOVATION ACTION – INNOVATION ACTIONS

TRESHOLD EVALUATION SUB-CRITERIA 15% IKOP

Requesting less CBE
JU contribution will
increase the IKOP

Example 2 (IA)	JU member	industry/ academia	To	otal eligible costs	Funding rate	CC	CBE JU ontribution		IKOP
Coordinator (BIC member)	Y	industry	€	3,200,000.00	60%	€	1,920,000.00	€	1,280,000.00
Beneficiary 1	N	academia	€	590,000.00	100%	€	590,000.00		
Beneficiary 2	N	industry	€	1,500,000.00	60%	€	900,000.00		
Beneficiary 3	N	industry	€	3,000,000.00	60%	€	1,800,000.00		
Beneficiary 4	N	academia	€	800,000.00	100%	€	800,000.00		
TOTAL			€	9,090,000.00		€	6,010,000.00	€	1,280,000.00

PERCENTANGE IKOP (eligible costs incurred by private members in implementing indirect actions less the contribution of CBE JU)

14.1%
(below the award sub-criteria threshold)

More information



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Horizon Europe Funding and Tender portal



europa.eu/!jH76RF

Thank you

