

# A competitive bioeconomy for a sustainable future

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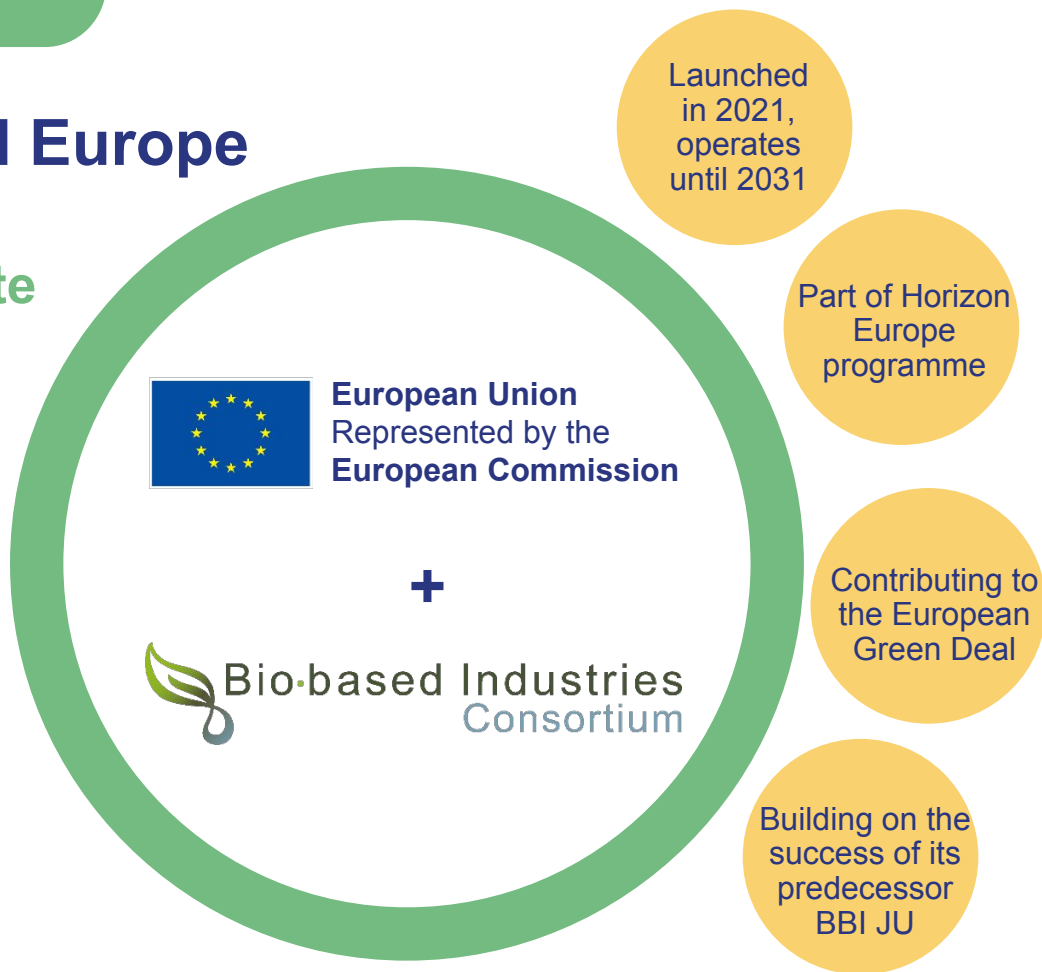
Executive Director a. i.

The Hague, 10 May 2023



# Circular Bio-based Europe Joint Undertaking

€2 billion public-private  
initiative



## General and Specific CBE JU Objectives



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



Increase cross-disciplinary **research and innovation** activities, reaping its benefits for the development and demonstration of **sustainable bio-based solutions**.



Increase and integrate the research and innovation **capacity of stakeholders** across the EU to unlock **bioeconomy potential** even in regions with underdeveloped capacity.



Increase the **research and innovation** capacity and development of sustainable bio-based innovations, by ensuring that sustainability issues and environmental performance are integrated throughout the whole **innovation chain**.



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



Reinforce the integration of **bio-based research** and innovation in EU bio-based industries and increase the involvement of R&I actors, including feedstock providers, in the **bio-based value chains**.



**Reduce the risk** for research and innovation investment in bio-based companies and projects.

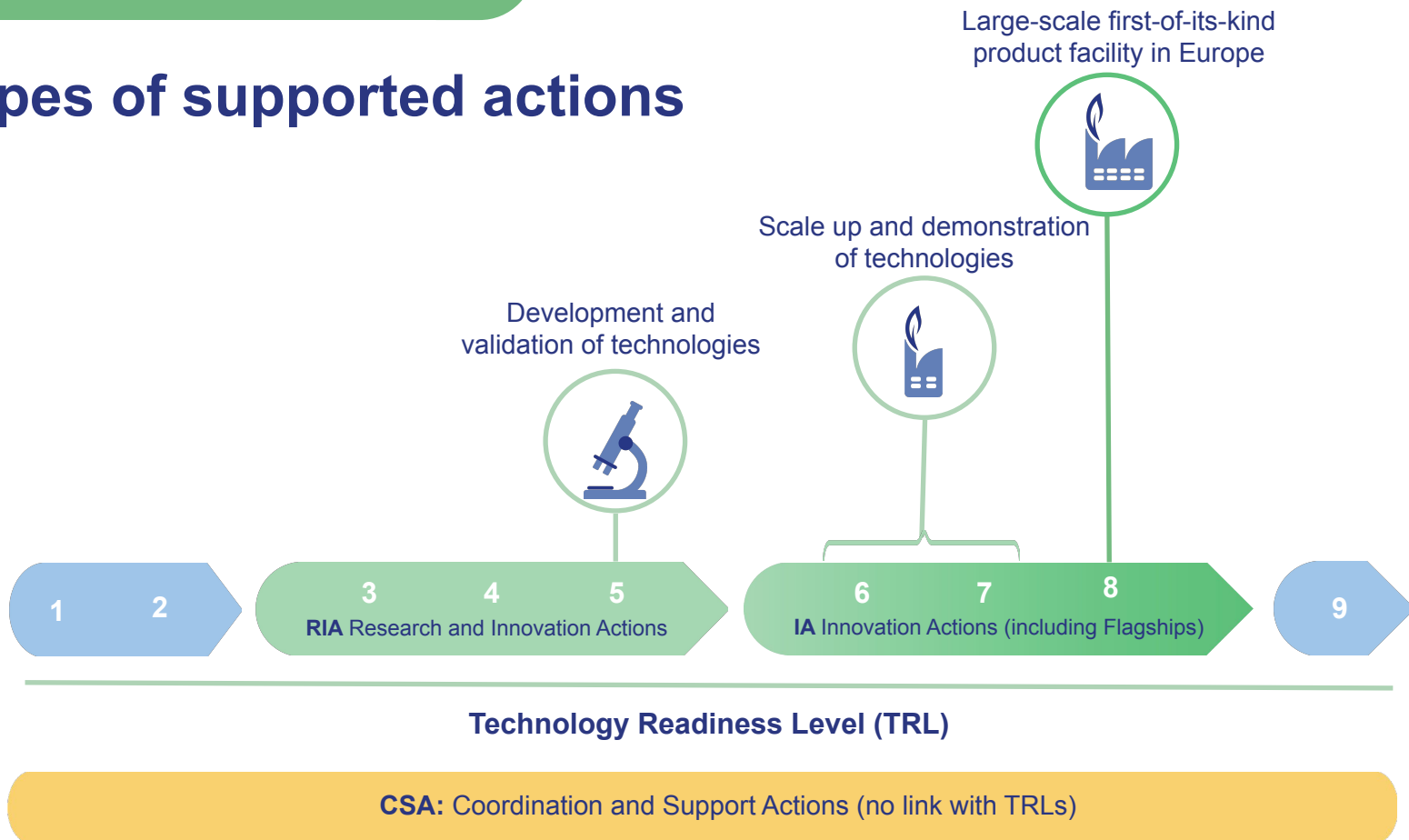


Ensure a high level of **environmental performance** of bio-based industrial systems



Ensure that **circularity** and environmental considerations, including contributions to **climate neutrality** and **zero pollution** objectives, are considered in the development and implementation of R&I bio-based projects and facilitate **societal acceptance**.

# Types of supported actions



## Building on the success of BBI JU

2014-2020



142 projects



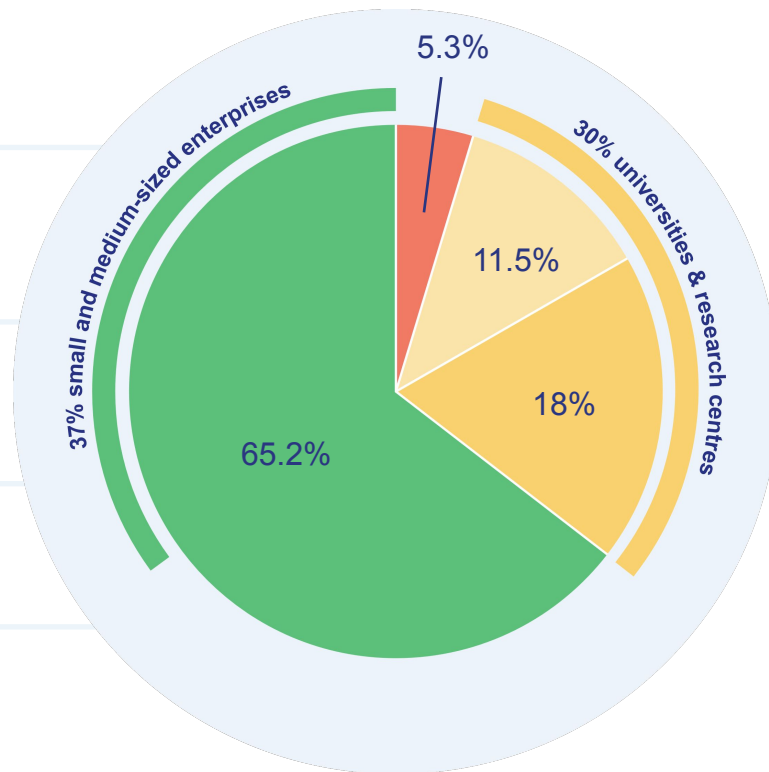
1,055 beneficiaries



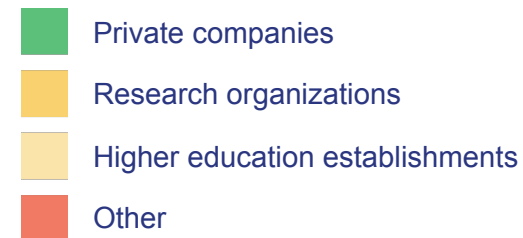
€822 million BBI JU funding



39 countries



### BBI JU funding per type of beneficiary



Data: CORDA, June 2021

# CBE JU flagship projects



● Flagship biorefinery

 **1** **Co. Tipperary**  
Ireland

 **2** **Sarpsborg**  
Norway

 **3** **Imavere**  
Estonia

 **4** **Riga**  
Latvia

 **5** **Sas van Gent**  
The Netherlands

 **6** **Delfzijl**  
The Netherlands

 **7** **Amiens**  
France

 **8** **Saint-Avoid**  
France

 **9** **Saint-Avoid**  
France

 **10** **Baillargues**  
France

 **11** **Zaragoza & Sesto San Giovanni**  
Spain & Italy

 **12** **Porto Torres**  
Italy

 **13** **Podari**  
Romania



# 13 Flagship projects:

Expected socio-economic impacts



Flagship  
biorefinery



4,700

direct jobs

15,000

indirect jobs



€5.2

private investment for

€1

CBE JU grant-leverage  
effect



€250

million CBE JU grant



800+

KT CO<sub>2</sub> emission  
savings



€1.3

billion private  
investment\*



High

replicability potential

\* Based on aggregated confidential data provided by the projects and subject to change until the Flagship plants are implemented



Circular  
Bio-based  
Europe  
Joint Undertaking

# CBE call 2023

Type of action	Topics HORIZON-JU-CBE-2023		Million EUR
<b>IA– flagship</b>	IAFlag-01	Optimised and integrated wood-based value chains	17
	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	17
	IAFlag-04	Valorisation of aquatic biomass waste and residues	10
<b>IA</b>	IA-01	Small scale biorefining in rural areas	15
	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-04	Recycling bio-based plastics increasing sorting and recycled content (upcycling).	15
	IA-05	Development of scalable, safe bio-based surfactants, with an improved sustainability profile	15
	IA-06	Selective, sustainable production routes towards bio-based alternatives to fossil-based chemical building blocks	15
	IA-07	High performance, circular-by design, bio-based composites	15
<b>RIA</b>	R-01	Phyto-management; curing soil with industrial crops, utilising contaminated and saline land for industrial crop production	10
	R-02	Optimised forest-based value chains for high value applications and improved forest management	10
	R-03	Robust and optimised industrial biotech and chemical/industrial biotech processes	10
	R-04	Development of novel, high-performance bio-based polymers and co-polymers	10
	R-05	Pre-normative research to develop standards for biodegradability of bio-based products in controlled and in open environments	5
<b>CSA</b>	S-01	EU-wide network of pilot plants and testing facilities, improving SMEs and start-ups' access to scale-up	1.5
	S-02	Supporting the capacity of regions in environmental sustainability assessment for the bio-based sectors	3
<b>Total</b>			<b>215.5</b>



# Call topic structure

## HORIZON-JU-CBE-2023-XX-NN Topic title

<b>Type of action</b>	Research and Innovation Action
<b>Indicative budget</b>	The total indicative budget for the topic is EUR 10 million
<b>Expected EU contribution per project</b>	It is estimated that a contribution of EUR 5 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts
<b>TRL</b>	TRL 4-5 at the end of the project
<b>Link to CBE JU Specific Objectives</b>	1.1: Increase the intensity of cross-disciplinary research and innovation activities
<b>Link to CBE JU SRIA Strategic Priorities</b>	1.1.2: Develop innovative production systems in the bio-based industry 1.1.3: Develop innovative bio-based products
<b>CBE JU KPIs</b>	4.5 Number of products with improved life cycle environmental performance 5.1 Number of innovative products that are biodegradable, compostable, recyclable, reused or upcycled (circular-by-design) 5.2 Number of projects developing circular production practices (incl. industrial & industrial urban symbiosis) 6 Increase innovative bio-based outputs and products

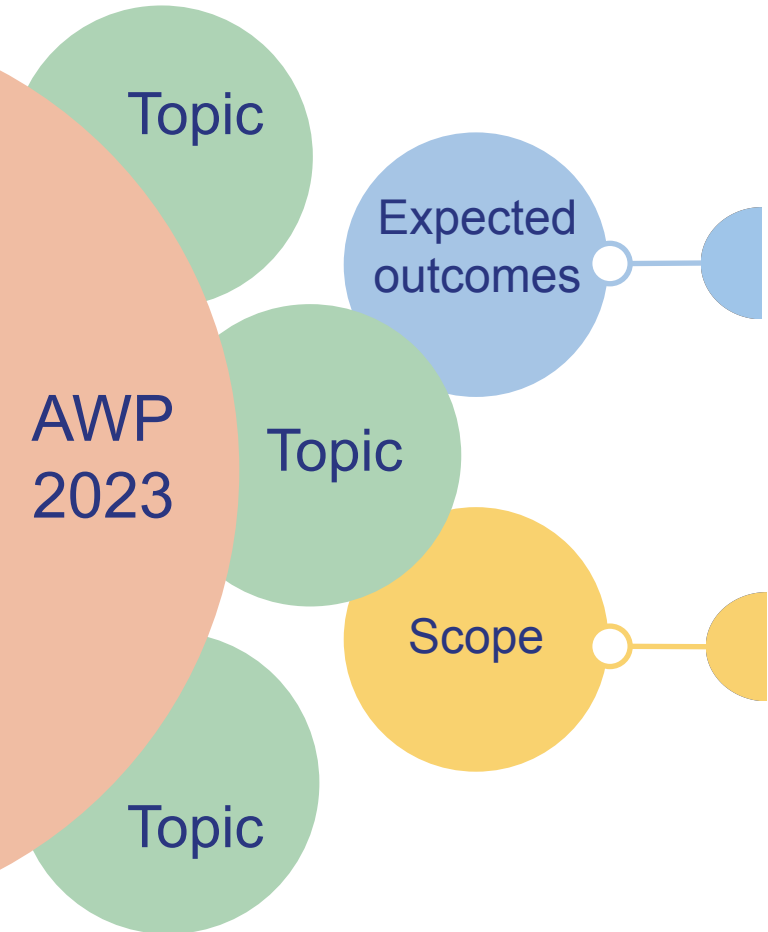
Topic

Topic

Topic

AWP  
2023

# Call topic structure



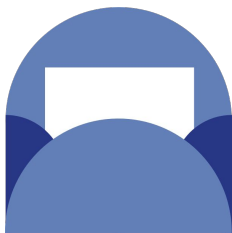
## *The 'change' to be achieved*

- Provides a broad description of what is the **impact** to be achieved by the project
- The **dissemination and exploitation** of future research results are vital for the impact`

## *The 'problem'*

- Identifies the aspects of the **challenge** that needs to be tackled
- Specifies a **perimeter** to the problem described
- Does not specify the expected solutions to the problem, nor the approach to be taken

## More information



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