

Priorities of the CBE JU Call 2023

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Head of Programme
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CBE JU Call 2023: topics list

No competition between topics!

| Type of actions | Topics: HORIZON-JU-CBE-2023 s | | | | | |
|-----------------|--|------|----|--|--|--|
| IAs- | IAFlag-01 Optimised and integrated woody-based value chains | 17 | | | | |
| Flagships | 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 | | | | |
| IAs | 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 | | | | |
| RIA | 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 | T | | | |
| | R-05 Pre-normative research to develop standards for biodegradability of bio-based products in controlled and in open environments | 5 | | | | |
| CSA | 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 | | | | |
| | Total | 215. | ,5 | | | |



Type of actions and TRL

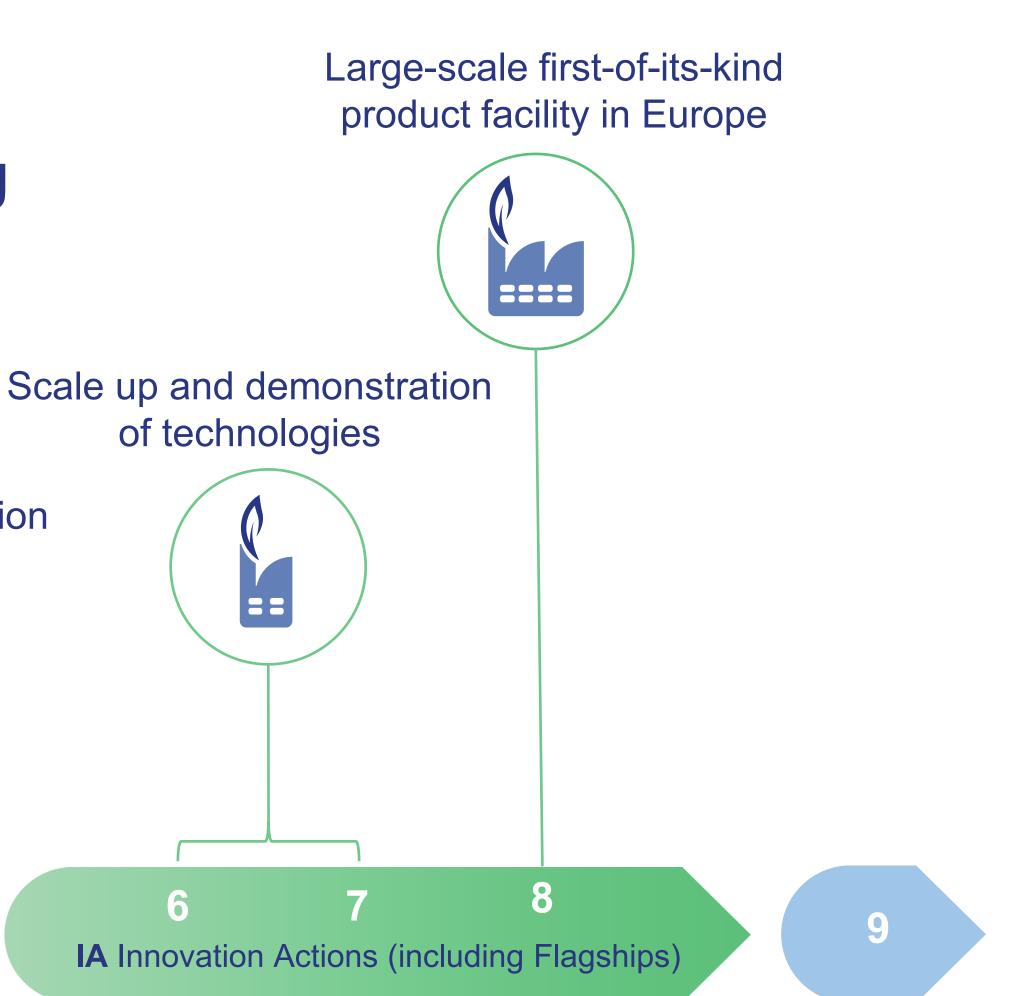
| Type of Action | Innovation Actions, including Flagship |
|--------------------------------------|--|
| | Research and Innovation Actions |
| | Coordination and Support Actions |
| Indicative budget | The total indicative budget for the topic is EUR XX million |
| Expected EU contribution per project | It is estimated that a contribution of EUR XX million would allow these outcomes to be addressed appropriately. Nonetheless, this |
| | does not preclude submission and selection of a proposal requesting |
| | different amounts. |
| TRL | TRL XX at the end of the project. |
| Link to CBE JU Specific Objectives | This topic contributes to the CBE JU specific objective XX |
| Link to CBE JU SRIA2030 | Strategic priority XX |
| CBE JU KPIs | Please refer to the KPIs table 3 |

Expected outcomes

<u>Scope</u>



Types of actions funded by the CBE JU



Technology Readiness Level (TRL)

Development and validation

of technologies

RIA Research and Innovation Actions

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



Topic budget

More than one project expected for most of the RIA/IAs topics!

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Specific Objectives and Strategic priorities

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Expected outcomes

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CBE JU AWP2023 Topic structure

CBE JU General and Specific Objectives

Accelerate



the innovation process and development of bio-based innovative solutions













innovative bio-

based solutions





- 1.1. Increase cross-disciplinary research and innovation activities, reaping its benefits for the development and demonstration of sustainable bio-based solutions.
- 1.2. Increase and integrate the research and innovation capacity of stakeholders across the EU to unlock bioeconomy potential even in regions with underdeveloped capacity.
- 1.3. Increase the **research and innovation** capacity and development sustainable bio-based innovations, by ensuring that sustainability issues and environmental performance are integrated throughout the whole innovation chain.
- 2.1. 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.
- 2.2. 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

3.1. 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.



Links to the SRIA strategic priorities

| | | | | CBE JU TOPICS AWP2023 | | | | | | | | | | | |
|-----------------------------|--|---|---|-----------------------|------------|------------|------------|------------|--------------------------|------------|------------------------|-----------|-----------|------------------------|---|
| SRIA Strategic priorities | | | | | 2023.IA-01 | 2023.IA-02 | 2023.IA-03 | 2023.IA-04 | 2023.IA-05 2023.IA-06 | 2023.IA-07 | 2023.R-01 2023.R-02 | 2023.R-03 | 2023.R-04 | 2023.R-05 2023.S-01 | (|
| | 1.1.1 - Ensure the availability and quality of sustainable bio-based feedstock | | | | Х | | | | |) | x x | | | | Х |
| FEEDSTOCK | 1.3.1 - Protect and enhance biodiversity and ecosystem services in bio-based feedstock supply systems | | | | | | | | | | x x | | | | X |
| | 2.1.1 - Demonstrate the sustainable supply of bio-based feedstock | | | X | X | Х | > | x | х х | | X | | | | |
| | 1.1.2 - Develop innovative production systems in the bio-based industry | | | | Х | | | | | | | Х | х | | |
| PROCESSING | 1.3.2 - Improve environmental performances of bio-based processes | | | | | | | | | | | Х | | | |
| | 2.1.2 - Deploy innovative production technologies | Х | Х | Х | X | Х | x > | x | х х | х | | | 1 | | |
| PROPULÇTE | 1.1.3 - Develop innovative bio-based products | | | | | | | | | | | | х | Х | |
| PRODUCTS | 2.1.3 – Scale-up production and market uptake of innovative bio-based products | Х | Х | Х | | Х | | | х х | Х | | | | Х | |
| | 1.2.1 - Stimulate research activities in countries and regions with underdeveloped R&I capacity for bio-based systems | | | | | | | | | | | | 1 | Х | X |
| | 1.2.2 – Increase the awareness and capacity of national and regional research support agencies for industrial bio-based systems | | | | | | | | | | | | | | X |
| Communication | 1.2.3 - Facilitate the development of expertise in bio-based fields by improving higher education and skills development in the private sector | | | | | | | | | | | | 1 | | |
| U U | 2.1.4 - Build policy makers' awareness and acceptance of bio-based solutions | | | | | | | | | | | | 1 | | |
| () () | 3.1.3 – Facilitate social acceptance of bio-based applications | Х | Х | х | | | | | | | | | | х | |
| CRO SO | 2.2.1 – Improve the risk profile of bio-based projects | | | | | | | | | | | | | | |
| Finance | 2.2.2 - Develop investment tools and approaches that mitigate the investment risk in bio-based systems | | | | | | | | | | | | | Х | |
| | 3.1.1 - Set effective and robust environmental sustainability and circularity criteria for bio-based systems | | | | | | | | | | | | | | |
| sustainability framework | 3.1.2 - Incorporate the environmental sustainability and circularity criteria in bio-based systems | Х | Х | х | | | x > | x | х х | х | | | | | X |





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Expected Contribution to CBE KPIs

| | | | | CBE JU AWP 2023 topics | | | | | | | | | | | |
|------|---|----------------|----------------|------------------------|------------|------------|---|------------|---|-------------|-------|------------------------|-----------|-----------|-----------|
| | CBE KPIs: Objectives and Units of measurement | 2023.IA-Flag01 | 2023.IAFlag-02 | 2022.IAFlag-04 | 2023.IA-01 | 2023.IA-02 | 4 | 2023.IA-04 | 4 | 2023.IA-06 | 3.R-(| 2023.R-02 2023.R-03 | 2023.R-04 | 2023.R-05 | 2023.5-01 |
| 1 | Strategic participation and integration of feedstock producers and suppliers towards large-scale valorisation of sustainable bi | oma | ss | | | | | | | | | | | | |
| 1.1 | N of primary producers, involved as project beneficiaries and/or engaged in value chains at project level | | | Х | Х | | | | | | X | Х | | | |
| 1.2 | N of bio- waste management actors, involved as project beneficiaries and/or engaged in value chains at project level | | | | Х | Х | | | х | | | | | | |
| 2 | Unlock sustainable and circular bio-based feedstock for the industry | | | | | | | | | | | | | | |
| 2 | N of innovative bio-based value chains created or enabled based on sustainably-sourced biomass | | | X | Х | Х | Х | | х | X | X | Х | | | |
| 3 | Ensure environmental sustainability of feedstock | | | | | | | | | | | | | | |
| 3.1 | N of projects using feedstock generated with practices that contribute to enhance biodiversity | | | | | Х | | | х | х | (| Х | | | |
| 3.2 | N of projects using feedstock generated with practices aiming at zero-pollution (soil, water, air) and/or at reducing water consumption | | | | | Х | | | Х | х | (X | Х | | | |
| 3.3 | N of projects using feedstock generated with practices contributing to climate change mitigation and/or adaptation | X | | | | Х | | | Х | х | (| X | | | |
| 4 | Improve environmental sustainability of bio-based production processes and value chains | | | | | | | | | | | | | | |
| 4.1 | N of projects with innovative & sustainable processes that contribute to GHG emission reduction | | | | Х | | Х | | | Х | | X | | | |
| 4.2 | N of projects developing innovative & sustainable processes that improve on resource efficiency and zero-waste | х | Х | Х | Х | | Х | Х | | Х | | X | | | |
| 4.3 | N of projects developing innovative & sustainable processes enabling to address zero pollution | | | X | Х | Х | Х | | Х | X | | X | | | |
| 4.4 | N of projects with innovative & sustainable processes with improved energy efficiency | Х | Х | | Х | | Х | | | Х | | Х | | | |
| 4.5 | N of products with improved life cycle environmental performance | | | (| Х | | Х | Х | Х | х | (| Х | Х | | |
| 5 | Expand circularity in bio-based value chains | | | | | | | | | | | | | | |
| 5.1 | N of innovative products that are biodegradable, compostable, recyclable, reused or upcycled (circular by design) | | | (| | | | X | | > | (| | Х | X | |
| 5.2 | N projects developing circular production practises (incl. industrial & industrial urban symbiosis) | Х | X | x x | | | | Х | | | | хх | х | Х | |
| 6 | Increase innovative bio-based outputs and products | | | | | | | | | | | | | | |
| 6.1 | N of innovative bio-based dedicated outputs, with novel or significantly improved properties vs relevant alternatives | | | | | | Х | | Х | × | (| X | Х | | |
| 6.2 | N of innovative bio-based drop in outputs meeting applications requirements | | | | | | Х | | Х | × | (| Х | Х | | |
| 7 | Improve the market uptake of bio-based products | | | | | | | | | | | | | | |
| 7 | N of brand owners involved as project partners and/or engaged with other mechanisms | | | (| | | | | Х | × | (| | | | (|
| 8 | Attract investment on the bio-based sector | | | | | | | | | | | | | | |
| 8 | N of actions implemented at project level to attract investment and/or to create awareness in the investment/funding community | | | | | | | | | | | | | | |
| 9 | Increase resilience and capacity in the bio-based sector | | | | | | | | | | | | | | |
| 9 | N of projects contributing to develop the skills and capacity needed by the EU bio-based sector | | | | | | | | | | | | | , | (X |
| 10 | Improve participation of regions and countries with high unexploited potential and strategic interest to develop it | | | | | | | | | | | | | | |
| 10.1 | N of participants from the underrepresented EU countries and region | | Х | Х | Х | | | | | | | | | , | x x |
| 10.2 | N of regional hubs established and operated to process bio-based feedstocks and other cooperation aspects | | Х | | Х | | | | | | | | | | |
| 10.3 | N of projects with synergies with other funding programmes at EU, national or regional level | | | | | | | | | | X | | | | x x |



Topic structure

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Expected outcomes



F&T Porta

Call topics



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 project 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.



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