
CLUSTER 6 - FOOD, BIOECONOMY, NATURAL
RESOURCES, AGRICULTURE AND ENVIRONMENT

Cluster 6 Work Programme 2023-2024

Artemios Kourtesis
European Commission
Head of Sector
RTD C.5 “Ecological and Social Transitions”



Cluster 6: from Expected Impacts to Destinations

Strategic Plan 2021-2024

Impact 1 Climate neutrality and adaptation to climate change

Impact 2 Preservation and restoration of biodiversity and ecosystems

Impact 3 Sustainable and circular management of natural resources; tackling pollution; bioeconomy

Impact 4 Food and nutrition security for all from sustainable food systems from farm to fork

Impact 5 Balanced development of rural, coastal and urban areas

Impact 6 Innovative governance models enabling sustainability, environmental observation

Work Programme 2023-2024

• **Destination 5:** Land, oceans and water for climate action

• **Destination 1:** Biodiversity and ecosystem services

• **Destination 3:** Circular economy and bioeconomy sectors
• **Destination 4:** Clean environment and zero pollution

• **Destination 2:** Fair, healthy and environmentally-friendly food systems from primary production to consumption

• **Destination 6:** Resilient, inclusive, healthy and green rural, coastal and urban communities

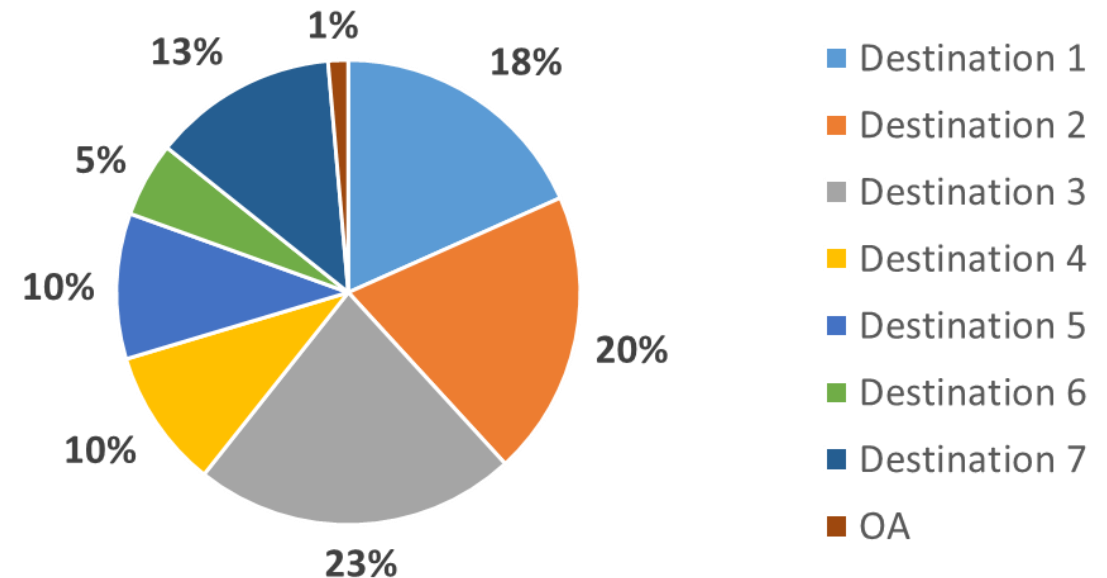
• **Destination 7:** Innovative governance, environmental observations and digital solutions in support of the Green Deal



Budget per Destination



Destinations	Budget (*) [mln EUR]
1. Biodiversity and Ecosystem Services	266
2. Fair, healthy and environmentally-friendly food systems from primary production to consumption	288
3. Circular economy and bioeconomy sectors	327
4. Clean environment and zero pollution	141
5. Land, oceans and water for climate action	147
6. Resilient, inclusive, healthy and green rural, coastal and urban communities	76
7. Innovative governance, environmental observations and digital solutions in support of the Green Deal	187
Other Actions	20
Grand Total	1.451



BIODIV, FARM2FORK, CIRCBIO bigger Destinations, followed by GOVERANCE
Overall balanced allocation of budget, reflecting the number of topics

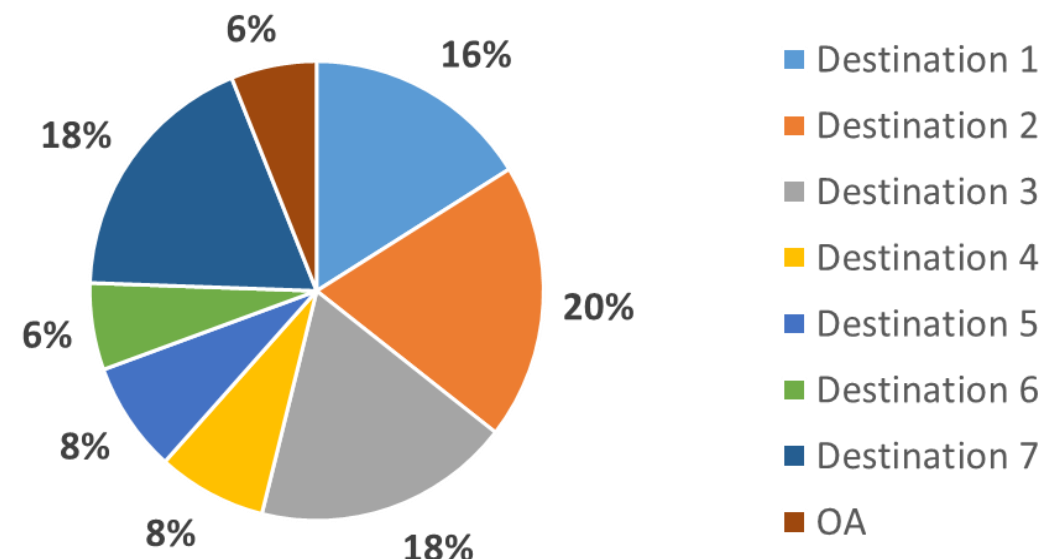
(*): Excluding the 7 Co-funded partnerships

Topics per Destination



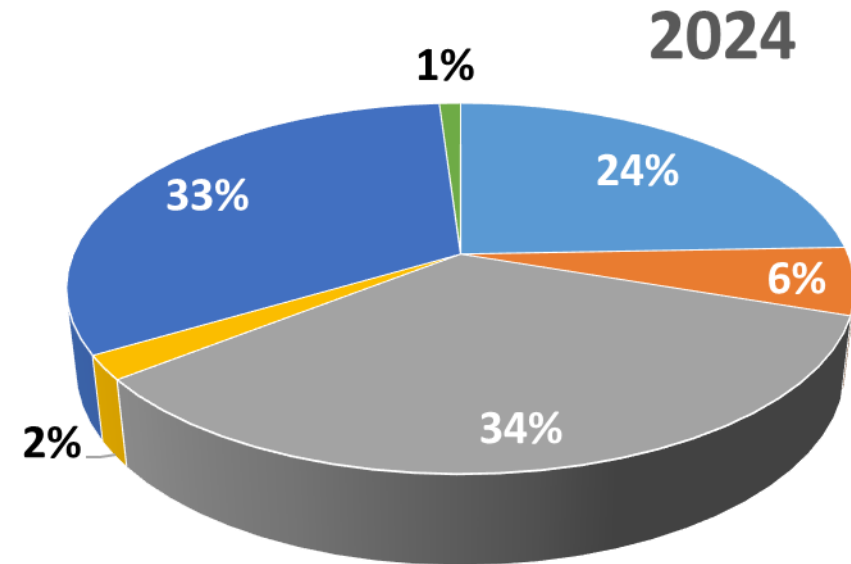
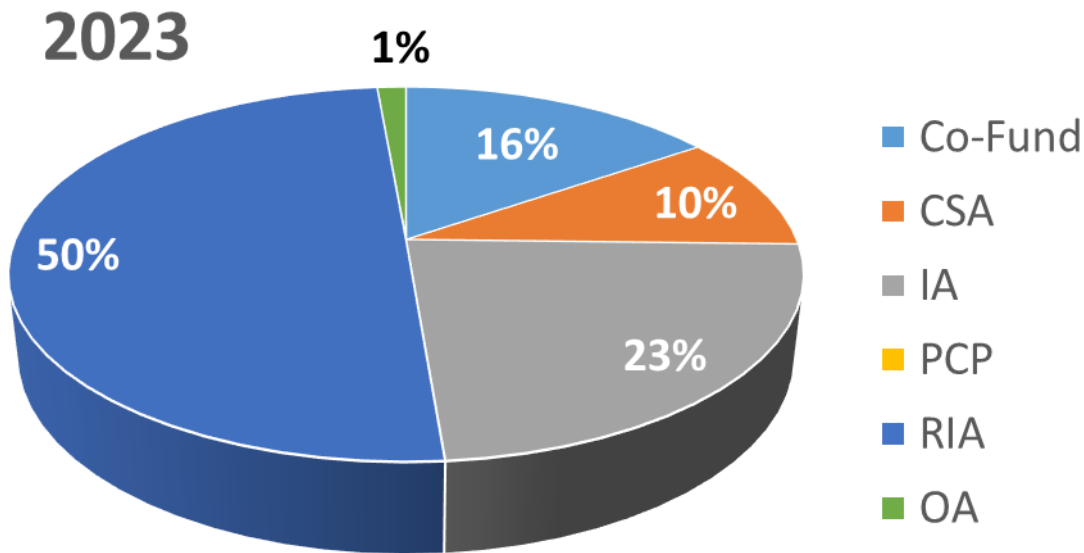
Destinations	N. topics (*)
1. Biodiversity and Ecosystem Services	30
2. Fair, healthy and environmentally-friendly food systems from primary production to consumption	38
3. Circular economy and bioeconomy sectors	33
4. Clean environment and zero pollution	14
5. Land, oceans and water for climate action	15
6. Resilient, inclusive, healthy and green rural, coastal and urban communities	11
7. Innovative governance, environmental observations and digital solutions in support of the Green Deal	35
Other Actions	10
Grand Total	186

(*) Including the 7 co-funded partnerships



176 topics + 10 other actions non subject to call for proposals
BIODIV, FARM2FORK and GOVERNANCE gathering the most topics

Budget per Year and Type of Action



		2023	2024	Total
Co-Fund	€	140,5	€ 220,5	€ 361,0
CSA	€	90,5	€ 53,0	€ 143,5
IA	€	212,0	€ 308,0	€ 520,0
PCP			€ 19,0	€ 19,0
RIA	€	454,0	€ 294,0	€ 748,0
OA	€	12,7	€ 9,4	€ 22,1
Total	€	909,7	€ 903,9	€ 1.813,6

Budgetary balance between the two years
RIAs have the lion share in 2023
IAs are the relative majority in 2024



Co-funded partnerships in Cluster 6

Destination 1 – Biodiversity and ecosystem services

Biodiversa+

Destination 2 – Fair, healthy and environment-friendly food systems from primary production to consumption

Agroecology

Animal Health and Welfare

Sustainable Food Systems

Destination 5 – Land, ocean and water for climate action

Water 4 All

Destination 7 – Innovative governance, environmental observations & digital solutions for the Green Deal

Agriculture of Data

Sustainable Blue Economy

Biodiversa+, **Water4All**, **SBEP** → launched in WP 2021-2022

Agroecology, PAHW, Sustainable Food Systems & Agri of Data

To start with
WP 2023-
2024



European
Commission

Single stage calls



Distribution in the WP 2023-2024

HORIZON-CL6-2023-BIODIV-01 (18 topics)
HORIZON-CL6-2023-FARM2FORK-01 (20 topics)
HORIZON-CL6-2023-CIRCBIO-01 (14 topics)
HORIZON-CL6-2023-ZEROPOLLUTION-01 (7 topics)
HORIZON-CL6-2023-CLIMATE-01 (8 topics)
HORIZON-CL6-2023-COMMUNITIES-01 (6 topics)
HORIZON-CL6-2023-GOVERNANCE-01 (22 topics)
HORIZON-CL6-2024-BIODIV-01 (9 topics)
HORIZON-CL6-2024-FARM2FORK-01 (11 topics)
HORIZON-CL6-2024-CIRCBIO-01 (10 topics)
HORIZON-CL6-2024-ZEROPOLLUTION-01 (3 topics)
HORIZON-CL6-2024-CLIMATE-01 (7 topics)
HORIZON-CL6-2024-COMMUNITIES-01 (3 topics)
HORIZON-CL6-2023-GOVERNANCE-01 (13 topics)

- **14 calls** (7 in 2023, 7 in 2024)
- **151 topics** (95 in 2023, 56 in 2024)
- Fewer single stage topics in 2024 matched by an **increase** of two stage in that year



Two-stage calls



Distribution in the CL6 WP 23-24

HORIZON-CL6-2023-CIRCBIO-02 (3 topics)

HORIZON-CL6-2024-BIODIV-02 (3 topics)

HORIZON-CL6-2024-FARM2FORK-02 (7 topics)

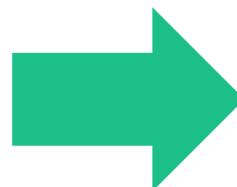
HORIZON-CL6-2024-CIRCBIO-02 (6 topics)

HORIZON-CL6-2023-ZEROPOLLUTION-02 (2 topics)

HORIZON-CL6-2024-ZEROPOLLUTION-02-1 (2 topics)

HORIZON-CL6-2024-COMMUNITIES-02 (2 topics)

- **7 calls** (2 in 2023, 5 in 2024);
- **25 topics** (5 in 2023, 20 in 2024);
- Compared to WP 21-22 (with 16 topics) **56%** increase of two-stages

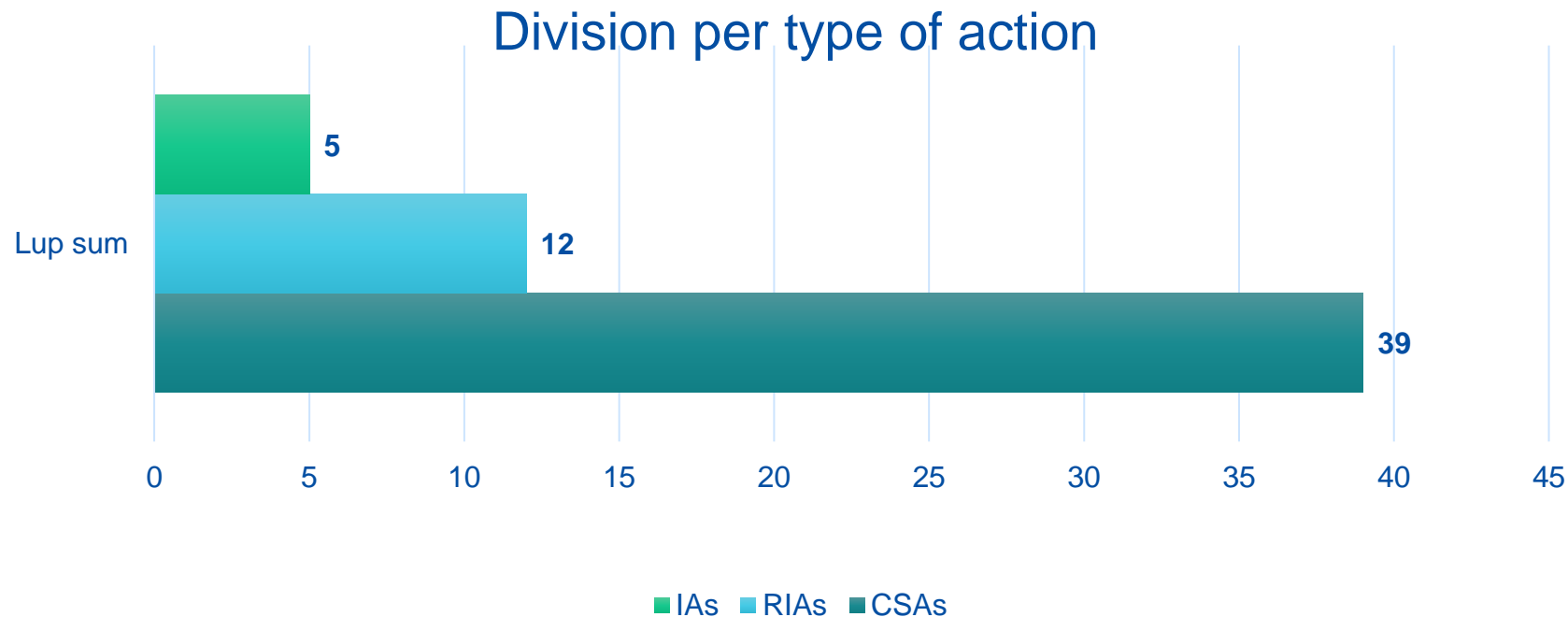


Blind evaluation: Anonymised proposals will be evaluated during the first stage based on the **award criteria** (excellence; impact; quality and efficiency of the implementation) – **Article 28.4** of the HE Regulation.



Lump sum topics

- 56 topics requiring lump sum as a **specific call condition**
- $\approx 32\%$ of total WP topics



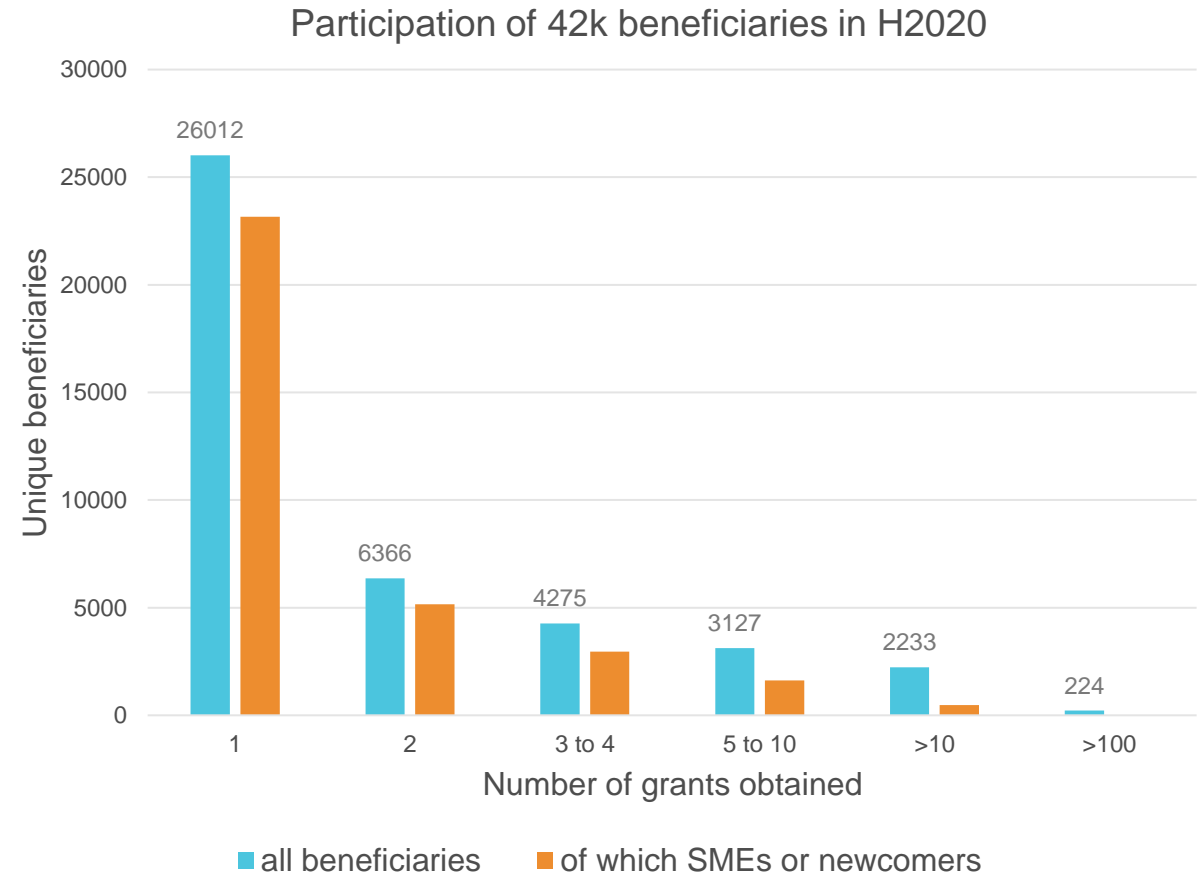
Destination	N. topics
D1	4
D2	11
D3	10
D4	2
D5	6
D6	4
D7	19

Why do we use lump sum funding?

Significant simplification potential

Easier access to the programme

- Very small share of beneficiaries have more than 100 grants:
 - Large entities
 - Dedicated staff and procedures to deal with actual costs
- Vast majority of beneficiaries have only 1 or 2 grants per programme
 - Most of them SMEs or newcomers
 - Little or no previous experience
 - Need a simple funding model



Basic principles

- **Lump sum grants follow the standard approach as much as possible**
same: templates, evaluation criteria, payment scheme, technical reporting
- **One lump sum share per work package and beneficiary**
- **Very simple financial reporting**
- **Lump sum shares paid upon completion of work packages**

	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8	Total
Beneficiary A	250.000			50.000	300.000	250.000		300.000	1.150.000
Beneficiary B		250.000	350.000	50.000			100.000	150.000	900.000
Beneficiary C	100.000	100.000		50.000		280.000			530.000
Beneficiary D		120.000		50.000			100.000	150.000	420.000
Total	350.000	470.000	350.000	200.000	300.000	530.000	200.000	600.000	3.000.000

Shares of the lump sum per beneficiary

Share of the lump sum per WP

Lump sum = Maximum grant amount

Evaluation of a lump sum proposal

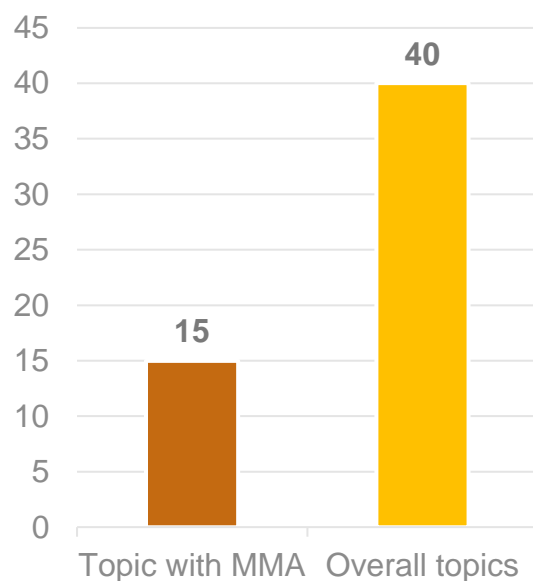
- Your proposal will be evaluated by independent experts against the **standard evaluation criteria**: excellence, impact, and implementation.
- The cost estimations will be assessed against the proposed activities under the **implementation** criterion.
- Experts will:
 - ensure that the cost estimations are **reasonable and non-excessive**
 - evaluate whether the proposed resources and the split of the lump sum **allow completing the activities described in the proposal**.
- If the experts find overestimated costs, they make **concrete recommendations** on the budget that are recorded in the Evaluation Summary Report. This will be reflected in a modified lump sum amount in the grant agreement.
- Cost estimations that are clearly overestimated or underestimated lead to a **decreased score** under the implementation criterion.



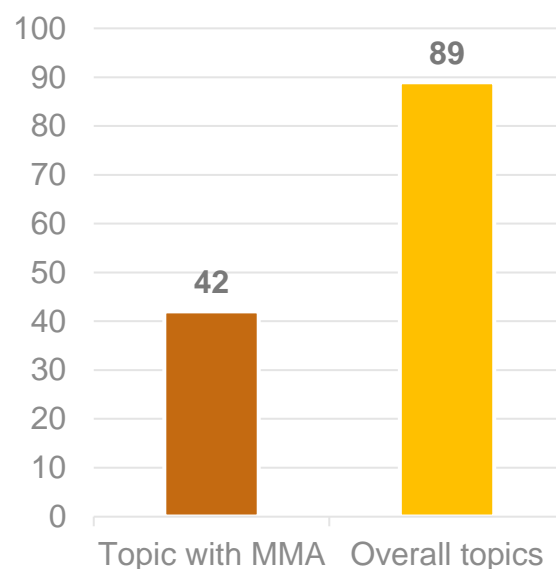
Cross-cutting issues: Multi-Actor Approach

- The Multi-Actor Approach (MMA) is required by 82 out of 176 topics (47%)
 - 37,5% of IAs, 47% of RIAs, 59% of CSAs + 2 Co-funded partnerships require MMA

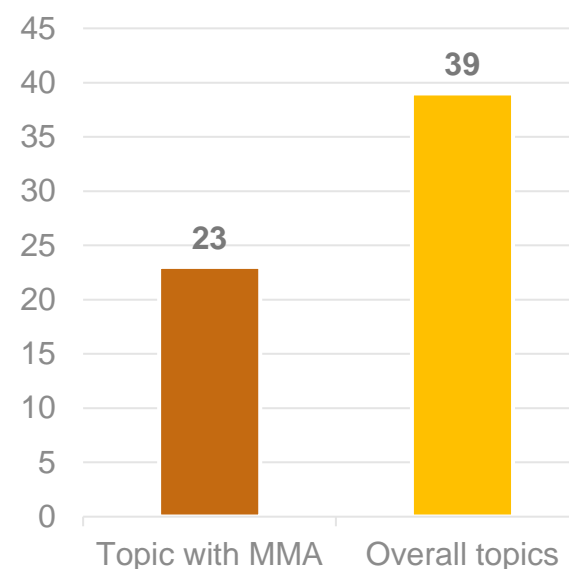
IAs



RIAs



CSAs



Destinations	N. topics
D1	8
D2	27
D3	9
D4	3
D5	7
D6	7
D7	21



Focus on the 'Multi-Actor Approach' (MAA)

- **Eligibility criterion** and an integral part of the topic text (i.e., it applies to 41% of 2023 CL6 topics)
- Makes R&I outcomes more **demand-driven**, reliable and **relevant to society**
- **Genuine and sufficient involvement of a targeted array of actors** (i.e., end-users of the project results), **all over the whole course of the project** ensuring real co-creation
- **End-users/practioners** are to be involved, not as a study-object, but to use their practical and local knowledge and/or entrepreneurial skills to develop solutions and create '**co-ownership**' of results
- The project concept and composition of the consortium must reflect a balanced choice of **key relevant actors with complementary knowledge, able to ensure broad implementation**



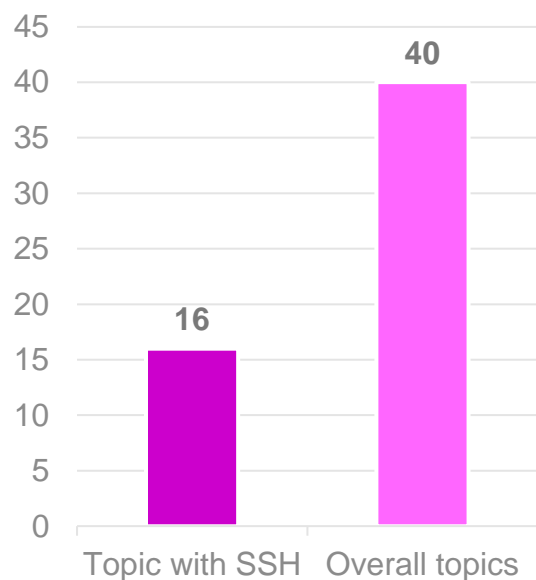


Cross-cutting issues: Social Science and Humanities (SSH)

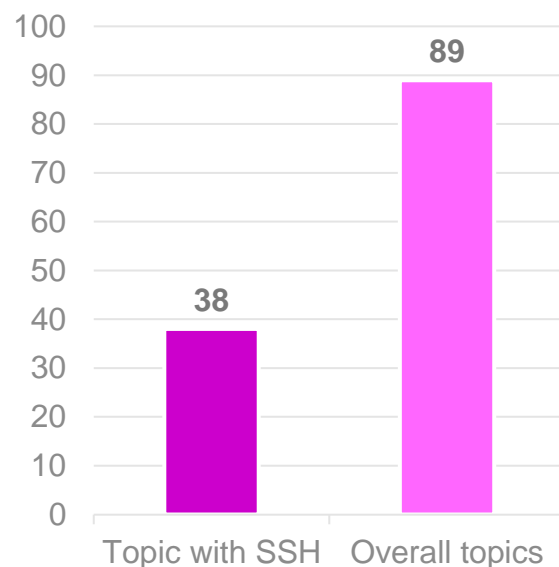


- The integration of Social Sciences and Humanities (SSH) is foreseen in 71 out of 176 topics (40%)
 - 40% of IAs, 43% of RIAs, 33% of CSAs + 4 Co-fund
 - **Most used sentence in CL6:** 'This topic should involve the effective contribution of SSH disciplines'

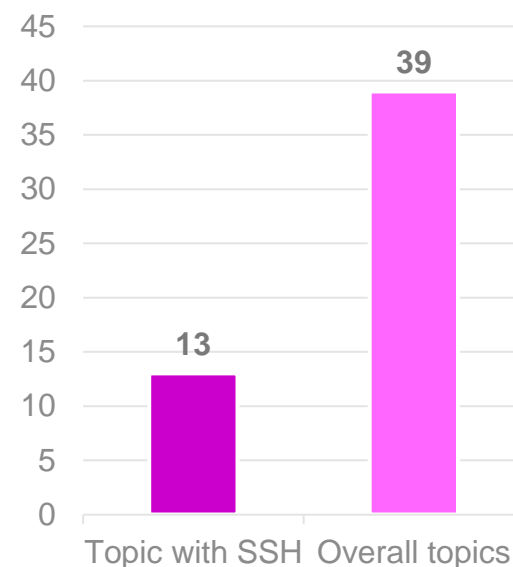
IAs



RIAs



CSAs



Destination	N. topics
D1	11
D2	6
D3	1
D4	2
D5	-
D6	6
D7	5



Social Sciences & Humanities in Cluster 6



- When SSH are the **main focus of a topic**, the **standard sentence** is used, i.e. *‘This topic requires the effective contribution of social sciences and humanities (SSH) disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research/innovation activities’*, thereby putting a **specific requirement for SSH expertise** in the consortium to be presented in section 3.2 of the implementation part of the proposal (in addition to the integration of SSH in the scientific methodology).
- ➡ • When in the scope of a topic it is specified that *‘This topic should involve the effective contribution of social sciences and humanities (SSH) disciplines’*, an effective contribution from SSH is also expected, like any other elements preceded in the scope by the verb “should”. Proposals not having SSH involved, under topics with this sentence may be considered admissible but risk being penalised since **SSH will be part of the scientific methodology assessed under the ‘excellence’ criterion**.

Opening date & deadlines of 2023 calls



WP adoption: **6 December 2022** / publication date: **7 December 2022** / calls opening date: **22 December 2022**

Deadlines	Call(s)
23 March 2023	GOVERNANCE-01
28 March 2023	BIODIV-01, CIRCBIO-01, CIRCBIO-02 (1 st stage), ZEROPOLLUTION-01 and ZEROPOLLUTION-02 (1 st stage)
12 April 2023	FARM2FORK-01, CLIMATE-01 and COMMUNITIES-01
26 September 2023	CIRCBIO-02 (2 nd stage) and ZEROPOLLUTION-02 (2 nd stage)

Opening date & deadlines of 2024 calls



17 October 2023 will be the opening date of all calls

Deadlines	Call(s)
21 February 2024	ZEROPOLLUTION-02 (1 st stage)
22 February 2024	BIODIV-01, BIODIV-02 (1 st stage), FARM2FORK-01, FARM2FORK-02 (1 st stage), CIRCBIO-01, CIRCBIO-02 (1 st stage), ZEROPOLLUTION-01, CLIMATE-01, COMMUNITIES-01 and COMMUNITIES-02 (1 st stage)
28 February 2024	GOVERNANCE-01
17 September 2024	BIODIV-02 (2 nd stage), FARM2FORK-02 (2 nd stage), CIRCBIO-02 (2 nd stage), ZEROPOLLUTION-02 (2 nd stage) and COMMUNITIES-02 (2 nd stage)

DESTINATION 1 – BIODIVERSITY AND ECOSYSTEMS SERVICES

Topics thematically grouped under 6 headings

Expected impacts

- Direct **drivers of biodiversity decline** will be **understood** and **addressed**
- **Protected areas** and their networks will be **planned, managed** and **expanded** and the **status of species** and **habitats** will be improved
- Biodiversity, ecosystem services and natural capital will be **mainstreamed** in the **society** and **economy**
- **Practices** in **agriculture, forestry, fisheries and aquaculture** will be **developed and improved**
- **Biodiversity research** and **support policies and processes** will be **interconnected**
- **Biodiversity and health nexus** will be understood (especially at the level of ecosystems)



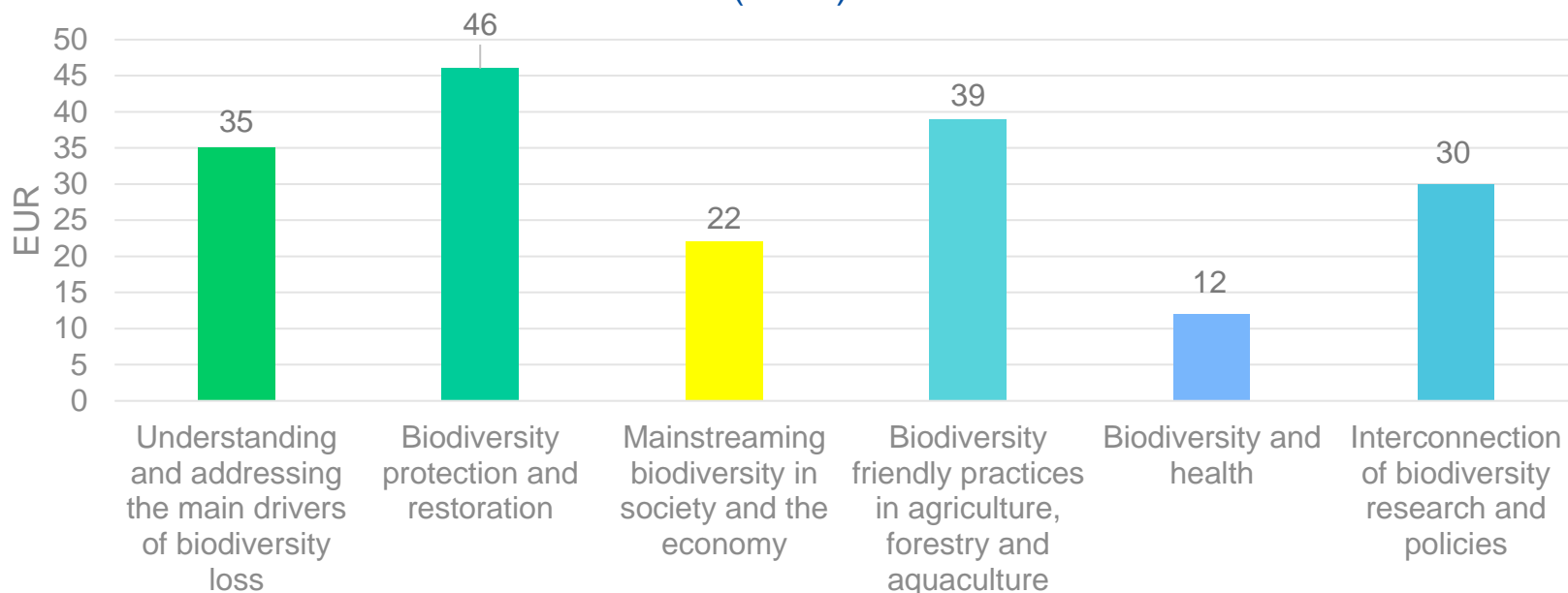
HORIZON-CL6-2023-BIODIV-01



Call data:

- Opening: **22 December 2022**
- Deadline: **28 March 2023**
- Number of topics: **18**, of which **12 RIAs** (Research & Innovation Actions), **2 IAs** (Innovation Action), **3 CSAs** (Coordination and Support Actions) and 1 **COFUND** (Co-funded Partnership)
- Number of projects expected to be funded: **30**

Call budget **BIODIV-2023-01**– EUR 184 million (2023) + 30 million (2024)



DESTINATION 2 – FAIR, HEALTHY, AND ENVIRONMENT-FRIENDLY FOOD SYSTEMS FROM PRIMARY PRODUCTION TO CONSUMPTION

Topics thematically grouped under 4 headings

Expected impacts

- **Sustainable, productive, climate-neutral and resilient farming systems** providing consumers with affordable, safe, traceable healthy and sustainable food, while minimising pressure on ecosystems, restoring and enhancing biodiversity, improving public health and generating fair economic returns for farmers;
- Sustainable **fisheries and aquaculture** increasing aquatic biomass production, diversification and consumption of seafood products for fair, healthy, climate-resilient and environment-friendly food systems with low impact on aquatic ecosystems and high animal welfare; and
- **Sustainable, healthy and inclusive food systems** delivering co-benefits for climate mitigation and adaptation, environmental sustainability and circularity, sustainable healthy nutrition, safe food consumption, food poverty reduction, the inclusion of marginalised people, the empowerment of communities, and flourishing businesses



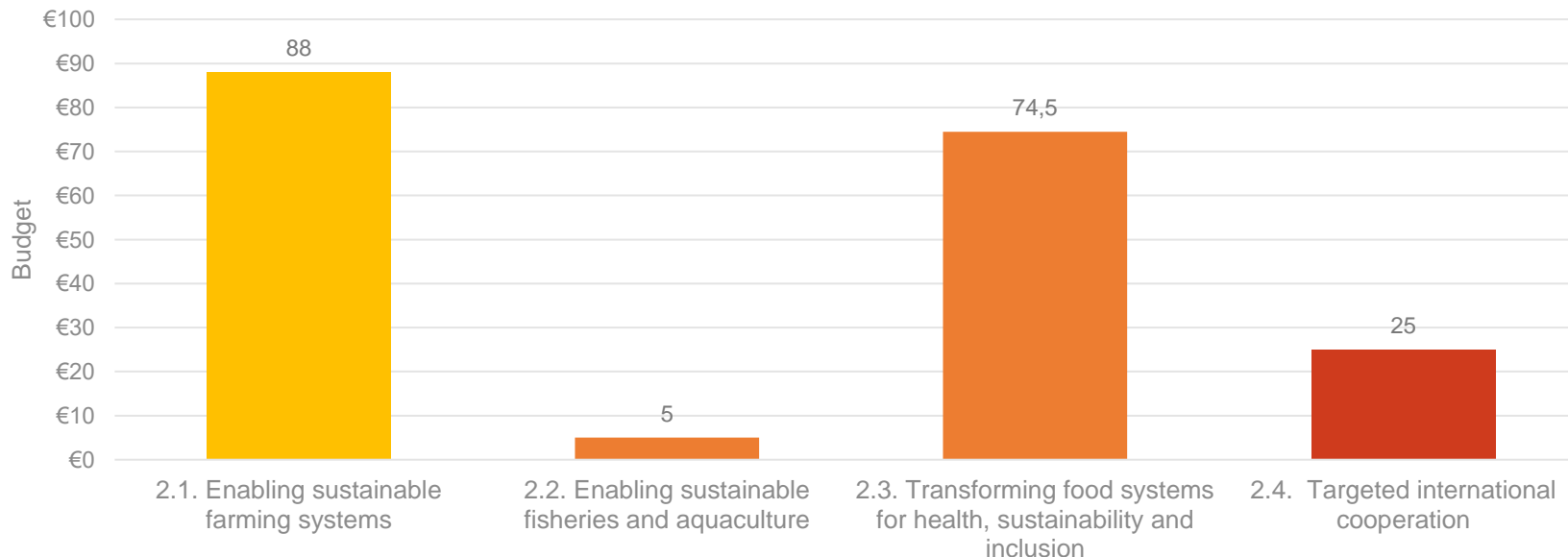
HORIZON-CL6-2023-FARM2FORK-01



Call data:

- Opening: **22 December 2022**
- Deadline: **12 April 2023**
- Number of topics: **22**, of which **9 RIAs** (Research & Innovation Actions), **4 IAs** (Innovation Action), **6 CSAs** (Coordination and Support Actions) and **3 COFUND** (Co-funded Partnerships)
- Number of projects expected to be funded: **27**

Call budget **FARM2FORK-2023-01**: EUR 196.5 million (2023) + 92.5 million (2024)



DESTINATION 3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS



Expected impacts

- **Regional, rural, local/urban and consumer-based transitions towards a sustainable, regenerative, inclusive and just circular economy and bioeconomy** across all regions of Europe based on enhanced knowledge and understanding of science;
- European **industrial sustainability, competitiveness and resource independence** by lowering the use of primary non-renewable raw materials and reducing greenhouse gas emissions and other negative environmental footprint;
- **Innovative and sustainable bio-based value-chains**, replacing fossil-based value chains and increasing circular bio-based systems from sustainably sourced biological resources
- **Improved consumer and citizen benefits**;
- **Multi-functionality and management of forests** in Europe based on the three pillars of sustainability (economic, environmental and social);
- **Enlarged potential of marine and freshwater biological resources and blue biotechnology** to deliver greener (climate-neutral circular) industrial products and processes, and to help characterise, monitor and sustain the health of aquatic ecosystems for a healthy planet and people.

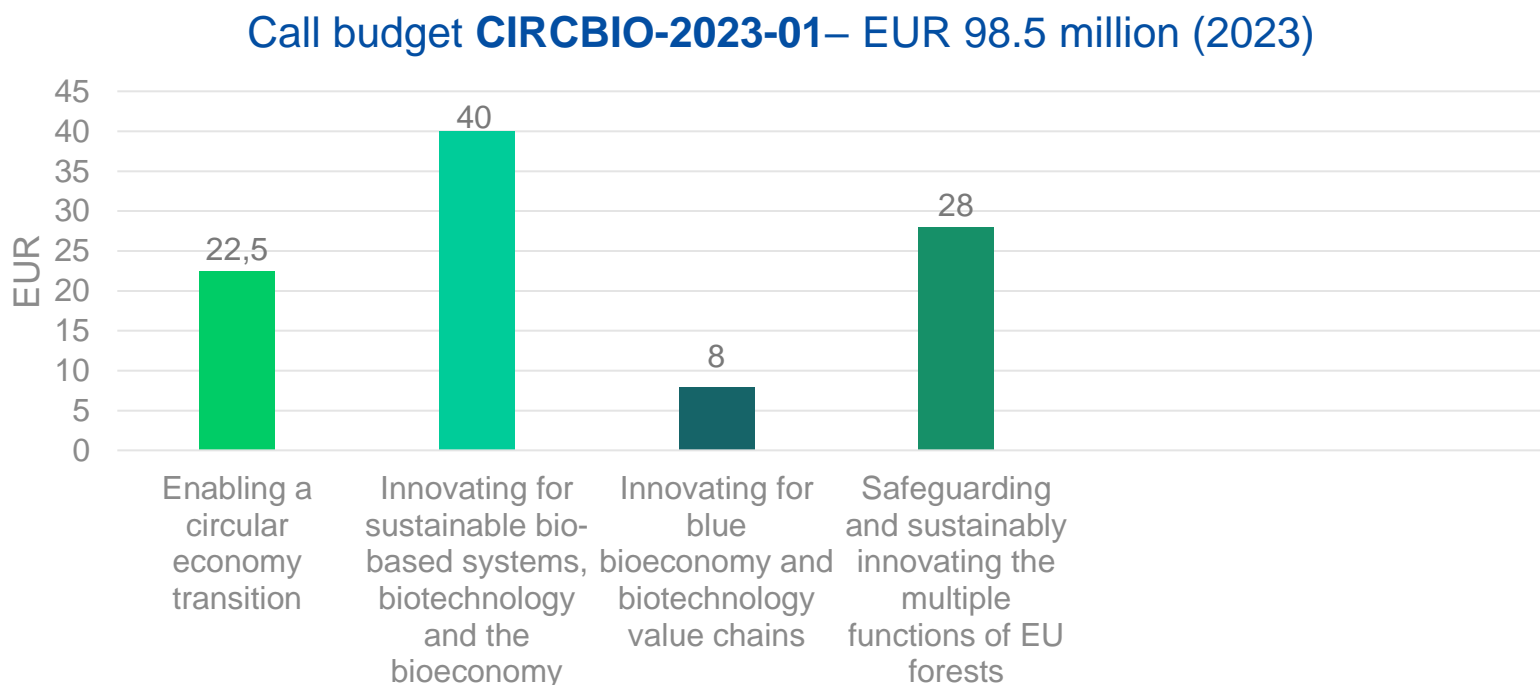
Topics thematically grouped under 4 headings

HORIZON-CL6-2023-CIRCBIO-01



Call data:

- Opening: **22 December 2022**
- Deadline: **28 March 2023**
- Number of topics: **14**, of which **6 RIAs** (Research & Innovation Actions), **4 IAs** (Innovation Action), **5 CSAs** (Coordination and Support Actions)
- Number of projects expected to be funded: **18**

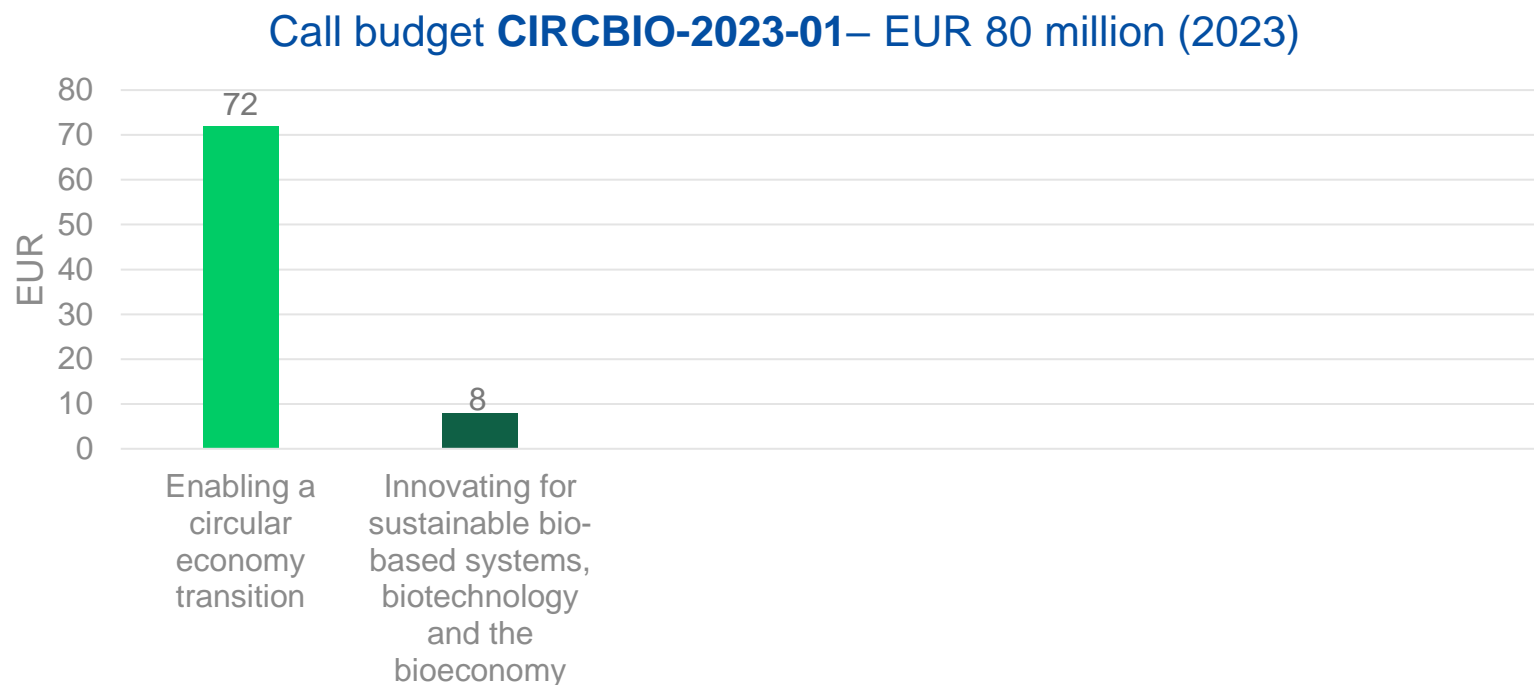


HORIZON-CL6-2023-CIRCBIO-02



Call data:

- Opening: **22 December 2022**
- Deadlines: **28 March 2023 (first stage) + 26 September 2023 (second stage)**
- Number of topics: **3**, of which **1 RIAs** (Research & Innovation Actions), **2 IAs** (Innovation Action)
- Number of projects expected to be funded: **10**



DESTINATION 4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

Expected impacts

- Move towards achieving clean, unpolluted surface water and groundwater bodies by advancing the understanding of diffuse and point sources of **water pollution in a global and climate change context**, enabling novel solutions to avoid degradation and restore water bodies, aquatic ecosystems and soil functionality, and further improve the quality and management of water for safe human and ecological use, while strengthening EU & Associated Countries' positions and roles in the global water scene.
- Balanced **N/P flows** within safe ecological boundaries at regional and local level, helping ecosystems.
- Move towards **clean, unpolluted oceans and seas**, including in the Arctic, by means of successful scientific, technological, behavioural, social-economic, demographic, governance and green-blue transitions.
- **Strengthen circular bio-based systems** to operate within planetary boundaries, replacing fossil-based systems and their carbon footprint, mitigating climate change, restoring biodiversity and protecting air, water and soil quality along supply chain of biological feedstocks and industrial value chains
- **Substitute harmful chemicals** for safer and more sustainable alternatives, notably by boosting innovative biotechnology and other sustainable technologies to create zero-pollution bio-based solutions.
- **Reduce the environmental impact of food systems**, e.g., by increasing knowledge of environmental and climate impacts from food systems and reducing pollution from plastic food packaging.



Topics thematically grouped under 5 headings

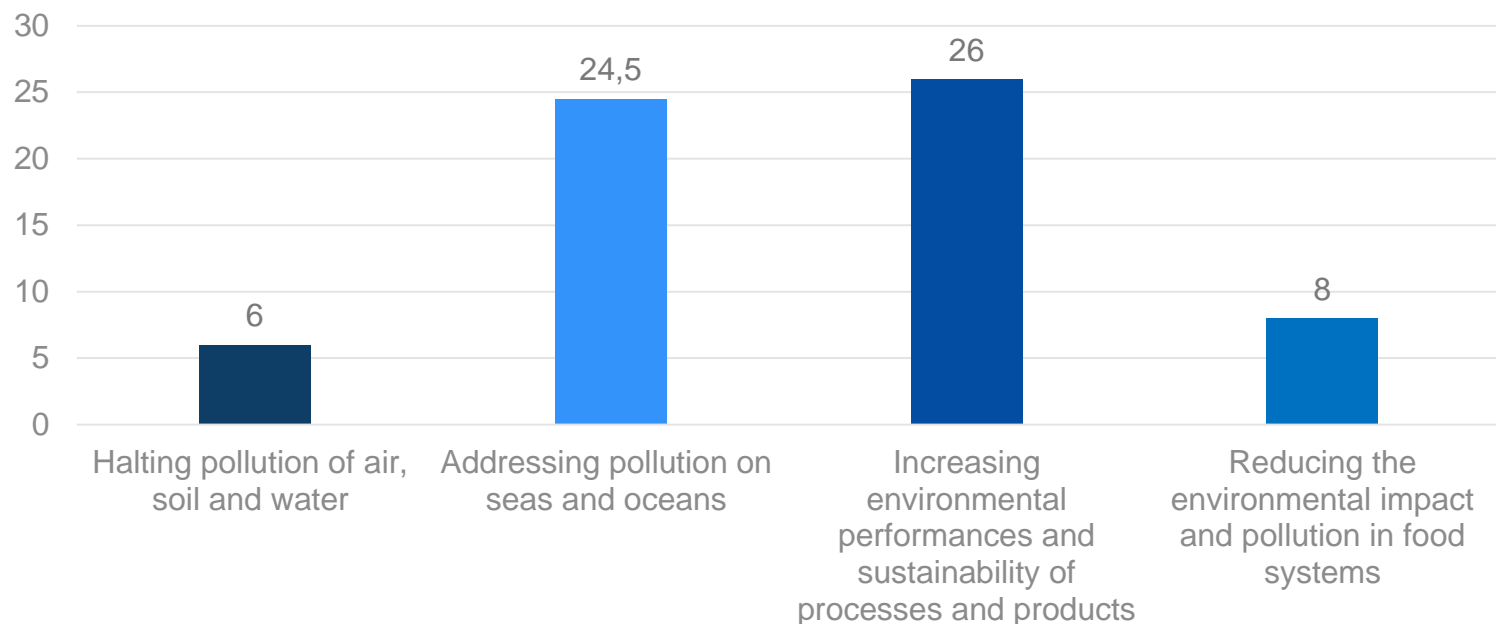
HORIZON-CL6-2023-ZEROPOLLUTION-01



Call data:

- Opening: **22 December 2022**
- Deadline: **28 March 2023**
- Number of topics: **7**, of which **6 RIAs** (Research & Innovation Actions), **1 IA** (Innovation Action)
- Number of projects expected to be funded: **13**

Call budget **2023-ZEROPOLLUTION-01**: EUR 64.5 million
(2023)

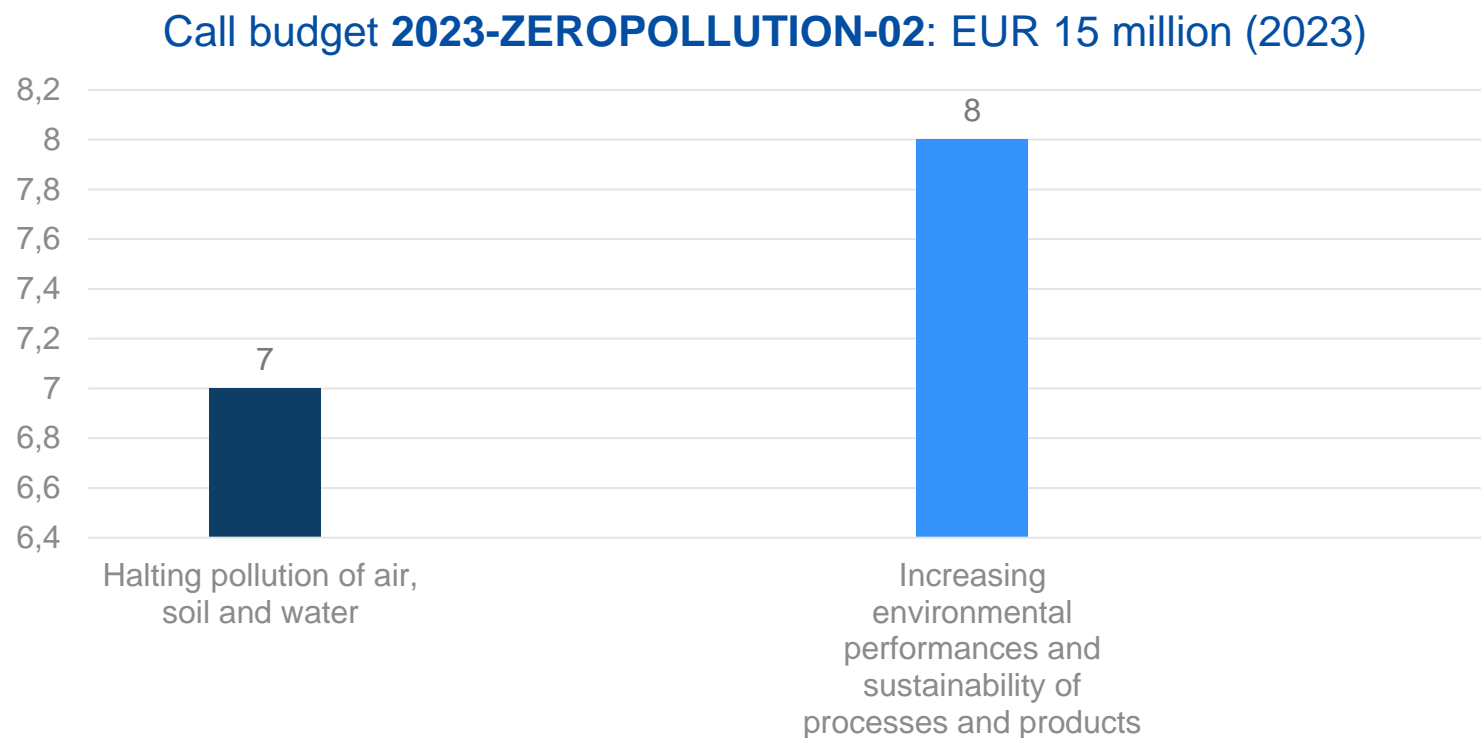


HORIZON-CL6-2023-ZEROPOLLUTION-02



Call data:

- Opening: **22 December 2022**
- Deadline: **28 March 2023 (first stage) + 26 September 2023 (second stage)**
- Number of topics: **2**, both **RIAs** (Research & Innovation Actions)
- Number of projects expected to be funded: **3**



DESTINATION 5 – LAND, OCEAN AND WATER FOR CLIMATE ACTION

No headings under this Destination



Expected impacts

- Better understanding and enhancing the **mitigation potential of ecosystems and sectors** based on the sustainable management of natural resources;
- Advanced understanding and science to support **adaptation and resilience** of natural and managed ecosystems, water and soil systems and economic sectors in the context of the changing climate;
- Efficient monitoring, assessment and projections related to climate change impacts, **mitigation and adaptation potential** in order to bring out solutions for **tackling emerging threats** and support decision-making in climate change mitigation and adaptation policies at European and global levels;
- Fostered **climate change mitigation in the primary sector**, including by the **reduction of GHG emissions**, maintenance of **natural carbon sinks** and enhancement of sequestration and storage of carbon in ecosystems;
- Improved **adaptive capacity of water and soil systems** and sectors including by unlocking the potential of **nature-based solutions**;
- Better managed scarce resources, in particular soils and water, thus **mitigating climate related risks, in particular desertification and erosion**, thanks to informed decision-makers and stakeholders and integration of adaptation measures in relevant EU policies.

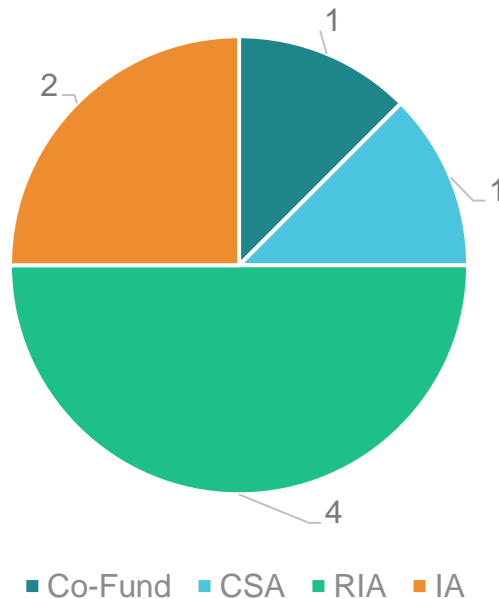
HORIZON-CL6-2023-CLIMATE-01



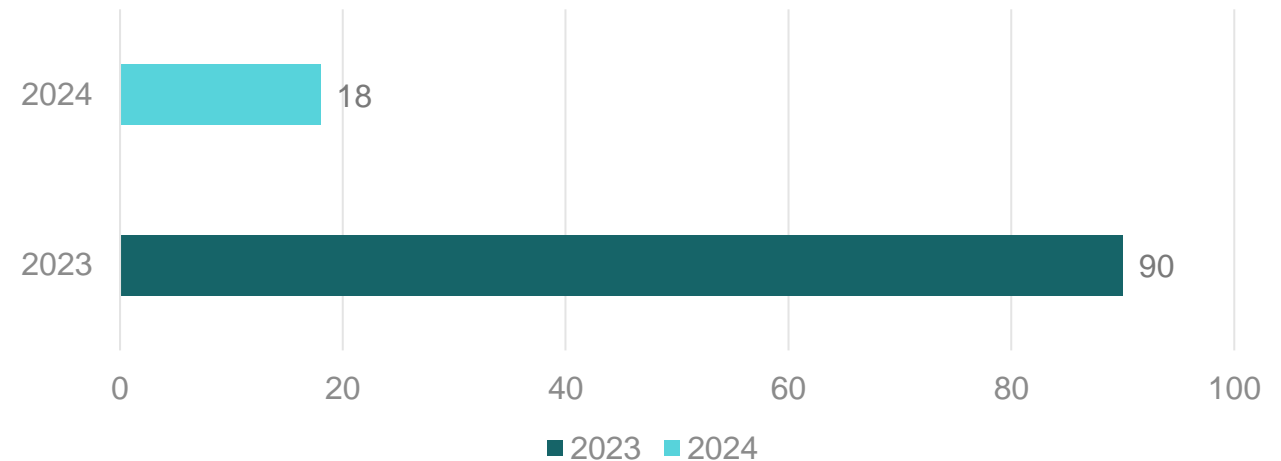
Call data:

- Opening: **22 December 2022**
- Deadline: **12 April 2023**
- Number of topics: **8**, of which **1 COFUND** (Co-funded partnership), **1 CSA** (Coordination & support action), **4 RIAs** (Research & Innovation Actions), **2 IA** (Innovation Actions),
- Number of projects expected to be funded: **13**

Type of Action



Call budget 2023-CLIMATE-01: EUR 90 million (2023) + 18 million (2024)



DESTINATION 6 – RESILIENT, INCLUSIVE, HEALTHY AND GREEN RURAL, COASTAL AND URBAN COMMUNITIES

Expected impacts

- Rural, coastal and urban areas are developed in a **sustainable, balanced, equitable and inclusive manner**.
- Rural, coastal and urban communities are empowered to **act for change**, be better prepared to achieve climate-neutrality and adapt to climate change, and use the digital and green transitions to increase resilience and provide positive long-term prospects.
- Rural communities are equipped with upgraded **innovation ecosystems and innovative and smarter circular solutions** that increase access to services and job opportunities, increase their attractiveness and reduce the feeling of being left behind.
- **Sustainable development of coastal areas**, including coastal protection and resilience, is enhanced, reaping the benefits of **social, digital and community-led innovations**.
- **Urban and peri-urban communities** – including people in vulnerable situations – can access, afford and choose healthy, nutritious and **environmental-friendly food**.

No headings under this Destination



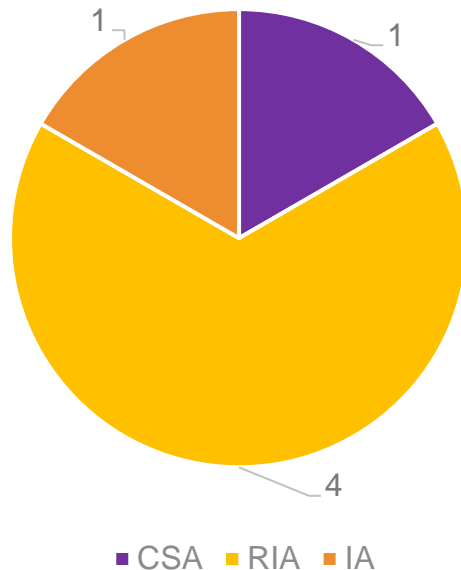
HORIZON-CL6-2023-COMMUNITIES-01



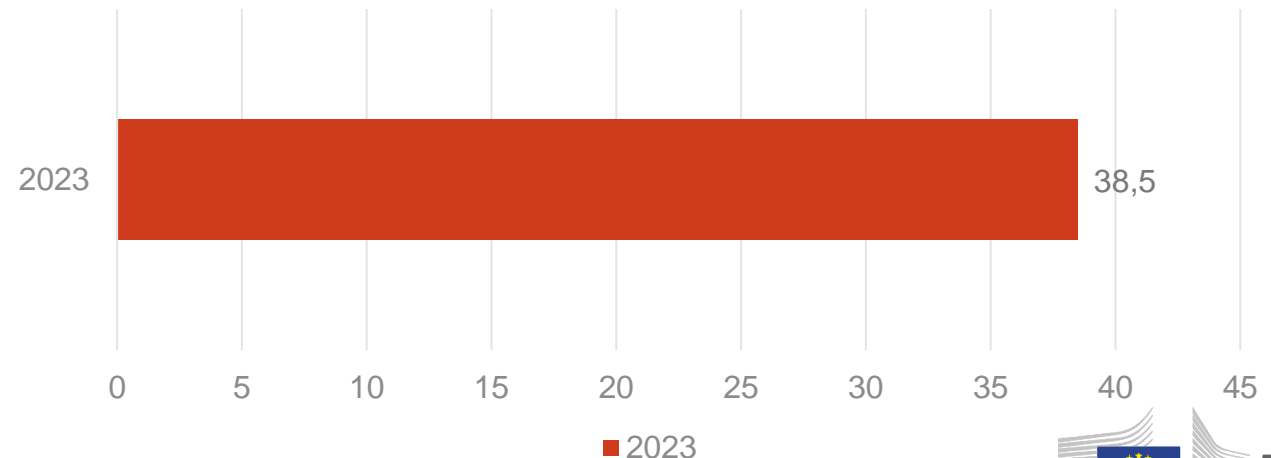
Call data:

- Opening: **22 December 2022**
- Deadline: **12 April 2023**
- Number of topics: **6**, of which **1 CSA** (Coordination & support action), **4 RIAs** (Research & Innovation Actions), **1 IA** (Innovation Actions),
- Number of projects expected to be funded: **8**

Type of Action



Call budget **2023-CLIMATE-01**: EUR 38.5 million (2023)



DESTINATION 7 – INNOVATIVE GOVERNANCE, ENVIRONMENTAL OBSERVATIONS AND DIGITAL SOLUTIONS IN SUPPORT OF THE GREEN DEAL

Expected impacts

- Innovative governance models enabling sustainability and resilience notably to achieve **better informed decision-making processes, societal engagement and innovation**
- Areas related to the European Green Deal benefit from further **deployment and exploitation of Environmental Observation** data, products and “green” solutions
- A **strengthened Global Earth Observation System of Systems (GEOSS)**
- **Sustainability performance and competitiveness** in the areas covered by Cluster 6 are improved through further deployment of digital and data technologies as key enablers
- Stakeholders and end users including primary producers and consumers are better informed and engaged thanks to effective platforms such as **Agriculture Knowledge and Innovation Systems (AKIS)**;
- Strengthened EU and international science-policy interfaces to achieve the **Sustainable Development Goals**

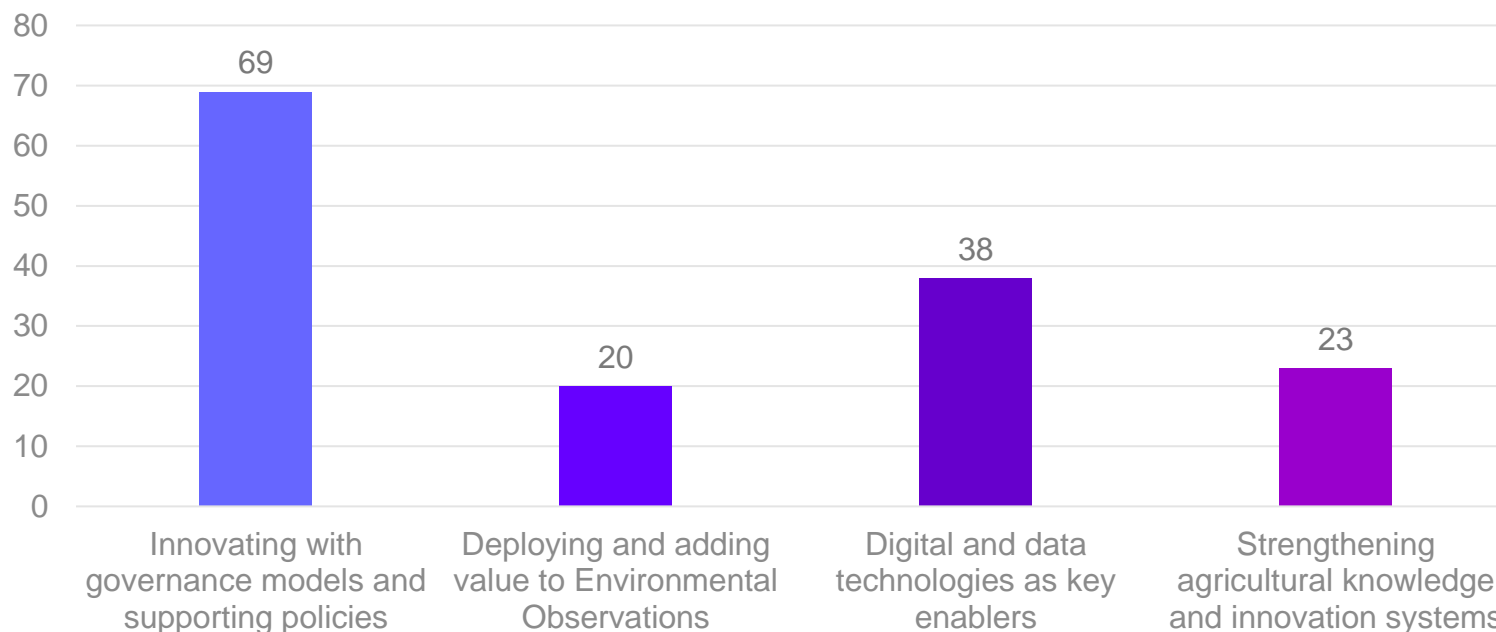
Topics thematically grouped under 4 headings

HORIZON-CL6-2023-GOVERNANCE-01

Call data:

- Opening: **22 December 2022**
- Deadline: **23 March 2023**
- Number of topics: **22**, of which **1 COFUND** (Co-funded partnership), **11 RIAs** (Research & Innovation Actions), **10 CSA** (Coordination & support action)
- Number of projects expected to be funded: **27**

Call budget **2023-GOVERNANCE-01**: EUR 130 million (2023) +
20 million (2024)





Thank you!

#HorizonEU

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