European Commission

#HorizonEU

THE EU RESEARCH & INNOVATION PROGRAMME

2021 – 2027

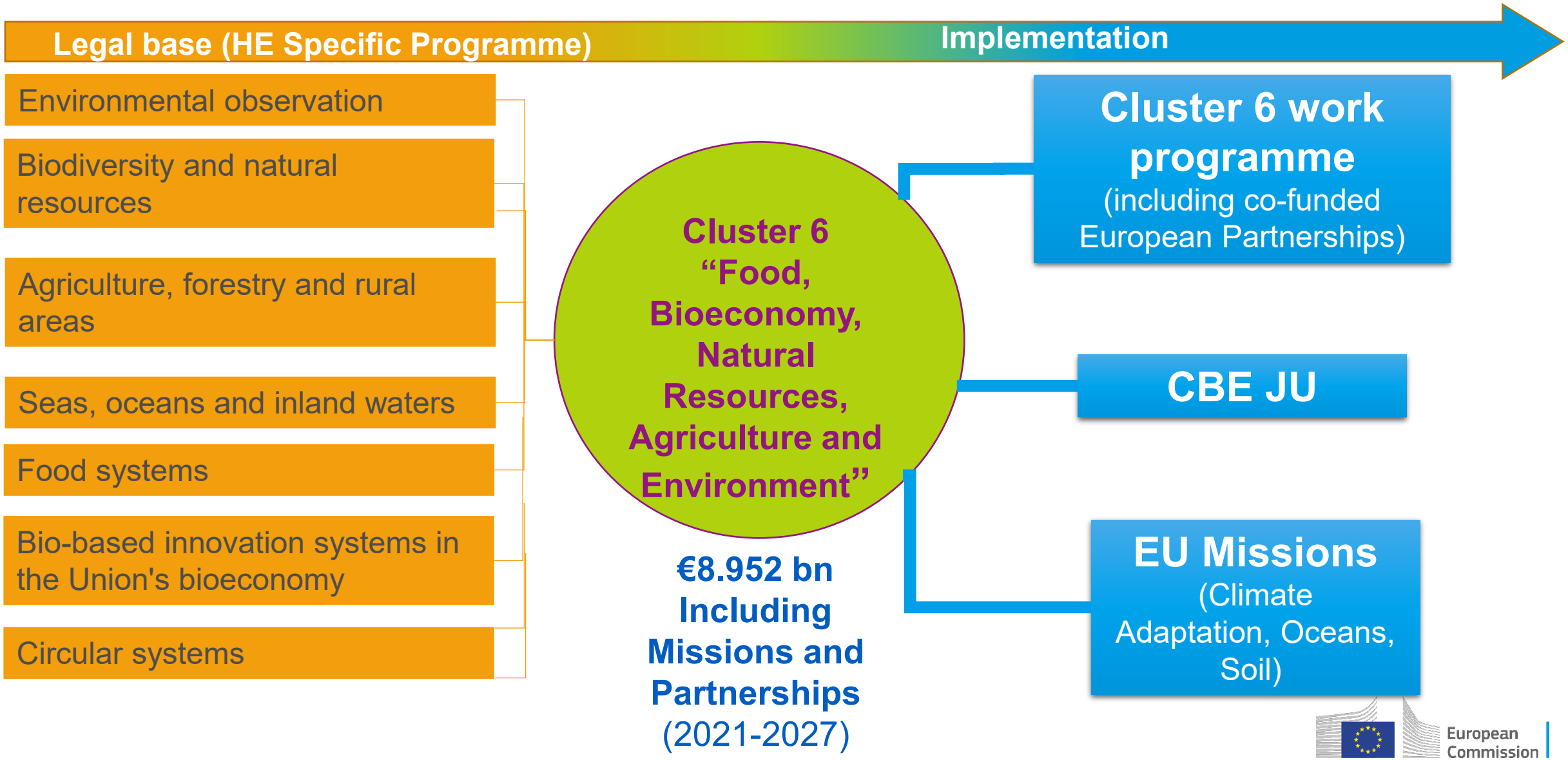
National Infoday on Horizon Europe
Cluster6 WP 2023-2024

Friday 27 January 2023

Davide AMATO – Deputy Head of Unit
European Commission
RTD C.5 “Ecological and Social Transitions”

Research and Innovation

Overview



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Cluster 6: from Expected Impacts to Destinations

Strategic Plan 2021-2024	Work Programmes 2021-2024	
Impact 1 Climate neutrality and adaptation to climate change	• **Destination 5:** Land, oceans and water for climate action	
Impact 2 Preservation and restoration of biodiversity and ecosystems	• **Destination 1:** Biodiversity and ecosystem services	
Impact 3 Sustainable and circular management of natural resources; tackling pollution; bioeconomy	• **Destination 3:** Circular economy and bioeconomy sectors • **Destination 4:** Clean environment and zero pollution	
Impact 4 Food and nutrition security for all from sustainable food systems from farm to fork	• **Destination 2:** Fair, healthy and environmentally-friendly food systems from primary production to consumption	
Impact 5 Balanced development of rural, coastal and urban areas	• **Destination 6:** Resilient, inclusive, healthy and green rural, coastal and urban communities	
Impact 6 Innovative governance models enabling sustainability, environmental observation	• **Destination 7:** Innovative governance, environmental observations and digital solutions in support of the Green Deal	

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

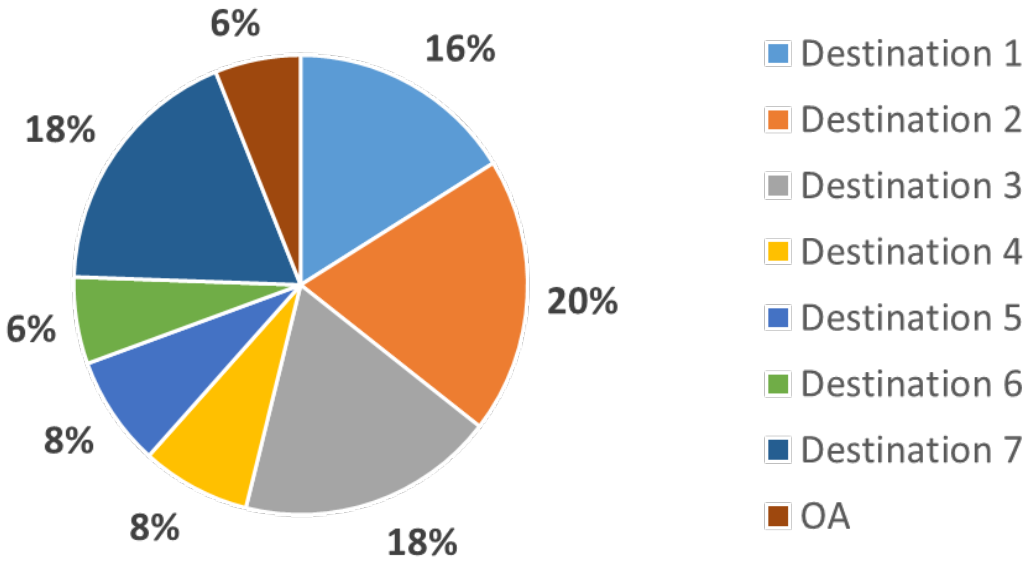
Agroecology, PAHW, Sustainable Food Systems & Agri of Data

To start with WP 2023-2024

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

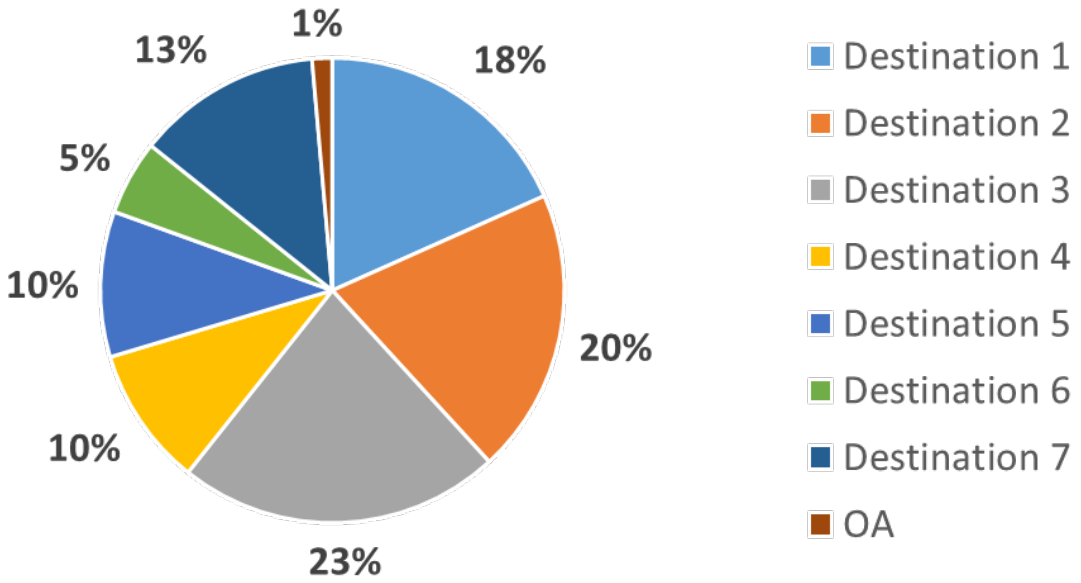


176 topics + 10 other actions non subject to call for proposals
BIODIV, FARM2FORK and GOVERNANCE gathering the most topics

Budget per Destination

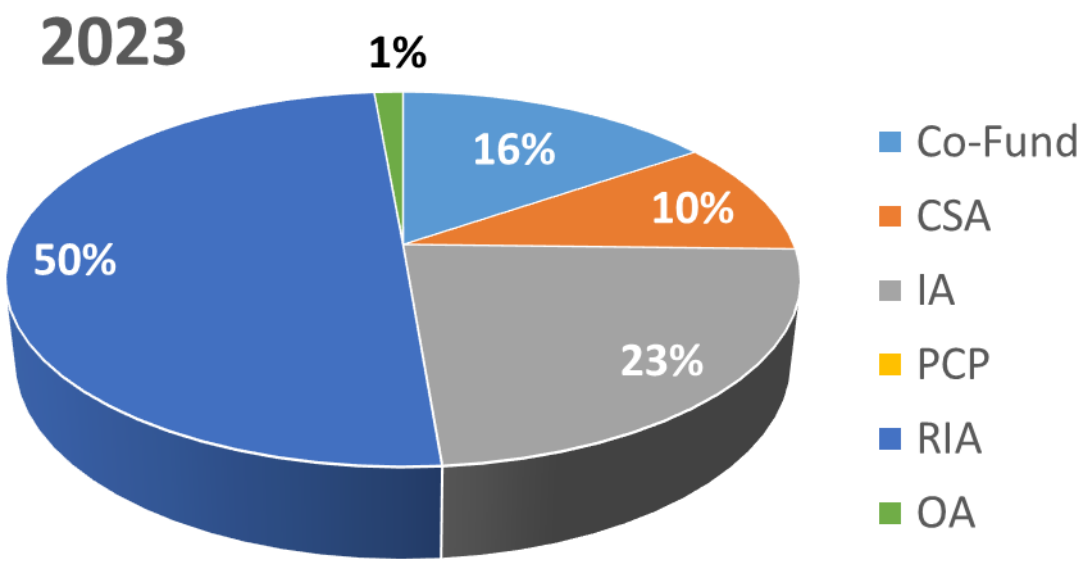
Destinations	Budget (*) [mln EUR]
1. Biodiversity and Ecosystem Services	266
2. Fair, healthy and environmentally-friendly food systems from primary production to consumption	288
3. Circular economy and bioeconomy sectors	327
4. Clean environment and zero pollution	141
5. Land, oceans and water for climate 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**

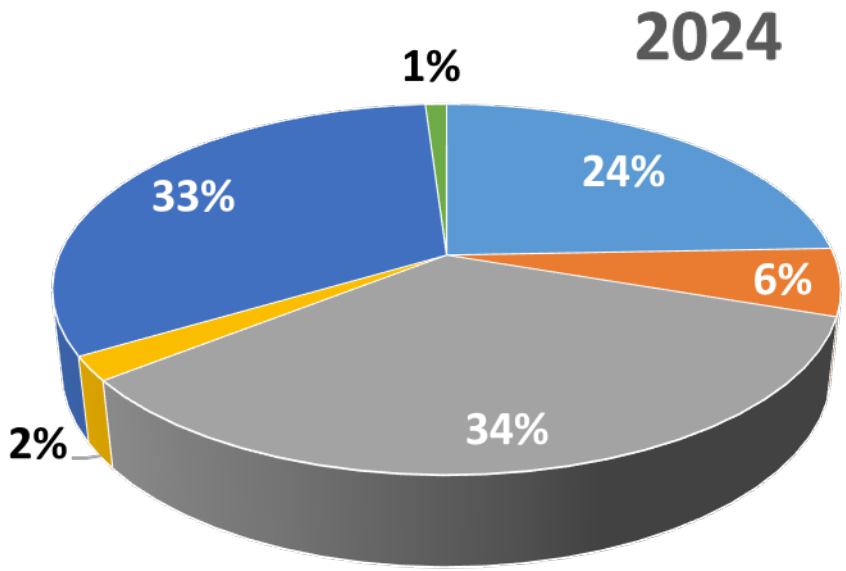
(*): Excluding the 7 Co-funded partnerships



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

Budget per Year and Type of Action



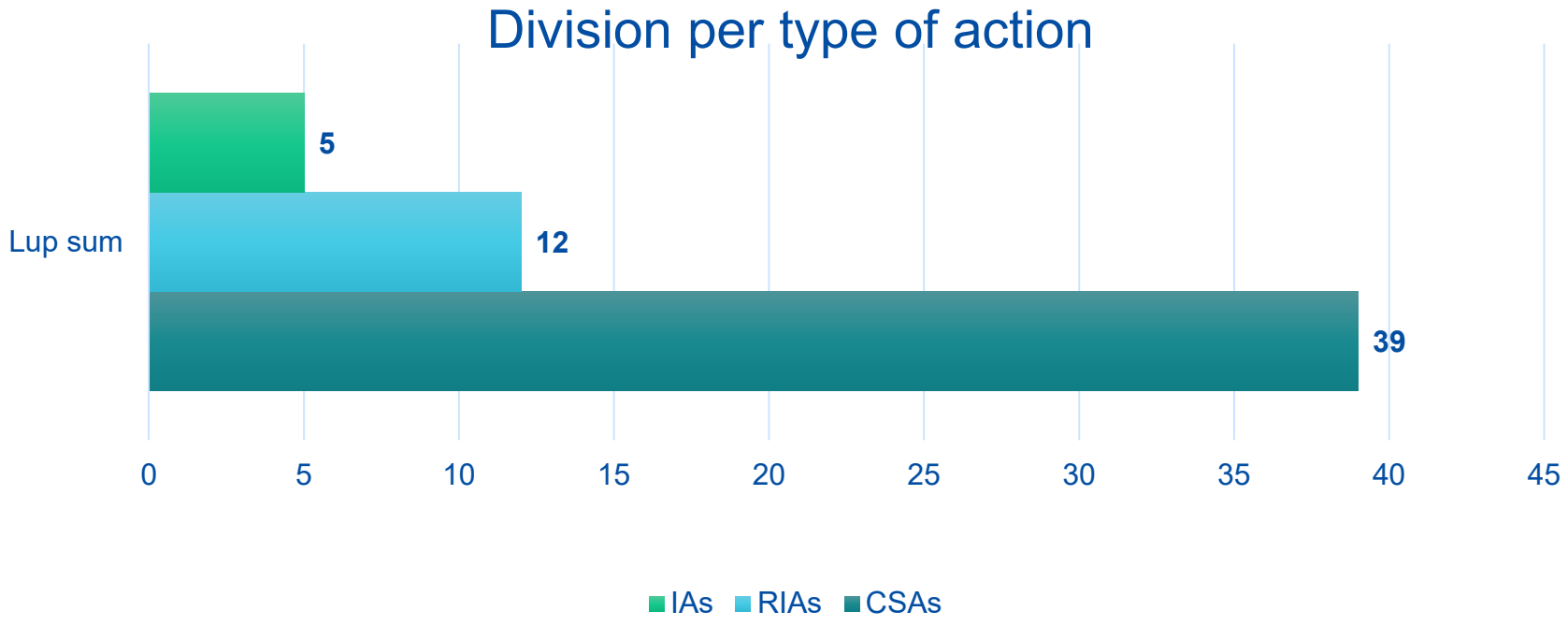


		2023		2024		Total
Co-Fund	€	140,5	€	220,5	€	361,0
CSA	€	90,5	€	53,0	€	143,5
IA	€	212,0	€	308,0	€	520,0
PCP			€	19,0	€	19,0
RIA	€	454,0	€	294,0	€	748,0
OA	€	12,7	€	9,4	€	22,1
Total	**€**	**909,7**	**€**	**903,9**	**€**	**1.813,6**

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

Lump sum topics

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



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

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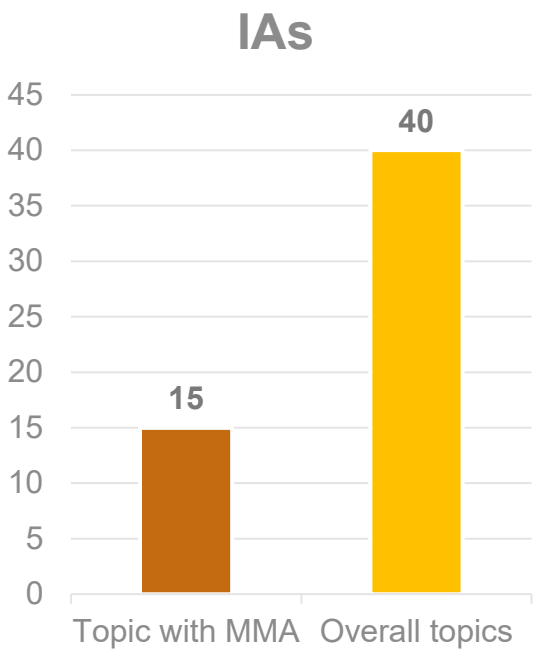
Fostering synergies in Cluster 6

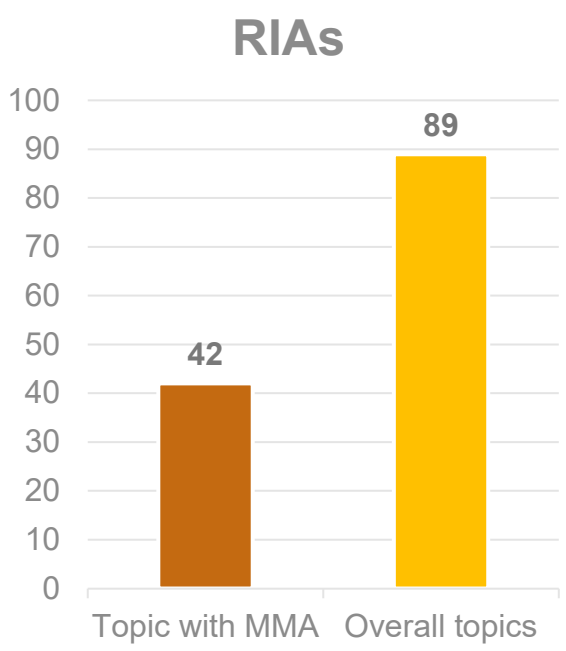
- Approach of the Commission: **'synergies by design'**
- In CL6 we pursue it in all phases of WP co-creation
- **Annex IV** Horizon Europe Regulation:
  - Requires seeking synergies with other EU programmes & funding instruments (e.g., LIFE, CAP, ERDF, EMFAF, Erasmus+, ESF, Innovation Fund, Just Transition Fund, Digital Europe etc.)

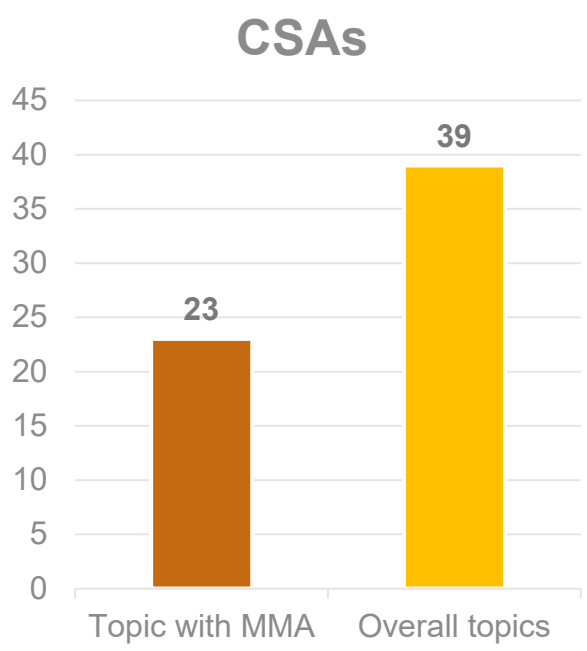
Factsheet on 'Boosting innovation through synergies with Horizon Europe'
http://bitly.ws/x3Sf

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







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

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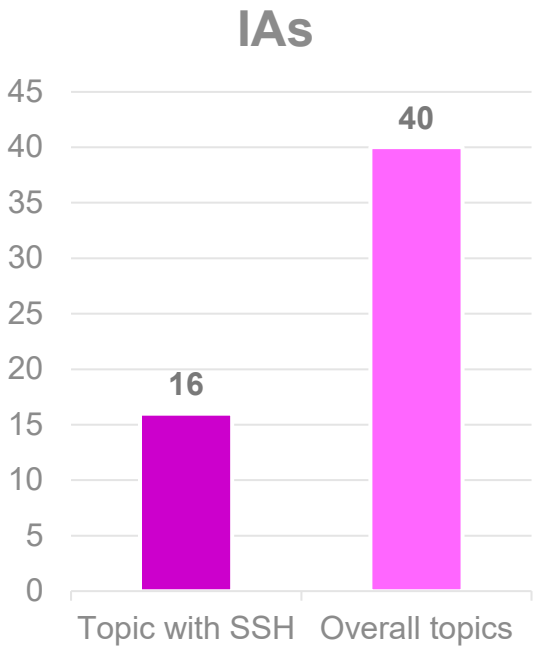
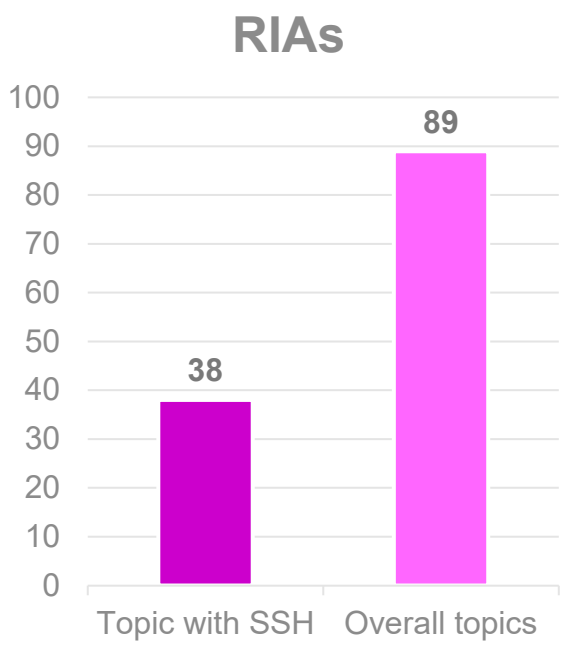
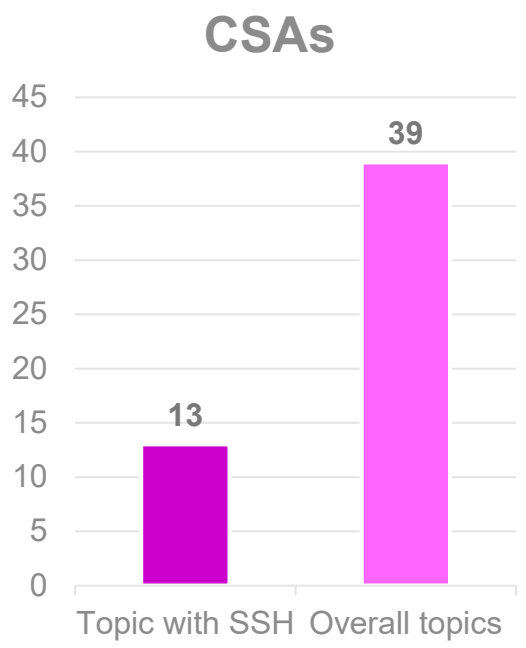
Cross-cutting issues: Social Science and Humanities (SSH)

- 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'







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

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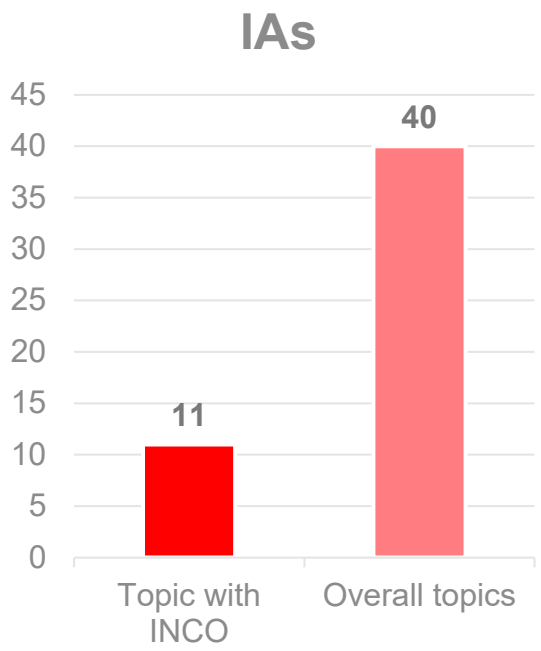
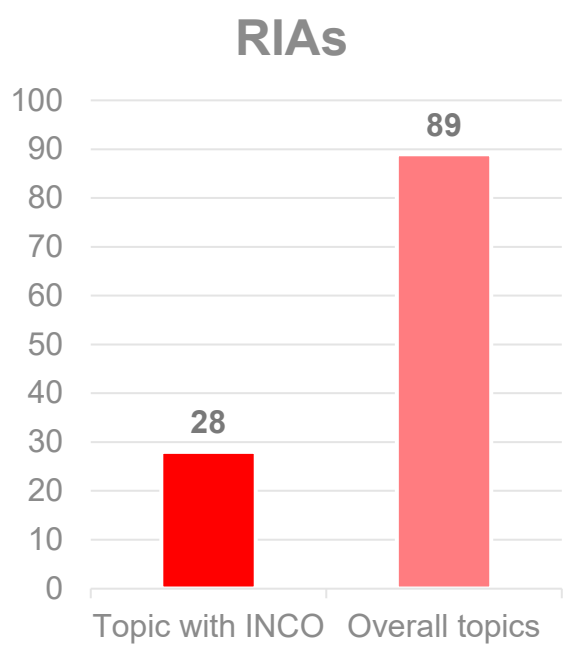
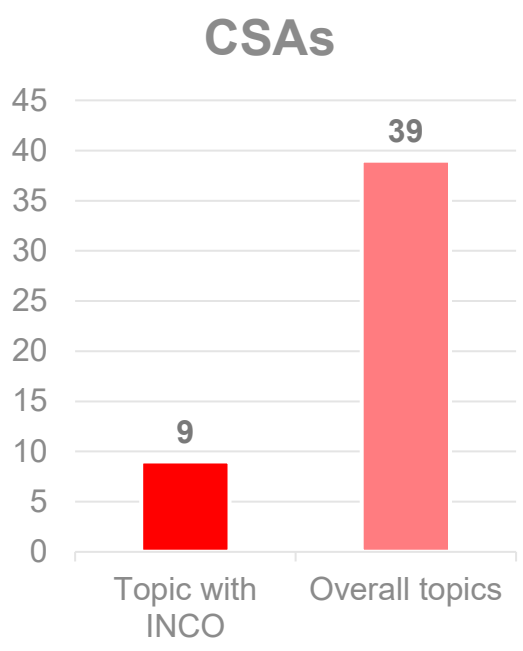
Cross-cutting issues: International Cooperation

- International cooperation is encouraged in 52 out of 176 topics (30%)
  - 27,5% of IAs, 31,5% of RIAs, 23% of CSAs + 4 Co-fund.
  - **Most used language**: 'In order to achieve the expected outcomes of this topic, international cooperation is (strongly) encouraged'.







Destinations	N. topics
D1	12
D2	13
D3	6
D4	6
D5	4
D6	3
D7	8

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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)

18 topics, **30** expected projects: **12 RIAs** (Research & Innovation Actions), **2 IAs** (Innovation Action), **3 CSAs** (Coordination and Support Actions) and **1 COFUND** (Co-funded Partnership)

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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

22 topics, **27** expected projects: **9 RIAs** (Research & Innovation Actions), **4 IAs** (Innovation Action), **6 CSAs** (Coordination and Support Actions) and **3 COFUND** (Co-funded Partnership)

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DESTINATION 3 – CIRCULAR ECONOMY AND BIOECONOMY SECTORS

Topics thematically grouped under 4 headings

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.

17 topics, **28** expected projects: **7 RIAs** (Research & Innovation Actions), **6 IAs** (Innovation Action), **5 CSAs** (Coordination and Support Actions)

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DESTINATION 4 – CLEAN ENVIRONMENT AND ZERO POLLUTION

Expected impacts

Topics thematically grouped under 5 headings

- 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.

9 topics, **16** expected projects: **8 RIAs** (Research & Innovation Actions), **1 IAs** (Innovation Action),

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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.

8 topics, **13** expected projects: **4 RIAs** (Research & Innovation Actions), **2 IAs** (Innovation Action), **1 CSAs** (Coordination and Support Actions) and **1 COFUND** (Co-funded Partnership)

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

No headings under this Destination

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**.

6 topics, **8** expected projects: **4 RIAs** (Research & Innovation Actions), **1 IAs** (Innovation Action), **1 CSAs** (Coordination and Support Actions)

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

Topics thematically grouped under 4 headings

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**

22 topics, **27** expected projects: **11 RIAs** (Research & Innovation Actions), **10 CSAs** (Coordination and Support Actions)

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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 (1st stage), ZEROPOLLUTION-01 and ZEROPOLLUTION-02 (1st stage)
12 April 2023	FARM2FORK-01, CLIMATE-01 and COMMUNITIES-01
26 September 2023	CIRCBIO-02 (2nd stage) and ZEROPOLLUTION-02 (2nd 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 (1st stage)
22 February 2024	BIODIV-01, BIODIV-02 (1st stage), FARM2FORK-01, FARM2FORK-02 (1st stage), CIRCBIO-01, CIRCBIO-02 (1st stage), ZEROPOLLUTION-01, CLIMATE-01, COMMUNITIES-01 and COMMUNITIES-02 (1st stage)
28 February 2024	GOVERNANCE-01
17 September 2024	BIODIV-02 (2nd stage), FARM2FORK-02 (2nd stage), CIRCBIO-02 (2nd stage), ZEROPOLLUTION-02 (2nd stage) and COMMUNITIES-02 (2nd stage)

Cluster 6 Info Days & Brokerage Event

- Cluster 6 Info Days (13/14 December):
- The recordings of the sessions, together with the related PPTs are available on the event's website. In order to access the presentations, please click on **"Show details"** on the respective session's page:
- https://research-innovation-community.ec.europa.eu/events/2tcohVdY0dfgCvuJRj8RTw/programme

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CL6 WP 23-24 text available on the Funding & Tenders Portal and on Horizon Europe work programmes (europa.eu)

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