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Horizonte Europa – Clúster 6

Alimentación, Bioeconomía, Recursos Naturales, Agricultura y Medio Ambiente

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Horizon Europe Week ACCIO, 2 de junio 2021

Horizonte Europa (2021 – 2027)

PILAR 1 – CIENCIA EXCELENTE		25.011	PILAR 2 - RETOS MUNDIALES Y COMPETITIVIDAD INDUSTRIAL EUROPEA		53.516	PILAR 3 – EUROPA INNOVADORA		13.597
ERC - Consejo Europeo de Investigación	16.004	Clúster 1 - Salud	8.246	EIC- Consejo Europeo de Innovación	10.105			
MSCA - Acciones Marie Skłodowska-Curie	6.602	Clúster 2 - Cultura, creatividad y sociedad inclusiva	2.280	Ecosistemas de innovación europea	527			
Infraestructuras de investigación	2.406	Clúster 3 - Seguridad	1.596	EIT - Instituto Europeo de Innovación y Tecnología	2.965			
		Clúster 4 - Digital, industria y espacio	15.349					
		Clúster 5 - Clima, energía y movilidad	15.123					
		Clúster 6 - Alimentación, bioeconomía recursos naturales, agricultura y medio ambiente	8.952					
		JRC – Centro Común de Investigación	1.970					
Ampliar la Participación y Fortalecer el Espacio Europeo de Investigación			3.393					
Ampliar la participación y difundir la excelencia			2.955					
Reformar y mejorar el sistema europeo de la I+i			438					

Índice

- Contexto político
- Cluster 6, estructura y contenido
- El Programa de Trabajo 2021-2022
- Cluster 6: Misiones y Partenariados

** La información mostrada es provisional y no ha sido adoptada por la CE. La información definitiva estará próximamente disponible en el Funding & Tender Portal con la publicación y apertura de las convocatorias*

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Clúster 6. Contribución a Compromisos Globales

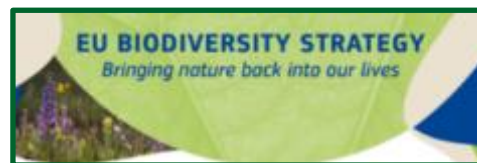
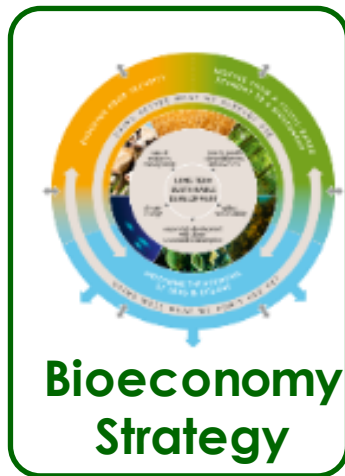
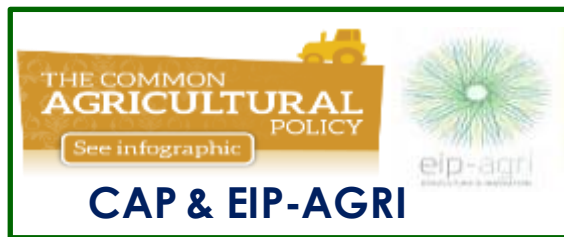


United Nations
Framework Convention on
Climate Change

Clúster 6. Contribución a políticas y estrategias



Clúster 6. Contribución a políticas y estrategias



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De Horizonte 2020 a Horizonte Europa

Reto Social 2

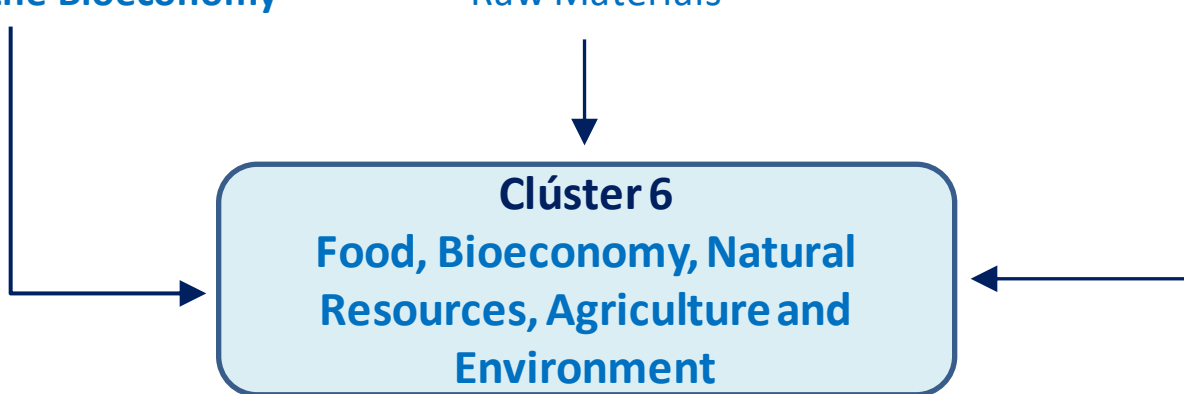
Food Security, Sustainable
Agriculture and Forestry, Marine,
Maritime and Inland Water
Research and the Bioeconomy

Reto Social 5




Climate Action,
Environment,
Resource Efficiency and
Raw Materials

Industrial Leadership (NMBP)

Nanotechnologies, Advance
Materials, Advanced Manufacturing
& Processing & **Biotechnology**



Clúster 6 – presupuesto a lo largo de 7 años

Overall budget	€8.952 billion
Operational budget	€8.4 billion
10% for missions  	- €0.9 billion
CBE partnership 	- €1 billion
Available budget for the Work Programmes	€6,5 billion

De prioridades políticas a acciones concretas



Cluster 6. 7 Áreas de Intervención muy amplias



*Environmental
Observation*



*Biodiversity,
Natural Capital*



*Agriculture &
Forestry*



Food Systems



*Seas, Oceans &
Inland Waters*

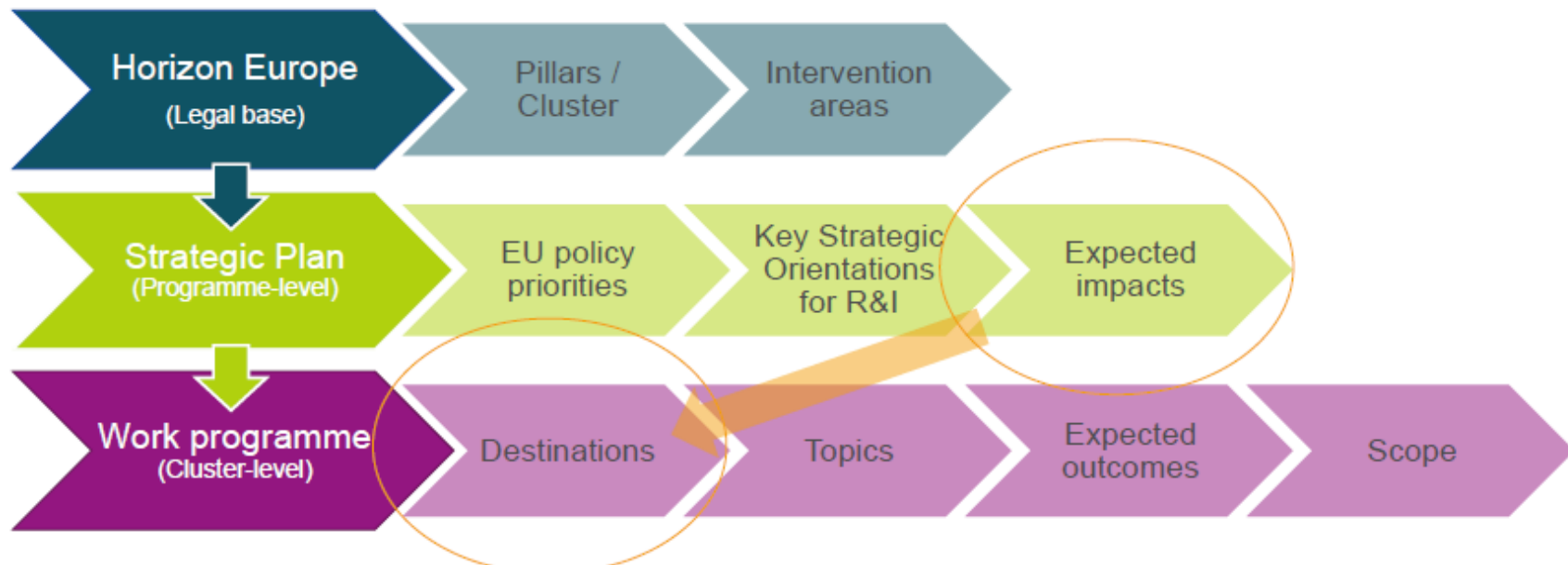


*Bio-based
Systems*



*Circular
Systems*

Horizonte Europa – de la base legal al programa de trabajo



Planificación estratégica

4 Orientaciones Estratégicas Clave (KSO)

KSO A

Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains to accelerate and steer the digital and green transitions through human-centred technologies and innovations

KSO B

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment

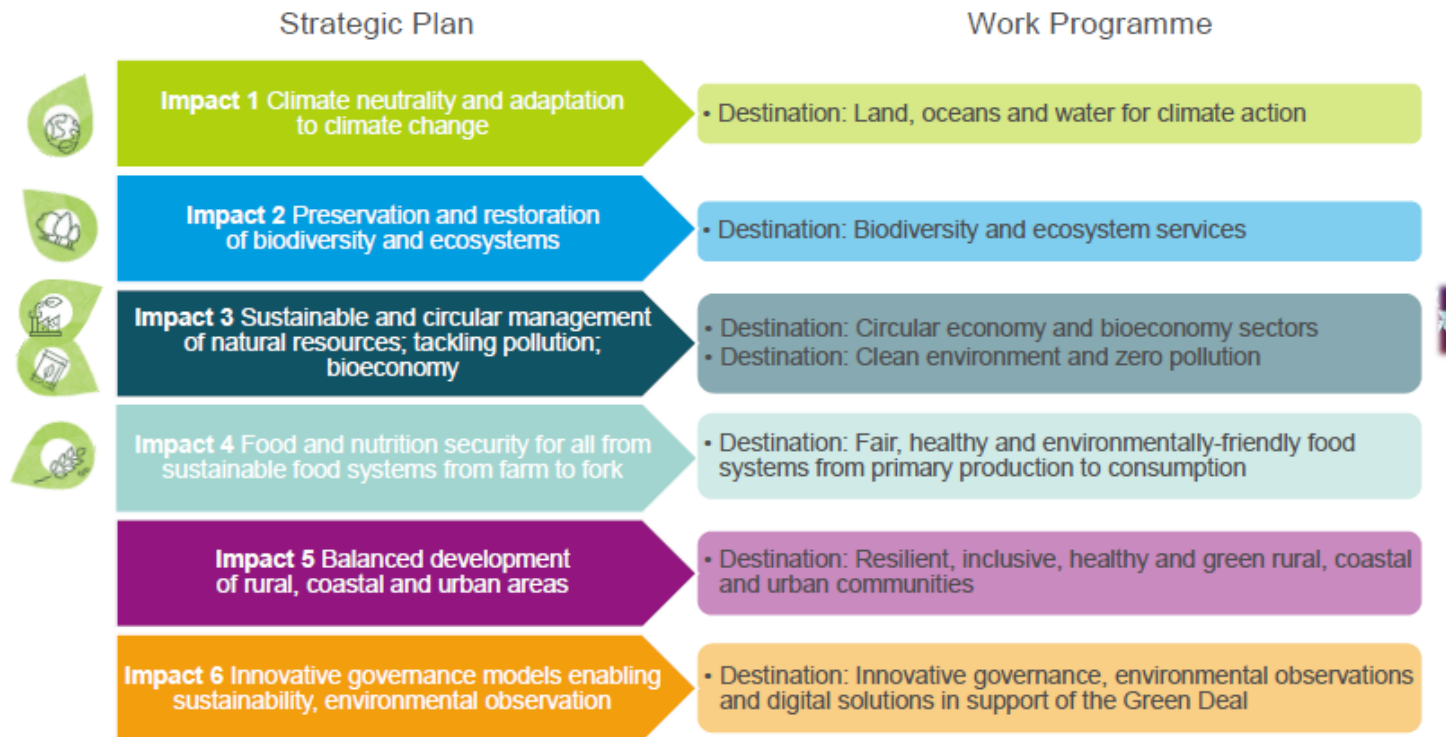
KSO C

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems

KSO D

Creating a more resilient, inclusive and democratic European society, prepared and responsive to threats and disasters, addressing inequalities and providing high-quality health care, and empowering all citizens to act in the green and digital transitions

De la planificación estratégica al WP



El Pacto Verde Europeo y el Clúster 6



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Clúster 6: WP2021-2022 Distribución de presupuesto por destino



Destination	Number of topics	Budget [mln EUR]	% Share
Biodiversity and ecosystem services	36	375,5	20%
Fair, healthy and environmentally-friendly food systems from primary production to consumption	39	416,5	22%
Circular economy and bioeconomy sectors	22	268,5	14%
Clean environment and zero pollution	14	116	6%
Land, oceans and water for climate action	16	193	10%
Resilient, inclusive, healthy and green rural, coastal and urban communities	13	128	7%
Innovative governance, environmental observations and digital solutions in support of the Green Deal	43	370	19%
Other actions	12	38,5	2%
Total	198	1906	100%

Clúster 6 – WP Estructura de convocatorias

DESTINATION	Call Id 2021 one stage	Call Id 2022 one stage	Call Id 2022 two stage
Biodiversity and Ecosystem Services	HORIZON-CL6-2021-BIODIV-01 HORIZON-CL6-2021-BIODIV-02	HORIZON-CL6-2022-BIODIV-01	HORIZON-CL6-2022-BIODIV-02-two-stage
Fair, healthy and environmentally-friendly food systems from primary production to consumption	HORIZON-CL6-2021-FARM2FORK-01	HORIZON-CL6-2022-FARM2FORK-01	HORIZON-CL6-2022-FARM2FORK-02-two-stage
Circular economy and bioeconomy sectors	HORIZON-CL6-2021-CircBio-01	HORIZON-CL6-2022-CircBio-01	HORIZON-CL6-2022-CircBio-02-two-stage
Clean environment and zero pollution	HORIZON-CL6-2021-ZEROPOLLUTION-01	HORIZON-CL6-2022-ZEROPOLLUTION-01	
Land, oceans and water for climate action	HORIZON-CL6-2021-CLIMATE-01	HORIZON-CL6-2022-CLIMATE-01	
Resilient, inclusive, healthy and green rural, coastal and urban communities	HORIZON-CL6-2021-COMMUNITIES-01	HORIZON-CL6-2022-COMMUNITIES-01	HORIZON-CL6-2022-COMMUNITIES-02-two-stage
Innovative governance, environmental observations and digital solutions in support of the Green Deal	HORIZON-CL6-2021-GOVERNANCE-01	HORIZON-CL6-2022-GOVERNANCE-01	

Tipos de acción elegibles para financiación

Research
and
innovation
action
(RIA)

Activities to establish new knowledge or to explore the feasibility of a new or improved technology, product, process, service or solution.

Innovation
action (IA)

Activities to produce plans and arrangements or designs for new, altered or improved products, processes or services.

Coordinati
on and
support
actions
(CSA)

Activities that contribute to the objectives of Horizon Europe. This excludes R&I activities, except for 'Widening participation and spreading excellence'

Programme
co-fund
actions
(CoFund)

A programme of activities established or implemented by legal entities managing or funding R&I programmes, other than EU funding bodies.

Innovation and
market
deployment
actions (IMDA)

Training and
mobility
actions
(TMA)

Pre-commercial
procurement
actions/ (PCP)

Public procurement
of innovative
solutions actions (PPI)

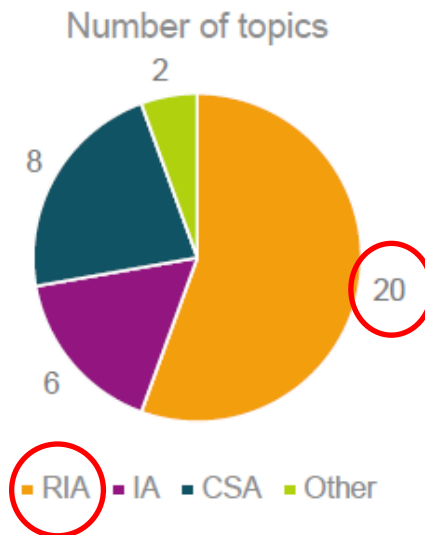
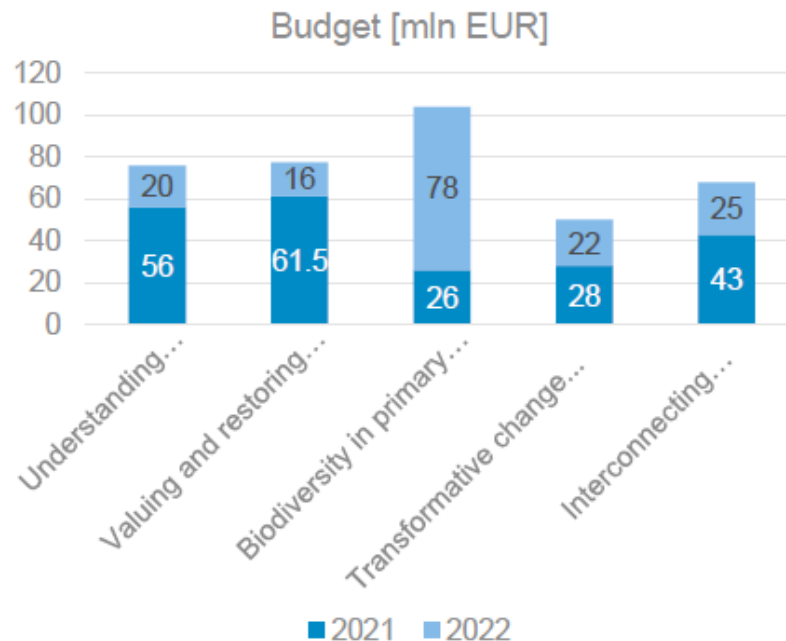
D1. Biodiversity and Ecosystem Services

- Understanding biodiversity decline
- Valuing and restoring biodiversity and ecosystem services.
- Managing biodiversity in primary production.
- Enabling transformative change on biodiversity.
- Interconnecting biodiversity research and supporting policies. EP on Biodiversity (co-fund action- starting 2021)



D1. Biodiversity and Ecosystem Services

375,5 mln EUR
36 topics
20%



D1. Biodiversity and Ecosystem Services 2021 (1)

Type action/ EU contrib/ Budget/ nºpj

Understanding biodiversity decline	HORIZON-CL6-2021-BIODIV-01-01: European participation in global biodiversity genomics endeavours aimed at identifying all biodiversity on Earth	RIA	(10-20)	20	2
	HORIZON-CL6-2021-BIODIV-01-02: Data and technologies for the inventory , fast identification and monitoring of endangered wildlife and other species groups	RIA	(3 - 5)	10	2
	HORIZON-CL6-2021-BIODIV-01-03: Understanding and valuing coastal and marine biodiversity and ecosystems services	RIA	16	16	1
	HORIZON-CL6-2021-BIODIV-01-04: Assess and predict integrated impacts of cumulative direct and indirect stressors on coastal and marine biodiversity, ecosystems and their services	RIA	10	10	1
			56		
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-05: The economics of nature-based solutions : cost-benefit analysis, market development and funding	RIA	5	5	1
	HORIZON-CL6-2021-BIODIV-01-06: Nature-based solutions, prevention and reduction of risks and the insurance sector	CSA	4	4	1
	HORIZON-CL6-2021-BIODIV-01-07: Ecosystems and their services for an evidence-based policy and decision-making	RIA	13	13	1
	HORIZON-CL6-2021-BIODIV-01-08: Supporting the development of a coherent and resilient Trans-European Nature Network	IA	10	10	1
	HORIZON-CL6-2021-BIODIV-01-09: Assessing and consolidating recent scientific advances on freshwater ecosystem restoration .	CSA	0,5	0,5	1
	HORIZON-CL6-2021-BIODIV-01-10: Demonstration of measures and management for coastal and marine ecosystems restoration and resilience in simplified socio-ecological systems .	IA	10	10	1
	HORIZON-CL6-2021-BIODIV-01-11: What else is out there? Exploring the connection between biodiversity, ecosystems services, pandemics and epidemic risk	RIA	(4 - 6)	12	2
	HORIZON-CL6-2021-BIODIV-01-12: Improved science based maritime spatial planning and identification of marine protected areas	RIA	(3 - 4)	7	2
			61,5		

D1. Biodiversity and Ecosystem Services 2021 (2)

		Type action/ EU contrib/ Budget/ n°pj			
Managing biodiversity in primary production	HORIZON-CL6-2021-BIODIV-01-13: Breeding for resilience: focus on root-based traits	RIA	8	16	2
	HORIZON-CL6-2021-BIODIV-01-14: Fostering organic crop breeding	IA	5	10	2
			26		
Enabling transformative change on biodiversity	HORIZON-CL6-2021-BIODIV-01-15: Quantify impacts of the trade in raw and processed biomass on ecosystems , for offering new leverage points for biodiversity conservation, along supply chains, to reduce leakage effects	RIA	(2 - 3)	10	4
	HORIZON-CL6-2021-BIODIV-01-16: Biodiversity, water, food, energy, transport, climate and health nexus in the context of transformative change	RIA	5	5	1
	HORIZON-CL6-2021-BIODIV-01-17: Policy mixes, governance (including financing) and decision-making tools for transformative action for biodiversity	RIA	(2 - 3)	8	3
	HORIZON-CL6-2021-BIODIV-01-18: Understanding the impacts of and the opportunities offered by digital transformation, new emerging technologies and social innovation on biodiversity	RIA	(2 - 3)	5	2
			28		
Interconnecting biodiversity research and supporting policies	HORIZON-CL6-2021-BIODIV-02-01: European partnership rescuing biodiversity to safeguard life on Earth	Co-fund action		20	
	HORIZON-CL6-2021-BIODIV-01-19: A mechanism for science to inform implementation , monitoring, review and ratcheting up of the new EU biodiversity strategy for 2030 ('Science Service').	CSA + Cascade funding	(11 - 13)	13	1
	HORIZON-CL6-2021-BIODIV-01-20: Support to processes triggered by IPBES and IPCC	CSA	5	5	1
	HORIZON-CL6-2021-BIODIV-01-21: Impact and dependence of business on biodiversity	RIA	(2 - 3)	5	2
			43		
			214,5		

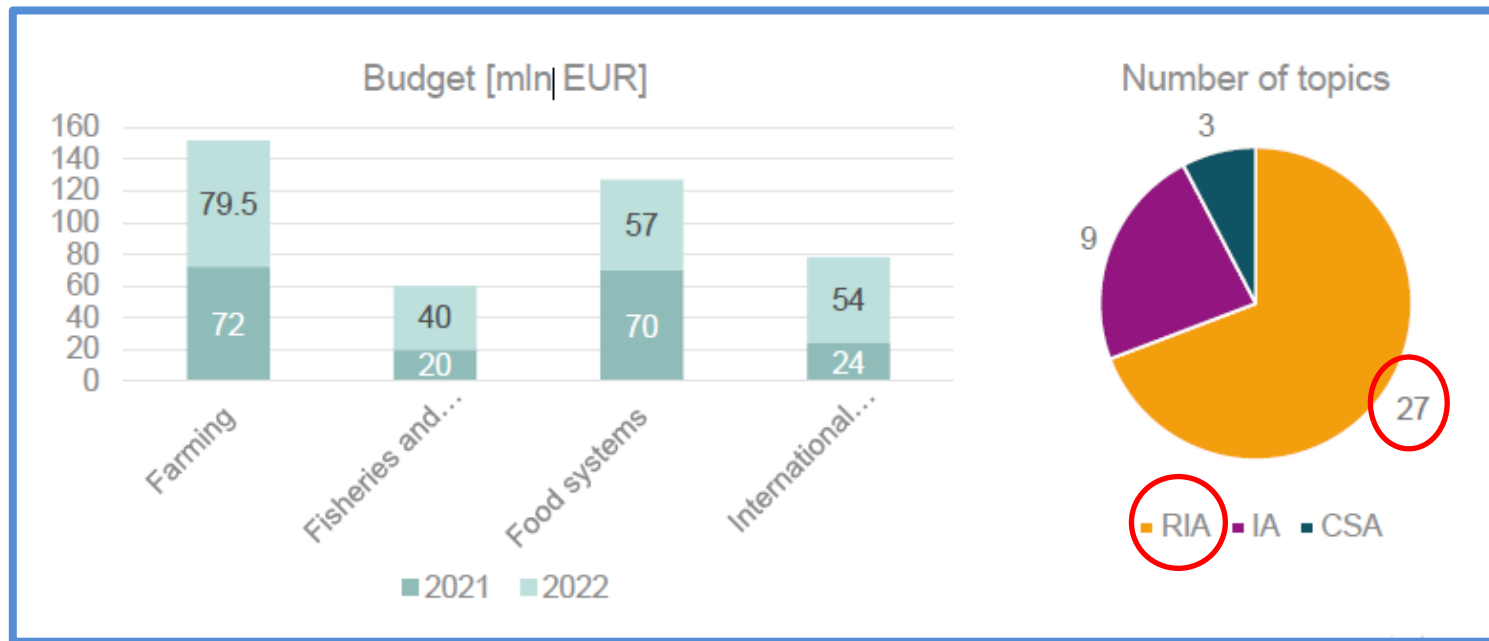
D2. Fair, healthy and environmentally-friendly food systems from primary production to consumption



- Enabling sustainable farming
- Sustainable fisheries & aquaculture
- Transforming food systems for health sustainability and inclusion
- Targeted international cooperation

D2. Fair, healthy and environmentally-friendly food systems from primary production to consumption

416,5 mln EUR
39 topics
22%



D2. Fair, healthy and environmentally-friendly food systems from primary production to consumption **2021** (1)

Type action/ EU contrib/ Budget/ nºpj

Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-01: Reaching the farm to fork target : R&I scenarios for boosting organic farming and organic aquaculture in Europe	RIA	4	4	1
	HORIZON-CL6-2021-FARM2FORK-01-02: Developing sustainable and competitive land-based protein crop systems and value chains	IA	9	9	1
	HORIZON-CL6-2021-FARM2FORK-01-03: Digitalisation as an enabler of agroecological farming systems	CSA	2	2	1
	HORIZON-CL6-2021-FARM2FORK-01-04: Tackling outbreaks of plant pests	RIA	7	14	2
	HORIZON-CL6-2021-FARM2FORK-01-05: Animal welfare 2.0	RIA	8	8	1
	HORIZON-CL6-2021-FARM2FORK-01-06: Vaccines and diagnostics for priority animal diseases	IA	6	12	2
	HORIZON-CL6-2021-FARM2FORK-01-07: Research & innovation roadmap for blockchain technologies in the agri-food sector	CSA	3	3	1
	HORIZON-CL6-2021-FARM2FORK-01-08: Uncovering lock-ins and levers to encourage farmers to move to and stay in sustainable, climate-neutral and biodiversity-friendly farming systems : from experiments to systemic mechanisms	RIA	4	12	3
	HORIZON-CL6-2021-FARM2FORK-01-09: Towards an EU approach to assess and internalise positive and negative externalities of food for incentivising sustainable choices	RIA	8	8	1
			72		
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2021-FARM2FORK-01-10: Sea to Fork transparency and consumer engagement	IA	5	10	2
	HORIZON-CL6-2021-FARM2FORK-01-11: Digital transition supporting inspection and control for sustainable fisheries	IA	5	10	2
			20		

D2. Fair, healthy and environmentally-friendly food systems from primary production to consumption **2021** (2)

Type action/ EU contrib/ Budget/ n°pj

Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-12: Filling knowledge gaps on the nutritional, safety, allergenicity and environmental assessment of alternative proteins and dietary shift	RIA	11	11	1
	HORIZON-CL6-2021-FARM2FORK-01-13: Evidence-based decision-making to change social norms towards zero food waste	RIA	(6 - 7)	12	2
	HORIZON-CL6-2021-FARM2FORK-01-14: Microbes for healthy and sustainable food and diets	RIA	12	12	1
	HORIZON-CL6-2021-FARM2FORK-01-15: Transition to healthy and sustainable dietary behaviour	RIA	12	12	1
	HORIZON-CL6-2021-FARM2FORK-01-16: Identification, assessment and management of existing and emerging food safety issues	RIA	6	12	2
	HORIZON-CL6-2021-FARM2FORK-01-17: Increasing the transparency of EU food systems to boost health, sustainability and safety of products, processes and diets	IA + Cascade funding	11	11	1
			70		
Targeted international cooperation	HORIZON-CL6-2021-FARM2FORK-01-18: One Health approach for Food Nutrition Security and Sustainable Agriculture (FNSSA)	RIA	6	18	3
	HORIZON-CL6-2021-FARM2FORK-01-19: EU-China international cooperation on integrated pest management in agriculture	RIA	6	6	1
			24		
			186		

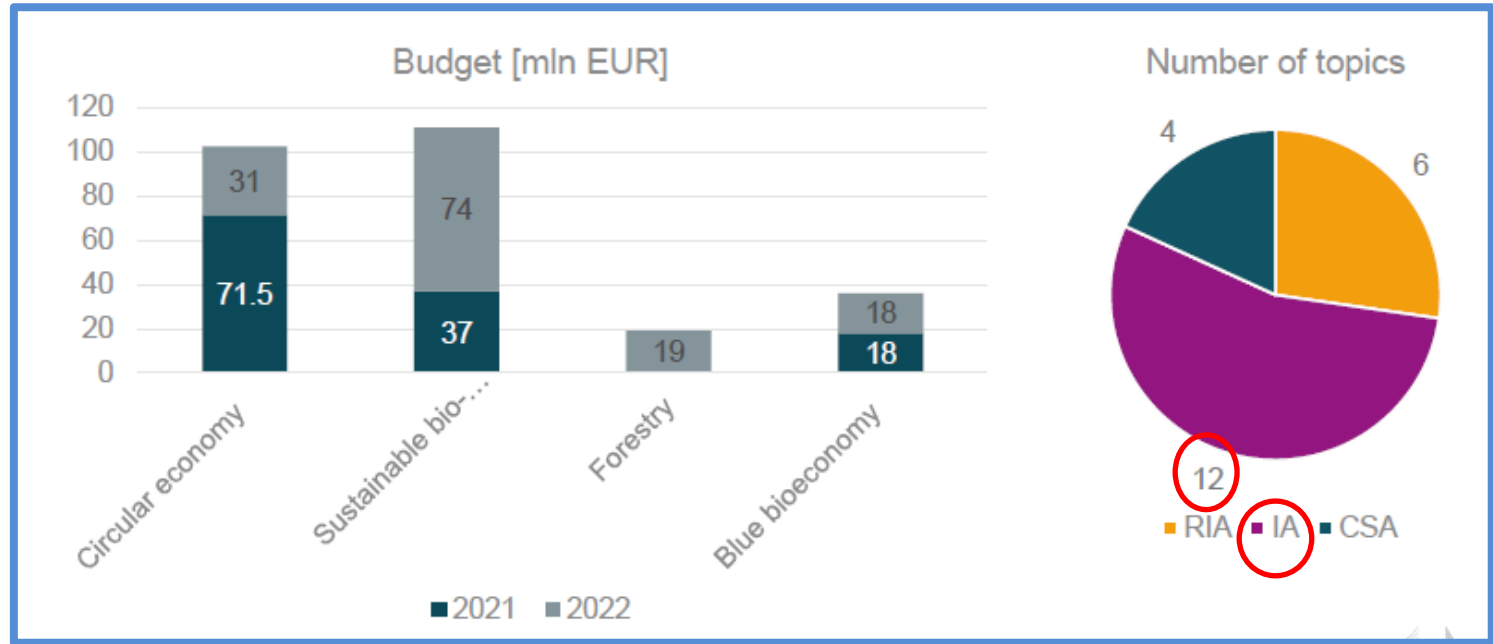
D3. Circular economy and bioeconomy sectors



- Enabling a circular economy transition.
- Innovation sustainable bio-based systems and the bioeconomy
- Safeguarding multiple functions of EU forests
- Innovating for blue bioeconomy and biotechnology value chains.

D3. Circular economy and bioeconomy sectors

268,5 mln EUR
22 topics
14%



D3. Circular economy and bioeconomy sectors 2021

		Type action/ EU contrib/ Budget/ n°pj			
Enabling a circular economy transition	HORIZON-CL6-2021-CircBio-01-01: Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions	IA	(5 - 10)	21,5	3
	HORIZON-CL6-2021-CircBio-01-02: Circular Cities and Regions Initiative's Project Development Assistance (CCRI-PDA)	CSA	0,4 - 2	10	6
	HORIZON-CL6-2021-CircBio-01-03: Innovative solutions to over-packaging and single-use plastics, and related microplastic pollution	IA	(5 - 7)	18	3
	HORIZON-CL6-2021-CIRC BIO-01-04: Increasing the circularity in textiles, plastics and/or electronics value chains	IA	(6 - 8)	22	3
				71,5	
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2021-CircBio-01-05: Novel, non-plant biomass feedstocks for industrial applications	IA	6	12	2
	HORIZON-CL6-2021-CIRC BIO-01-06: Contained biomass solutions for sustainable and zero-Indirect Land Use Change (ILUC) production systems for high value applications	IA	5	10	2
	HORIZON-CL6-2021-CircBio-01-07: Microbiomes for bio-based innovation and environmental applications	IA	6	6	1
	HORIZON-CL6-2021-CircBio-01-08: Mainstreaming inclusive small-scale bio-based solutions in European rural areas	CSA	3	9	3
				37	
Innovating for blue bioeconomy and	HORIZON-CL6-2021-CircBio-01-09: Unlocking the potential of algae for a thriving European blue bioeconomy	IA	9	18	2
				18	
				126,5	

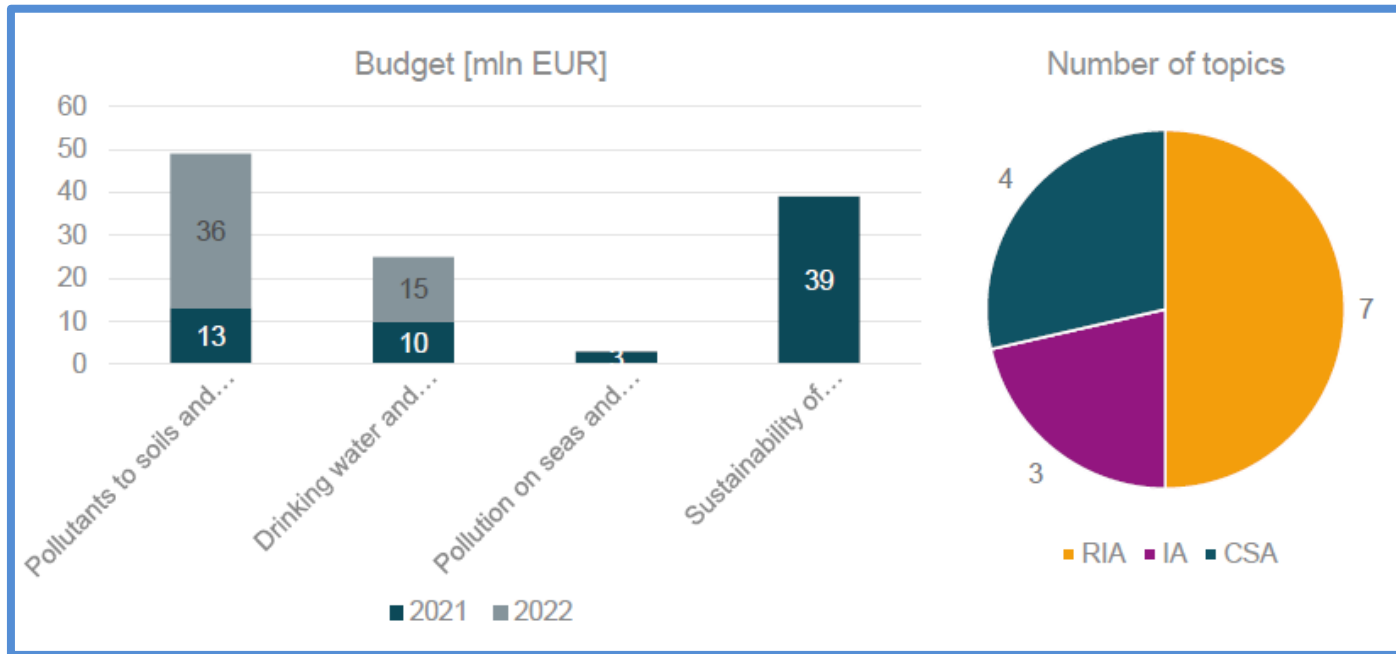
D4. Clean environment and zero pollution

- Halting emissions of pollutants to soils and waters.
- Protecting drinking water and managing urban water pollution.
- Addressing pollution on seas and ocean.
- Increasing environmental performances and sustainability of processes and products.



D4. Clean environment and zero pollution

116 mln EUR
14 topics
6%



D4. Clean environment and zero pollution 2021

		Type action/ EU contrib/ Budget/ n°pj			
Halting emissions of pollutants to soils and waters	HORIZON-CL6-2021-ZEROPOLLUTION-01-01: Regional nitrogen and phosphorus load reduction approach within safe ecological boundaries	CSA	2	6	3
	HORIZON-CL6-2021-ZEROPOLLUTION-01-02: Optimization of nutrient budget in agriculture	RIA	7	7	1
			13		
Protecting drinking water and managing urban water pollution	HORIZON-CL6-2021-ZEROPOLLUTION-01-03: Preventing and managing diffuse pollution in urban water runoff	RIA	(2 - 4)	10	3
			10		
Addressing pollution on seas and oceans	HORIZON-CL6-2021-ZEROPOLLUTION-01-04: Achieving zero polluted seas and oceans	CSA	3	3	1
			3		
Increasing environmental performances and sustainability of processes and products	HORIZON-CL6-2021-ZEROPOLLUTION-01-05: Environmental sustainability criteria for biological resources production and trade in bio-based systems : impacts and trade-offs	IA	6	6	1
	HORIZON-CL6-2021-ZEROPOLLUTION-01-06: Increasing the environmental performance of industrial processes in bio-based sectors: construction, woodworking, textiles, pulp and paper and bio-chemicals	RIA	3,5	7	2
	HORIZON-CL6-2021-ZEROPOLLUTION-01-07: International and EU sustainability certification schemes for bio-based systems	CSA	2	6	3
	HORIZON-CL6-2021-ZEROPOLLUTION-01-08: New genomic techniques (NGT) : understanding benefits and risks – focus on bio-based innovation	RIA	5	5	1
	HORIZON-CL6-2021-ZEROPOLLUTION-01-09: Environmental impacts and trade-offs of alternative fertilising products at global/local scale.	CSA	2	4	2
	HORIZON-CL6-2021-ZEROPOLLUTION-01-10: Environmental services: improved bioremediation and revitalization strategies for soil, sediments and water	RIA	5,5	11	2
			39		
			65		

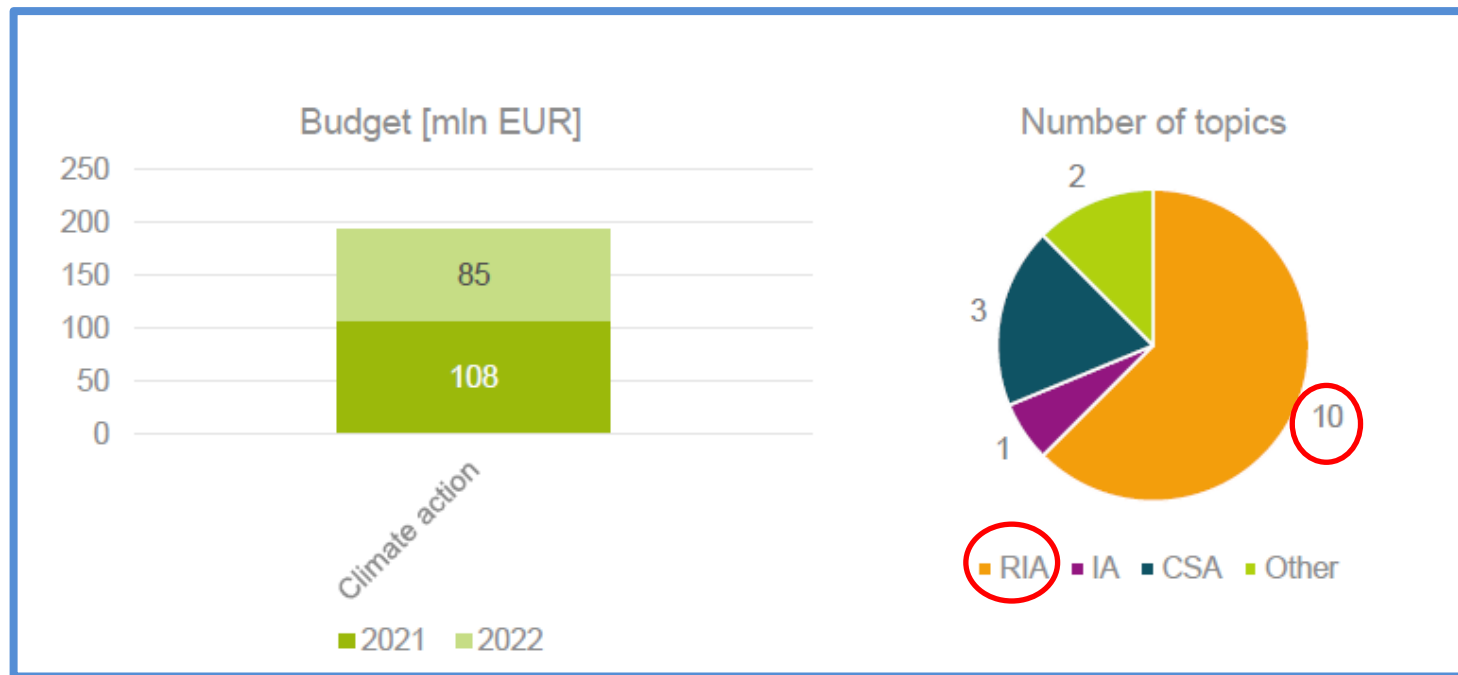
D5. Land, oceans and water for climate action



- **Impacts of climate change** on land and marine environments, natural resources, agriculture, forestry and food systems.
- **Fresh water resources-** EP Water4All. Co-fund action-starting 2021.
- Strengthening the **ocean and climate nexus**.
- **Mitigation potential of ecosystems** and sectors. The role of **agriculture** to reduce and mitigate GHG emissions and enhance carbon sinks.
- **Resilience of agriculture and forestry** to climate change.
- Focus on **large-scale deployment** and uptake solutions.

D5. Land, oceans and water for Climate action

193 mln EUR
16 topics
10%



D5. Land, oceans and water for Climate action **2021**

	Type action/ EU contrib/ Budget/ nºpj			
HORIZON-CL6-2021-CLIMATE-01-01: Improved understanding, observation and monitoring of water resources availability.	RIA	(3 - 5)	10	3
HORIZON-CL6-2021-CLIMATE-01-02: European Partnership Water Security for the Planet (Water4All)	Co-fund action		10	
HORIZON-CL6-2021-CLIMATE-01-03: Key oceanic and polar processes driving regional & global climate change	RIA	(7 - 8)	15	2
HORIZON-CL6-2021-CLIMATE-01-04: Demonstration network on climate-smart farming – linking pilot farms	CSA	23	23	1
HORIZON-CL6-2021-CLIMATE-01-05: Agroecological approaches for climate change mitigation , resilient agricultural production and enhanced biodiversity	RIA	7	7	1
HORIZON-CL6-2021-CLIMATE-01-06: Resilient livestock farming systems under climate change	RIA	12	12	1
HORIZON-CL6-2021-CLIMATE-01-07: International Research Consortium on (agricultural) soil carbon	CSA	3	3	1
HORIZON-CL6-2021-CLIMATE-01-08: Agroforestry to meet climate, biodiversity and farming sustainability goals	RIA	4	8	2
HORIZON-CL6-2021-CLIMATE-01-09: Enhancing science-based knowledge on EU forests' , including old-growth forests, capacities to mitigate climate change	RIA	5	10	2
HORIZON-CL6-2021-CLIMATE-01-10: EU-China international cooperation on increasing the resilience of forests	RIA	10	10	1
			108	

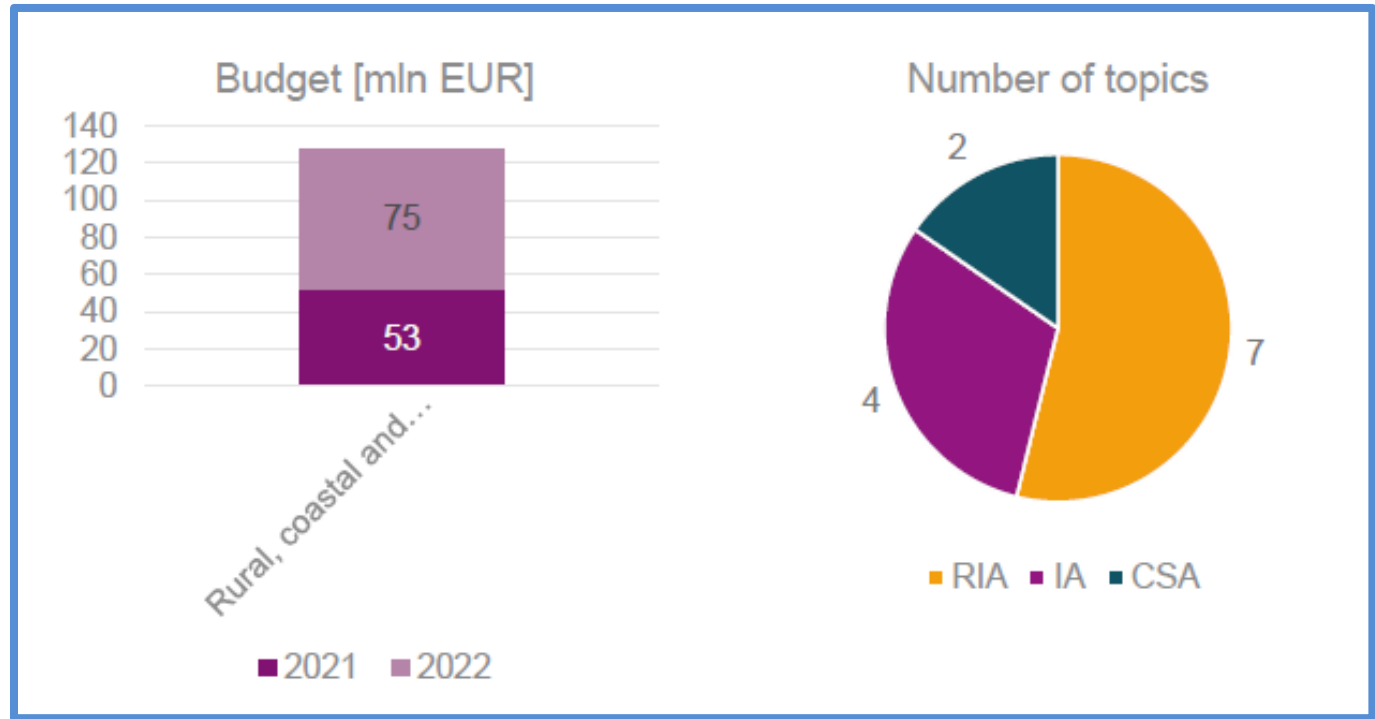
D6. Rural, coastal and urban communities

- Empowerment of actors to act for transitions.
- Innovative and smarter solutions for rural communities.
- Coastal communities: protection and resilience.
- Urban and peri-urban communities Access to food
- Tourism, recreational and leisure activity development



D6. Rural, coastal and urban communities

128 mln EUR
13 topics
7%

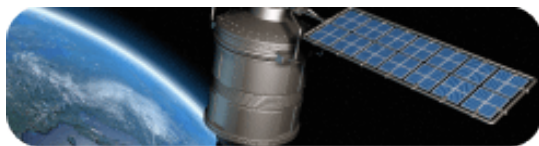


D6. Rural, coastal and urban communities **2021**

Type action / EU contrib/ Budget/ n°pj

HORIZON-CL6-2021-COMMUNITIES-01-01: Grasping rural diversity and strengthening evidence for tailored policies enhancing the contribution of rural communities to ecological, digital and social transitions	RIA	(7 - 7,5)	15	2
HORIZON-CL6-2021-COMMUNITIES-01-02: Expertise and training centre on rural innovation	CSA	5	5	1
HORIZON-CL6-2021-COMMUNITIES-01-03: Smart XG, last-mile and edge solutions for remote farming, forestry and rural areas	RIA	5	10	2
HORIZON-CL6-2021-COMMUNITIES-01-04: Socio-economic empowerment of the users of the sea	RIA	6	6	1
HORIZON-CL6-2021-COMMUNITIES-01-05: Integrated urban food system policies – how cities and towns can transform food systems for co-benefits	IA	12	12	1
HORIZON-CL6-2021-COMMUNITIES-01-06: Inside and outside: educational innovation with nature-based solutions	CSA	5	5	1
		53		

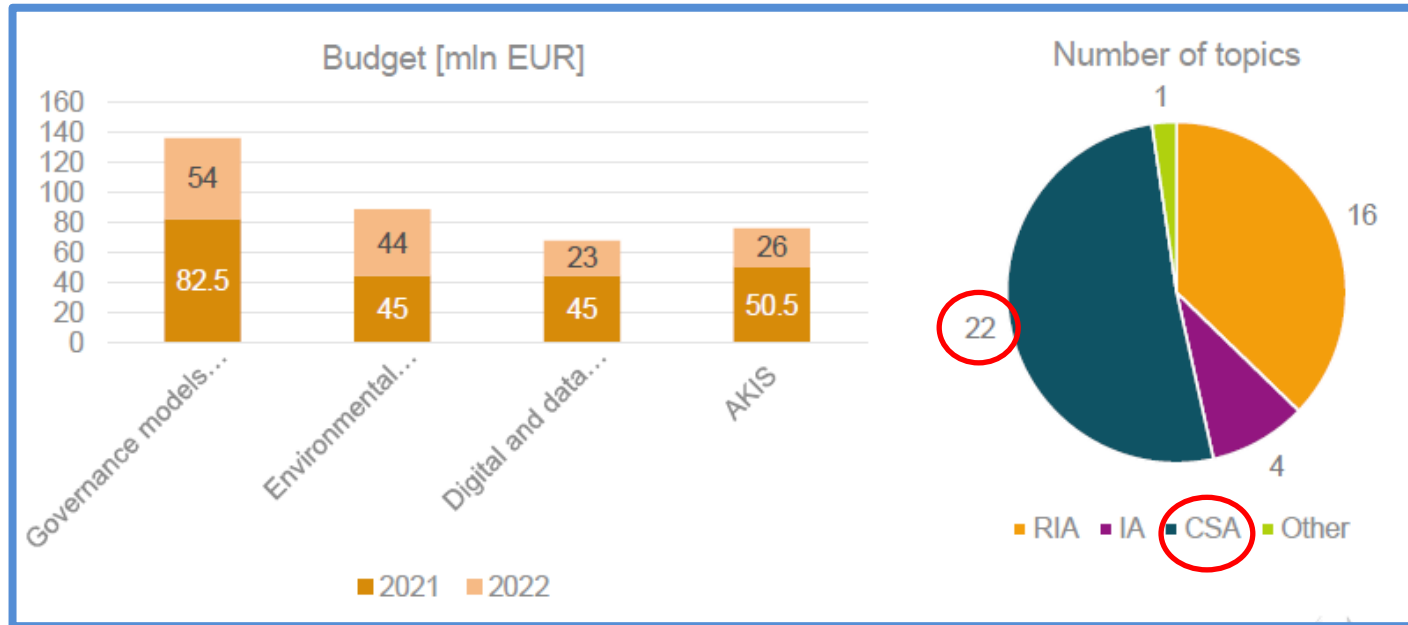
D7. Innovative governance, environmental observation and digital solutions in support of the Green Deal



- Innovating with **governance models and supporting policies**.
- **EP Blue Economy** (Co-fund action – starting 2022)
- Deployment and adding value to **environmental observations**.
- **Digital and data technologies** as key enablers.
- Strengthening **AKIs** (Agriculture Knowledge and Innovation Systems)

D7. Innovative governance, environmental observation and digital solutions in support of the Green Deal

370 mln EUR
43 topics
19%



D7. Innovative governance, environmental observation and digital solutions in support of the Green Deal 2021 (1)

		Type action	EU contrib/	Budget/	n°pj
Innovating with governance models and supporting policies	HORIZON-CL6-2021-GOVERNANCE-01-01: Mobilising the network of national contact points in Cluster 6	CSA	3,5	3,5	1
	HORIZON-CL6-2021-GOVERNANCE-01-02: Furthering food systems science and federating researchers across the European Research Area	RIA	6	17	3
	HORIZON-CL6-2021-GOVERNANCE-01-03: Preparatory action for the Horizon Europe Food System Partnership	CSA	5	5	1
	HORIZON-CL6-2021-GOVERNANCE-01-04: Strengthening bioeconomy innovation and deployment across sectors and all governance levels	CSA	4	4	1
	HORIZON-CL6-2021-GOVERNANCE-01-05: Fostering strategic advice and synergies between national and EU research and innovation agendas, including SCAR foresight	CSA	4	4	1
	HORIZON-CL6-2021-GOVERNANCE-01-06: Environmental and social cross-compliance of marine policies	RIA	(2 - 3)	8	3
	HORIZON-CL6-2021-GOVERNANCE-01-07: Regional governance models in the bioeconomy	CSA	2,5	5	2
	HORIZON-CL6-2021-GOVERNANCE-01-08: Improving understanding of and engagement in bio-based systems with training and skills development	CSA	2,5	5	2
	HORIZON-CL6-2021-GOVERNANCE-01-09: Revitalisation of European local communities with innovative bio-based business models and social innovation	CSA	2,5	5	2
	HORIZON-CL6-2021-GOVERNANCE-01-10: Raising awareness of circular and sustainable bioeconomy in support of Member States to develop bioeconomy strategies and/or action plans	CSA	4	4	1
	HORIZON-CL6-2021-GOVERNANCE-01-11: Education on the bioeconomy including bio-based sectors for young people in primary and secondary education in Europe	CSA	2	2	1
	HORIZON-CL6-2021-GOVERNANCE-01-12: EU agriculture within a safe and just operating space and planetary boundaries	RIA + Cascade funding	10	10	1
HORIZON-CL6-2021-GOVERNANCE-01-13: Modelling land use and land management in the context of climate change		RIA	5	10	2
			82,5		

D7. Innovative governance, environmental observation and digital solutions in support of the Green Deal 2021 (2)

Type action EU contrib/ Budget/ n°pj

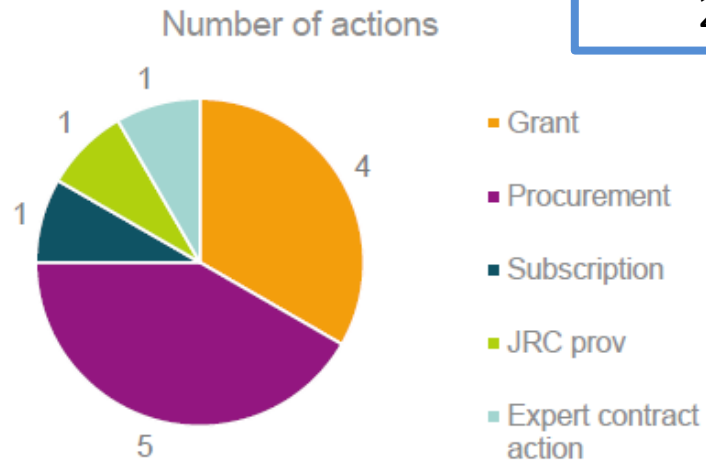
Deploying and adding value to Environmental Observations	HORIZON-CL6-2021-GOVERNANCE-01-14: User-oriented solutions building on environmental observation to monitor critical ecosystems and biodiversity loss and vulnerability in the European Union	RIA	(3 - 5)	20	4
	HORIZON-CL6-2021-GOVERNANCE-01-15: Preparing for pre-commercial procurement (PCP) for end-user services based on environmental observation in the area of climate change adaptation and mitigation	CSA	2	2	1
	HORIZON-CL6-2021-GOVERNANCE-01-16: Tools to support the uptake and accessibility/exploitability of environmental observation information at European and global level	IA	13	13	1
	HORIZON-CL6-2021-GOVERNANCE-01-17: Common European Green Deal data space to provide more accessible and exploitable environmental observation data in support of the European Green Deal priority actions	IA	(3 - 5)	10	2
			45		
Digital and data technologies as key enablers	HORIZON-CL6-2021-GOVERNANCE-01-18: Mapping and improving the data economy for food systems	RIA	10	10	1
	HORIZON-CL6-2021-GOVERNANCE-01-19: Development of the markets and use of digital technologies and infrastructure in agriculture – state of play and foresight: digital and data technologies for the agricultural sector in a fast changing regulatory, trade and technical environment	RIA	(2 - 4)	4	1
	HORIZON-CL6-2021-GOVERNANCE-01-20: Data economy in the field of agriculture – effects of data sharing and big data	RIA	(2 - 4)	4	1
	HORIZON-CL6-2021-GOVERNANCE-01-21: Potential of drones as multi-purpose vehicle – risks and added values	RIA + Cascade funding	6	12	2
	HORIZON-CL6-2021-GOVERNANCE-01-22: Assessing the impacts of digital technologies in agriculture – cost, benefits and potential for sustainability gains	RIA	7,5	15	2
			45		

D7. Innovative governance, environmental observation and digital solutions in support of the Green Deal 2021 (3)

Type action EU contrib/ Budget/ n°pj					
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2021-GOVERNANCE-01-23: Broaden EIP Operational Group outcomes across borders by means of thematic networks , compiling and sharing knowledge ready for practice	CSA	2	4	2
	HORIZON-CL6-2021-GOVERNANCE-01-24: Supporting knowledge exchange between all AKIS actors in the Member States by means of an EU-wide interactive knowledge reservoir	CSA	15	15	1
	HORIZON-CL6-2021-GOVERNANCE-01-25: Improving national AKIS organisation in a co-creative process across the EU	CSA	10	10	1
	HORIZON-CL6-2021-GOVERNANCE-01-26: Deepening the functioning of innovation support	CSA	5	5	1
	HORIZON-CL6-2021-GOVERNANCE-01-27: Developing EU advisory networks on consumer-producer chains	CSA	4	8	2
	HORIZON-CL6-2021-GOVERNANCE-01-28: Thematic networks to compile and share knowledge ready for practice	CSA	3	8,5	3
				50,5	
				223	

Other actions

- Not subject to calls for proposals
- Grants to identified beneficiaries and indirect management in the areas of **biodiversity and circular economy**
- Public procurement in the area of **circular economy**: studies, conferences, events and outreach activities
- **GEO subscription** 2021 and 2022
- Scientific and technical services by the **Joint Research Centre**
- **Expert contract action**



38,5 mln EUR
12 topics
2%

Del programa de trabajo al “topic”



EN

Horizon Europe

Work Programme 2021-2022

9. Food, Bioeconomy, Natural Resources, Agriculture and Environment

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material

Horizon Europe - Work Programme 2021-2022
Food, Bioeconomy, Natural Resources, Agriculture and Environment

Destination – Circular economy and bioeconomy sectors

Expected impacts

Proposals for topics under this Destination should set out a credible pathway to developing circular economy and bioeconomy sectors, achieving sustainable and circular management and use of natural resources, as well as prevention and removal of pollution, unlocking the full potential and benefits of the circular economy and the bioeconomy, ensuring competitiveness and guaranteeing healthy soil, air, fresh and marine water for all, through better understanding of planetary boundaries and wide deployment and market uptake of innovative technologies and other solutions, notably in primary production (forestry) and bio-based systems.

Specifically, the topics will target one or several of the following impacts, for circular economy, bio-based sectors, ~~forestry~~ and aquatic value chains:

- **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**, in particular regarding biotechnology-based value chains, for all actors, including policy makers, to design, implement and monitor policies and instruments for a circular and bio-based transitions.
- **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 (including on biodiversity), enabling climate-neutrality and higher resource efficiency (e.g. by circular design, improved waste management, cascading use of biomass) along and across value chains, developing innovative and sustainable value-chains in the bio-based sectors, substituting fossil-based ones, increasing circular practices in textiles, plastics, electronics and construction, developing recycling technologies and industrial symbiosis, increasing circular bio-based systems from sustainably sourced biological resources replacing carbon-intensive and fossil-based systems, with inclusive engagement of all stakeholders;
- **Improved consumer and citizen benefits**, including in the rural settings by establishing circular and bio-based systems based on sustainability, inclusiveness, health and safety;

Part 9 - Page 237 of 554

Horizon Europe - Work Programme 2021-2022
Food, Bioeconomy, Natural Resources, Agriculture and Environment

HORIZON-CL6-2021-CIRC-BIO-01-07: Microbiomes for bio-based innovation and environmental applications

Specific conditions

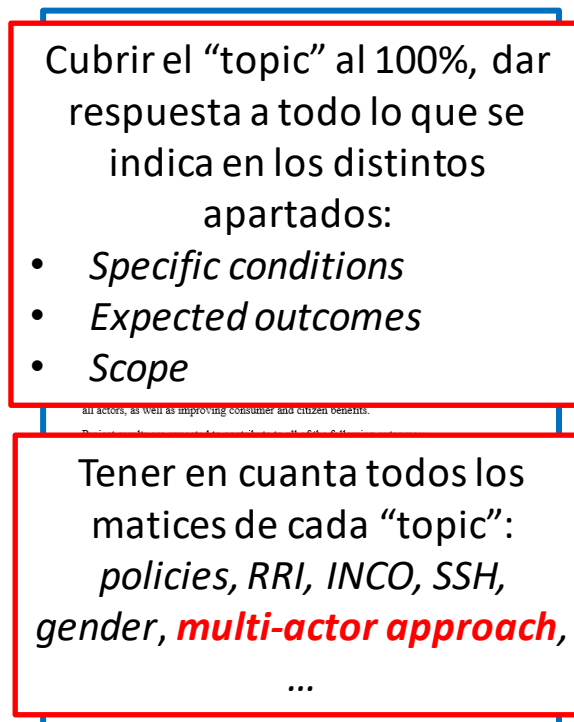
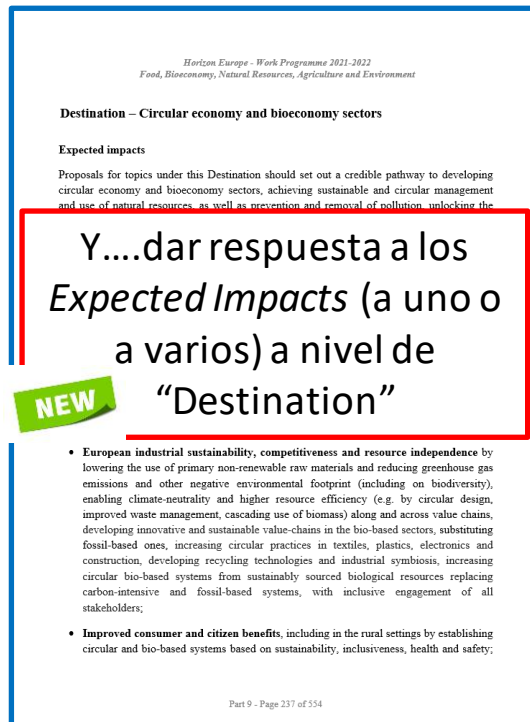
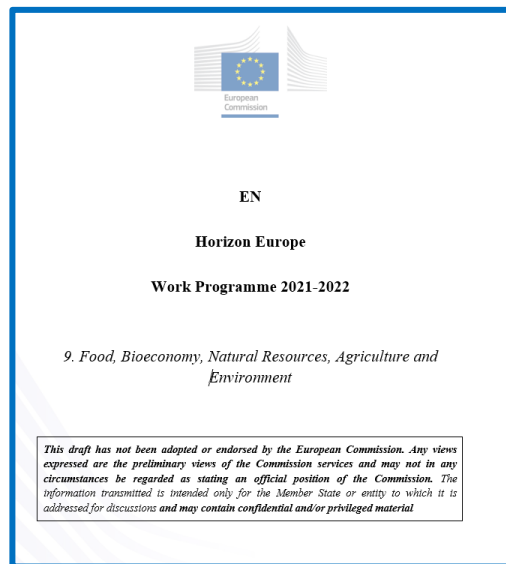
<i>Expected EU contribution per project</i>	The EU estimates that an EU contribution of around EUR 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 6.00 million.
<i>Type of Action</i>	Innovation Actions
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 6-7 by the end of the project – see General Annex B.

Expected Outcome: The successful proposal should contribute to the impacts of this Destination, and the European policies it supports, in particular the European Green Deal, the Circular Economy Action Plan and the Bioeconomy Strategy, and as related to improving European industrial²⁰¹ sustainability, competitiveness and resource independence, developing innovative bio-based products, with inclusive engagement of all stakeholders, enhancing knowledge and understanding of science, in particular biotechnology-based value chains, for all actors, as well as improving consumer and citizen benefits.

Project results are expected to contribute to all of the following outcomes:

- Deeper understanding of the structural composition of microbiomes, their structure, functions, mechanisms, and potentials, as related to the bio-based innovation (i.e. bio-based materials, biochemicals, products and services, including the environmental applications), as well as improved methods of their isolation and cultivation, leading to innovative solutions to engineer and control microbiomes to guarantee safety and efficacy for specific applications.
- Improved interdisciplinary cooperation for R&D&I between academia and industrial sectors (e.g. industrial biotechnology, food, pharma and ICT/data industries) and higher engagement of industry and SMEs.
- More systematic adoption of recent advances in molecular biology and biotechnology to increase industrial uptake of R&D&I on microbiota and especially on their complex communities via biotechnology approaches, leading to more cost- and resource-efficient production of high-value complex molecules, lowering pressure on natural resources, or increasing their use in environmental applications.

Del programa de trabajo al “topic”



Índice

- Contexto político
- Cluster 6, estructura y contenido
- El Programa de Trabajo 2021-2022
- Cluster 6: Misiones y Partenariados

** La información mostrada es provisional y no ha sido adoptada por la CE. La información definitiva estará próximamente disponible en el Funding & Tender Portal con la publicación y apertura de las convocatorias*



Key Novelties:

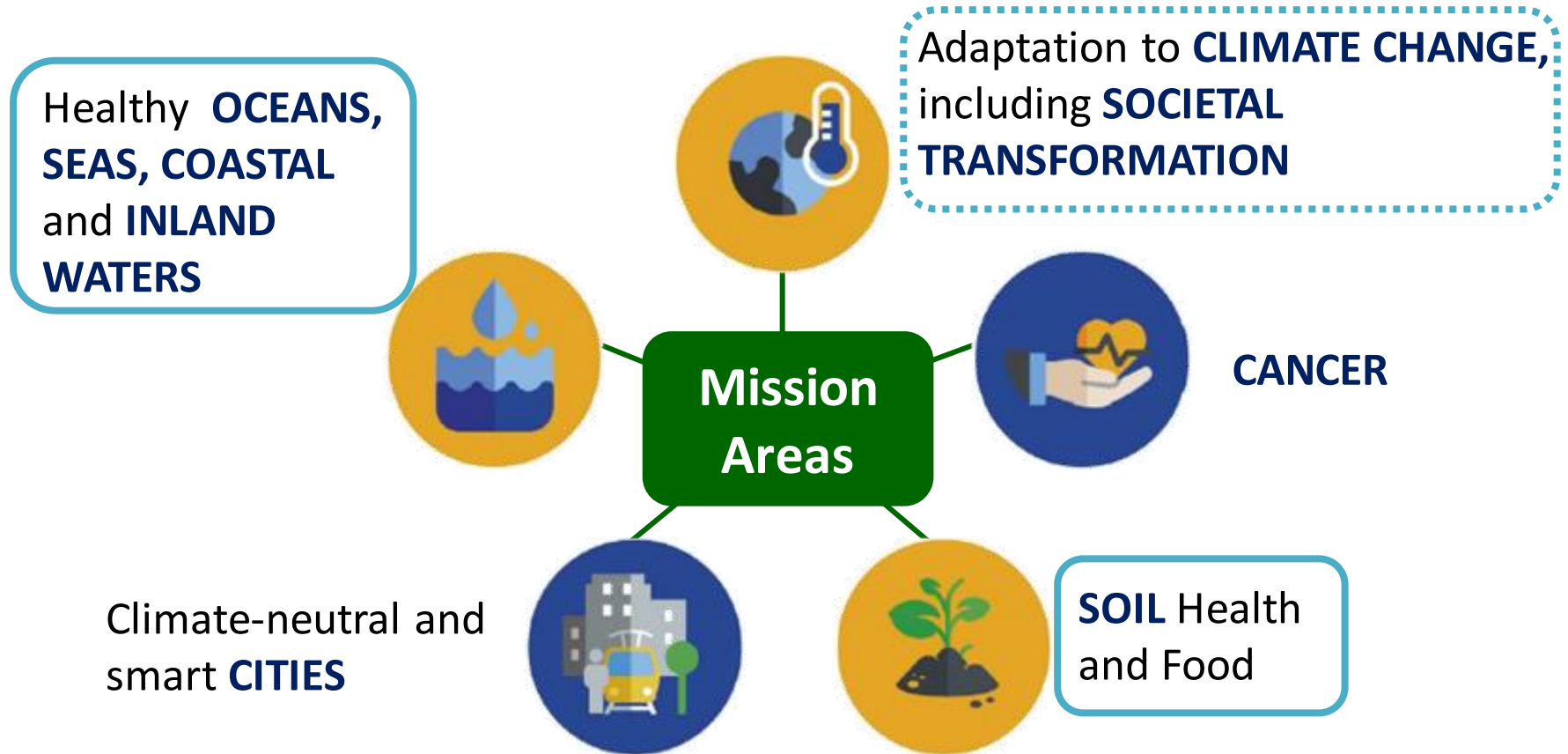
Clúster 6

European INNOVATION Council

R&I MISSIONS

New approach to PARTNERSHIPS

De las Misiones en Clúster 6



De las Misiones en Clúster 6

Healthy **OCEANS, SEAS, COASTAL** and **INLAND WATERS**



Climate-neutral and smart **CITIES**



Mission Starfish 2030: Restore our Ocean and Waters

Targets by 2030:

- cleaning marine and fresh waters,
- restoring degraded ecosystems and habitats,
- decarbonising the blue economy in order to sustainably harness the essential goods and services they provide.

De las Misiones en Clúster 6

Caring for Soil is Caring for Life

Targets by 2030: at least **75%** of all soils in the EU are healthy for food, people, nature and climate.

*The proposed mission combines research and innovation, education and training, investments and the demonstration of good practices using “**living labs**” (experiments and innovation in a laboratory on the ground) and “**lighthouses**” (places to showcase good practices).*

Climate-neutral and
smart **CITIES**



SOIL Health
and Food

De las Misiones en Clúster 6

Healthy OCEANS,
SEAS, COASTAL
and INLAND



Adaptation to **CLIMATE CHANGE**,
including **SOCIETAL
TRANSFORMATION**

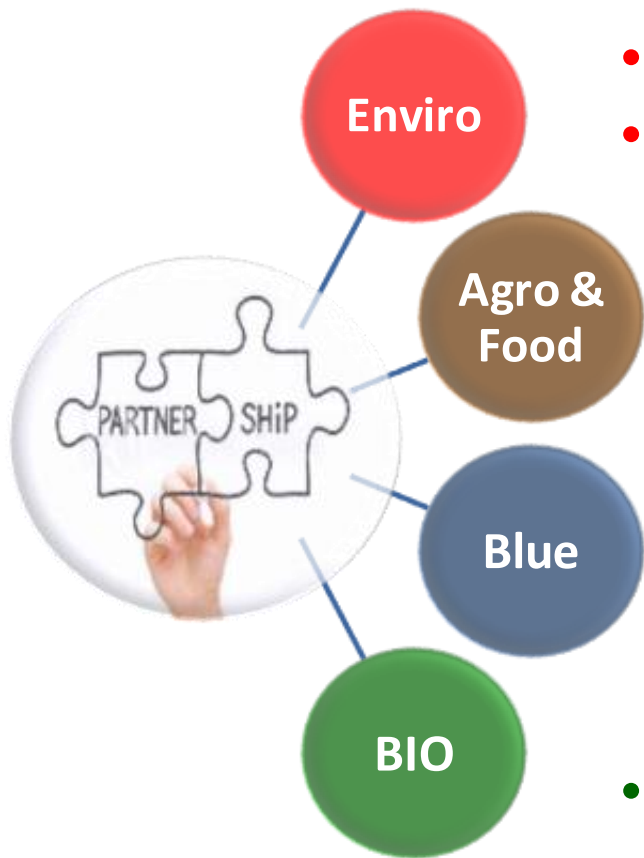


A Climate Resilient Europe by 2030

The Mission will:

- **prepare** Europe to deal with climate disruptions;
- **accelerate** the transformation to a climate resilience, healthy and prosperous future within safe planetary boundaries;
- and **build** deep resilience by scaling up solutions triggering societal transformations.

....y varios “partnerships”*



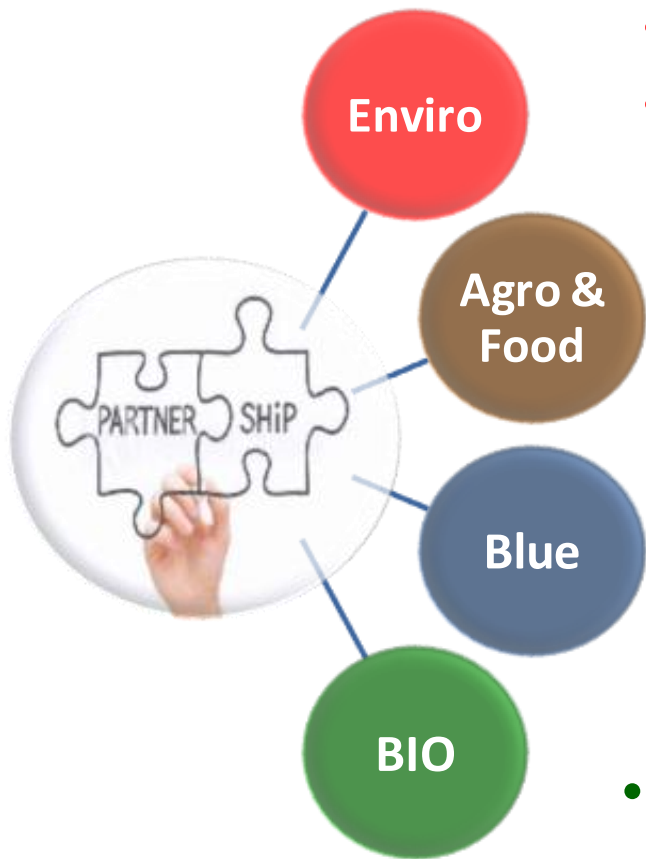
- **Agriculture of Data**
- **Biodiversity**

- **Farming Systems (Agroec. + LL)**
- **Animal Health**
- **Food Systems**
- **Blue Economy**
- **Water4All**

**1st Strategic
Period
2021 - 2024**

- **Circular Bio-Based¹**








Algunos partenariados enWP 2021-2022



- **Agriculture of Data**
- **Biodiversity**
- Farming Systems (Agroec. + LL)
- Animal Health
- Food Systems
- **Blue Economy**
- **Water4All**
- **Circular Bio-Based**¹



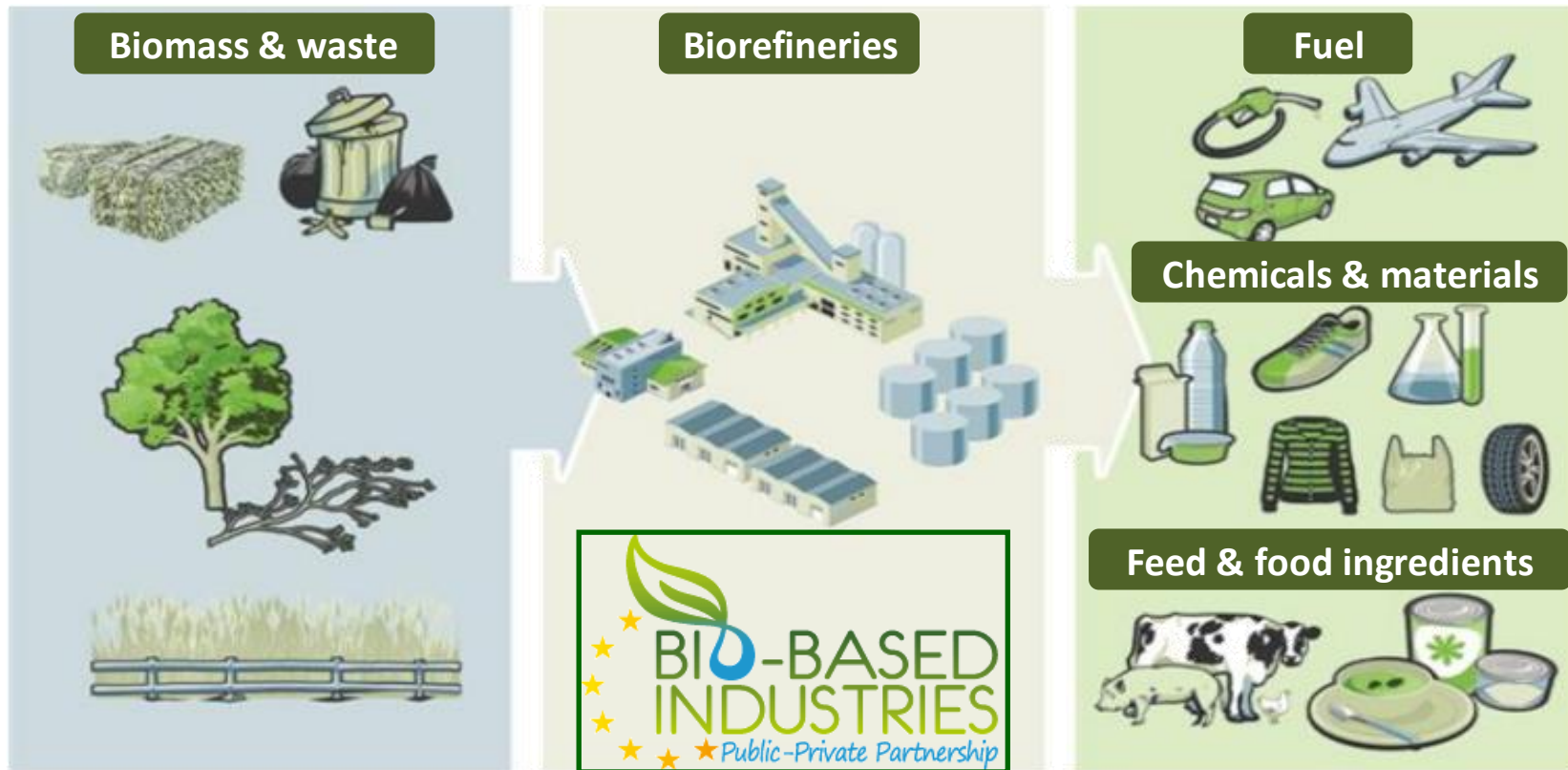
Partenariados co-financiados en CL6

	Co-funded partnership	Work Programme where the topic is introduced	HE expected contribution (7 years; mln EUR)
	Rescuing biodiversity to safeguard life on Earth	2021-2022	165
	A climate neutral, sustainable and productive Blue Economy	2021-2022	150
	European Partnership Water Security for the Planet (Water4All)	2021-2022	126
	Accelerating farming systems transition: agroecology living labs and research infrastructures	2023-2024	150
	Animal health: fighting infectious diseases	2023-2024	180
	Environmental observations for a sustainable EU agriculture	2023-2024	100
	Safe and sustainable food systems for people, planet and climate	2023-2024	175

El presupuesto que se destinará a los partenariados co-financiados será de 1.000 millones de euros aproximadamente (dependiendo de la aportación de los EEMM)

A la JU Circular Bio-based Europe se le destinarán alrededor de 1.000 millones de euros.

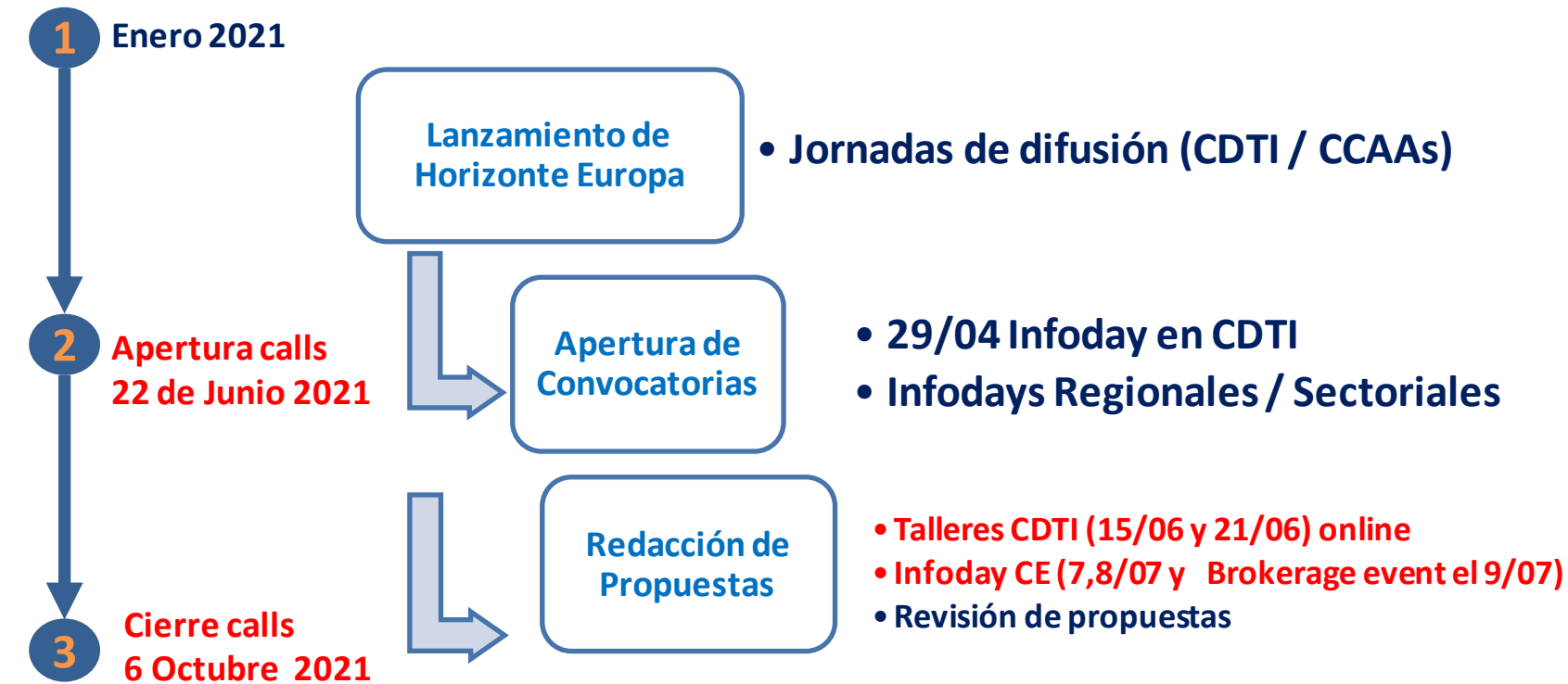
Objetivo de “Circular Bio-Based Europe”



Índice

- Contexto político
- Cluster 6, estructura y contenido
- Hacia el Programa de Trabajo 2021-2022
- Cluster 6: Misiones y Partenariados
- Próximos pasos y....a modo de conclusión.

Próximos pasos



Documentación (estará) disponible

- **Cluster 6 WP 2021-2020** \Longrightarrow **Funding & Tender Portal**
(Anexo específico al WP HE)
- **Misiones** \Longrightarrow **Funding & Tender Portal**
(Soil, Oceans, Adaptation to CC)
(Anexo específico al WP HE)
- **Partenariados Institucionales** \Longrightarrow **Funding & Tender Portal**
(Circular Bio-based Europe)
(Convocatorias propias)
- **Partenariados Co-financiados** \Longrightarrow **Convocatorias propias**
(Biodiversity, Water4All, Blue Economy)
(Web específica)

A modo de conclusión.....

Clúster 6: Reto 2 (BIO) + Reto 5 (Medioambiente)

Políticas, estrategias, iniciativas....a tener en cuenta

Oportunidades en otros Destinos o Clústeres

Convocatorias Estándar + Partenariados + Misiones

Convocatorias cierran a comienzos de octubre. Preparados?!

Preparados?! Partiendo de H2020.....

SC2-Bioeconomy

- Participaciones > 900 (1)
- Coordinadores = 63 (14%) (1)
- Retorno \approx 270 M€ (> 10%) (1)
- Proyectos = 355 (78%) (1)

SC5-Resource Efficiency and Environment

- Participaciones > 450 (1)
- Coordinadores = 41 (22%) (1)
- Retorno \approx 147 M€ (> 16%) (2)
- Proyectos = 145 (76%) (1)



Clúster 6



El equipo CDTI de Clúster 6



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www.cdti.es**





Documentos clave para empezar a trabajar

Draft Work Programme HE- Cluster 6 2021-2022:

[HORIZON-CL6-2021-2022_04_19_2021.docx](#)

Reference documents – [Horizon Europe](#):

- **Horizon Europe Work Programme 2021-2022. 13. General Annexes (31/03/2021)**
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf
- **Standard Proposal template (RIA&IA)**
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-ria-ia_en.pdf
- **Standard Proposal template (CSA)**
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/temp-form/af/af_he-csa_en.pdf
- **EU Funding & Tenders Online Manual EU Funding Programmes 2021-2027 (08/02/2021)**
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/om_en.pdf

Portal español de Horizonte Europa

<https://www.horizonteeuropa.es/>

HORIZONTE



GOBIERNO

MINISTERIO

21 Abr
10:00

#HorizonEU



Webinar "A Successful Proposal For Horizon Europe: Scientific-Technical Excellence Is Key, But Don't Forget The Other Aspects"

La Comisión Europea organiza un nuevo seminario para informar sobre cómo preparar una

ABRIL 2021						
L	M	M	J	V	S	D
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

eventos »



Horizonte2020: España encara la recta final del programa consolidando su cuarta posición

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Plan de Incentivación para la participación española en Horizonte Europa

Leer más »



La Comisión Europea publica el primer Plan Estratégico para Horizonte Europa

Leer más »



Telegram



RSS



PUNTOS NACIONALES DE CONTACTO



CÓMO PARTICIPAR



¡ÚNETE A NOSOTROS!

¿Qué podemos hacer los NCPs por vosotros?



LA IDEA



ENCAJE EN TOPIC



EL CONSORCIO



LA PROPUESTA



PROYECTO



EL ACUERDO



EVALUACIÓN



EL ENVÍO



REVISION



NCPs del Clúster 6

Puntos nacionales de contacto

Alimentación, Bioeconomía, Recursos Naturales, Agricultura y Medioambiente



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+ info sobre programas y ayudas
para la
internacionalización de la I+D+I española



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