

Horizon Europe

Cluster 6 –

Food, Bioeconomy, Natural Resources, Agriculture and the
Environment

HORIS^{NTTI} EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

Remember

The event starts at 9.00 and ends at 10.30

During the event your microphones are muted all the time

Please send you questions and comments via chat. We will provide compiled answers later on

The presentation will be available in Business Finland / EUTI webpages after this event (<https://www.businessfinland.fi/suomalaisille-asiakkaille/palvelut/rahoitus/horisontti-2020/esitysaineisto>)

Agenda

- Overview of the HEU programme
 - Pillars I, III and IV
- Overview of the HEU Pillar II
 - What is new?
 - Partnerships
 - Missions
- Cluster 6
 - Indicative budget
 - Forms of funding
- HEU WP 2021-22 Cluster 6 Destinations

HEU Cluster 6 Shadow Programme Committee, Finland's representatives:

Elina Nikkola Ministry of Agriculture and Forestry
(delegate)

Sampo Tukiainen Business Finland

Jaana Lehtimäki Academy of Finland

Tanja Suni Ministry of the Environment

<https://www.businessfinland.fi/suomalaisille-asiakkaille/palvelut/rahoitus/horizontti-2020/horizontti-yhteyshenkilot/horizon-europe-yhteyshenkilot/>

Objectives of the Programme Committee work

- Represent **the coordinated national positions** at the meetings
- Participate **in the development** of the Framework Programme and **the design of Work Programmes** by bringing together national views
- **Seek synergies** between R&D&I relevant national and EU programmes, and policy initiatives
- Monitor various activities in their own program area (partnerships, missions, technology platforms, etc.) and **enhance active discussion between configurations** for cross-cutting themes
- **Keep national actors informed** of the progress of the programme
- Engage in an interactive discussion with Commission representatives
- Seek alliances with the colleagues from other Member States

HEU implementation in Finland –roles and tasks

EUTI Business Finland

- Coordination of the national NCP -network
- Advisory and information services on Horizon Europe related issues (e.g. how to apply funding etc.)
- www.horisonttieurooppa.fi

Programme Committees

- Business Finland, Academy of Finland
- Finland's representatives in the Programme Committee

National Contact Points

- Business Finland, Academy of Finland
- Thematic areas, advisory and assistance of applicants

Up-coming Horizon Europe events in Finland

<https://www.businessfinland.fi/suomalaisille-asiakkaille/palvelut/rahoitus/horisontti-2020/lyhyesti>
-> tapahtumat

- 13.1. Call information on HEU Cluster 1
- 14.1. Call information on HEU Cluster 5
- 14.1. Call information on HEU Cluster 2
- 19.1. Call information on HEU Clusteri 4
- 19.1. Euroopan innovaatio- ja teknologiainstituutti (EIT)
- 21.1. Call information on HEU Cluster 3
- 25.1. EOSC in Finland and in the European context
- 5.2. Horisontti Eurooppa: T&i-kumppanuudet

Horizon Europe 2021-2027

Pillars I, III and IV

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Horizon Europe, ~95,5 billion euros for 2021 – 2027



Pillar 1 Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



Pillar 2 Global Challenges and European Industrial Competitiveness

Clusters

- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



Pillar 3 Innovative Europe

European Innovation Council

European innovation ecosystems

European Institute of Innovation
and Technology

Widening Participation and Strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

Pillar I: EXCELLENT SCIENCE: reinforcing and extending the excellence of the Union's science base

European Research Council (ERC)

- Supports excellence in frontier research through a bottom-up, individual-based, pan-European competition
 - Independent Scientific Council
 - Excellence as the only criterion,
 - Support for the individual scientist – no networks!
 - Global peer-review
 - Bottom-up, all fields of science

ERC contact in Finland

Annika Raitala, Academy of Finland

Marie-Sklodowska-Curie Actions (MSCA)

- Equipping researches with new knowledge and skills through mobility and training
 - International mobility
 - Bottom up, open to all domains of R&I
 - Open to the whole world
 - Supervision, mentoring, career guidance and career development
 - Participation of both academic and non-academic (private) sector organisations

MSCA contact in Finland

Satu Huuha-Cissokho, Academy of Finland

Research Infrastructures

- Integrated and inter-connected world-class research infrastructures
 - Developing, consolidating and optimising European Research Infrastructures
 - Enabling an operational European Open Science Cloud (EOSC) ecosystem
 - For frontier research and for challenge-driven research (e.g. health research, and green and digital transformation)

Research Infrastructure contact in Finland

Merja Särkioja, Academy of Finland

Pillar III: European Innovation Council, EIC

Support to the full innovation cycle from **research and development** to **rapid scale** up of innovative technologies and companies (mainly start-ups and SMEs) at international level.

- **Pathfinder** (ex-FET): early stage research of breakthrough technologies by a multidisciplinary consortium
- **Transition**: develop market readiness of most potential research findings – open only to Pathfinder or ERC PoC projects
- **Accelerator** (ex SME Instrument): finalize the technology, commercialisation and scale-up by single innovative SMEs

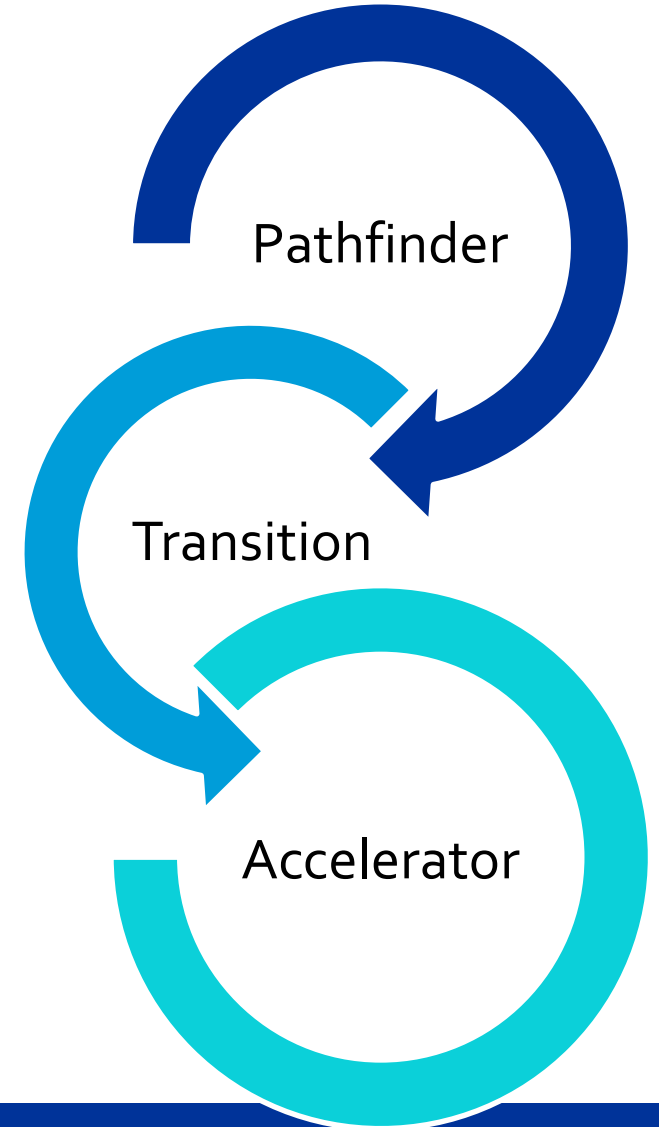
Funding mainly through **bottom-up schemes** – *Open Calls*

All instruments also contribute to **thematic priorities**: Health & Biotech, Digital, Energy, Climate & Environment – *Challenge Calls*

EIC contacts in Finland

Elina Holmberg, Business Finland

Hannele Lahtinen, Academy of Finland



Pillar IV: Widening participation and strengthening the European Research Area

A horizontal programme supporting

- 1) excellence and development of critical mass in the low R&I performing Member states (= widening countries), i.a. through collaboration with more R&I intensive MSs
- 2) mobility to widening countries (Inclusion Fellowships, ERA Chairs)
- 3) development of institutional policies and practices in ERA, related e.g. to open science, gender equality, citizen science, research integrity, science communication

Widening/ERA contact in Finland

Vera Mikkilä, Academy of Finland

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Pillar II

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HEU – what is changing?

Focus still on:

- Horizontality
- Multidisciplinarity
- Impact
- Multi Actor Approach (MAA)

Special attention to:

- European Green Deal
- Sustainable Development Goals
- Societal Sciences and Humanities (SSH)
- Synergies between different funding instruments

What is new?

Wide cooperation to tackle global challenges

Missions

Clearer funding

Partnerships

European partnerships

- Are initiatives in which the EU Commission and private and/or public partners commit themselves to jointly support the development and implementation of a research and innovation program.
- They make a significant contribution to achieving the EU's political priorities, such as the Green Deal, Europe's digital strategy or pandemic preparedness.
- They shall furthermore develop the European Research Area (ERA), overcome the fragmentation of the R&I landscape, avoid duplication with national or regional research activities and promote competitiveness and innovation
- The coherence of the partnerships among themselves and in interaction with other instruments in the Framework Programme will be improved under Horizon Europe

European partnerships

- Identifying European Partnerships is an integral part of Horizon Europe's strategic planning process. This will ensure alignment with the programme's priorities and resulted in a portfolio of 49 candidates for European Partnerships
- The list of candidate European Partnerships & draft proposals are available on the commission website.
- The first wave of European Partnerships in HEU will start with the work programmes 2021/ 2022.
- There are 3 types of European partnerships: Co-funded European Partnerships, Institutionalized European Partnerships and Co-Programmed European Partnerships (cPPP)
- They represent a significant investment; approximately 25% of the Horizon Europe budget and 50% of the budget of Pillar II.

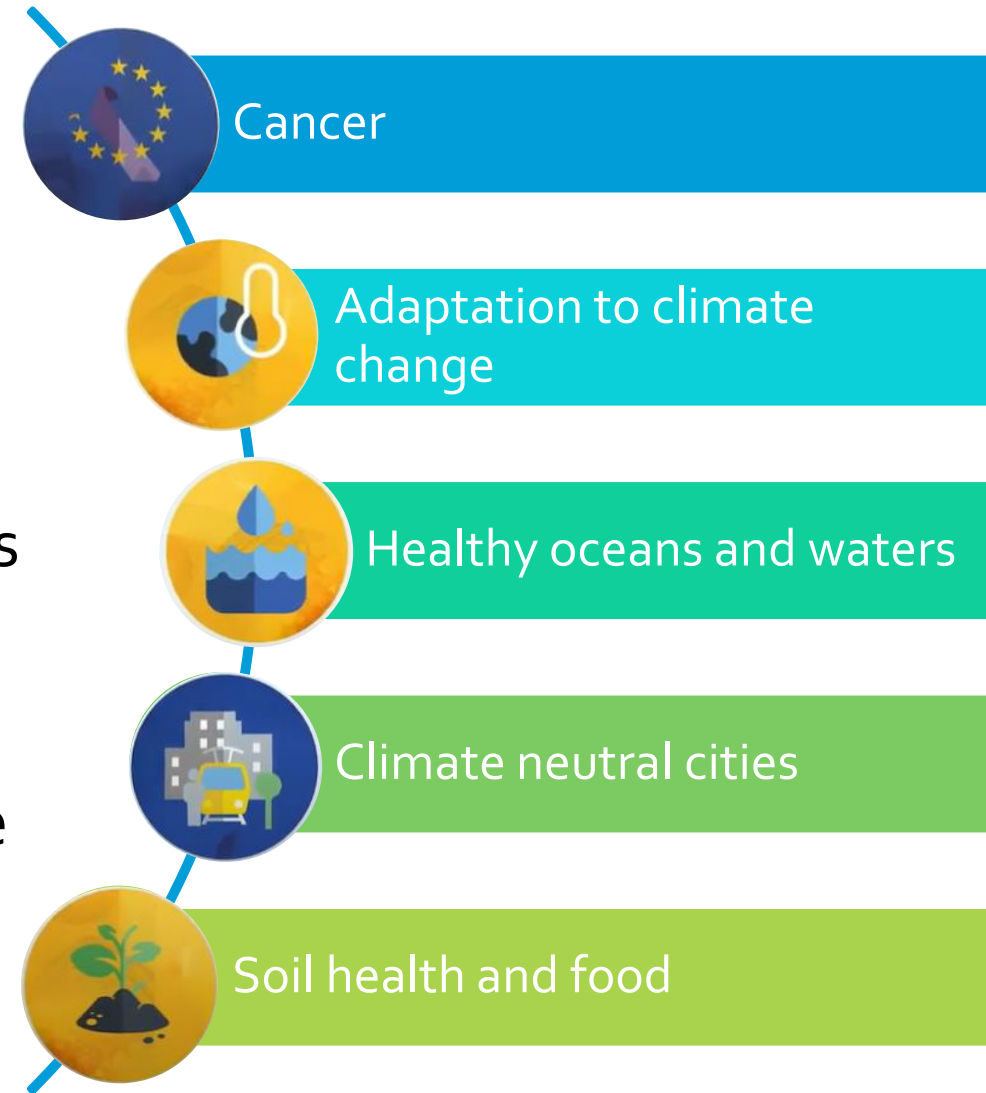
Cluster 6 co-funded partnerships in WP

Co-funded partnership	Work Programme	Proposed budget for 7-years (EUR million)
Rescuing biodiversity to safeguard life on Earth	2021-2022	165
A climate neutral, sustainable and productive Blue Economy	2021-2022	150
Water security for the planet (Water4All)	2021-2022	126
Accelerating farming systems transition: agroecology, living labs and research infrastructures	2023-2024	
Animal health: fighting infectious diseases	2023-2024	
Environmental observations for a sustainable EU agriculture	2023-2024	
Safe and sustainable food systems for people, planet and climate	2023-2024	

**Total budget for all co-funded partnerships around EUR 1 billion);
Outside the WP: Circular bio-based Europe (Joint Undertaking) EUR 1 billion))**

Missions

- Bold, inspirational and widely relevant to society
- Clearly framed: targeted, measurable and time-bound
- Establish impact-driven but realistic goals
- Mobilise resources on EU, national and local levels
- Link activities across different disciplines and different types of research and innovation
- Make it easier for citizens to understand the value of investments in research and innovation



Cluster 6

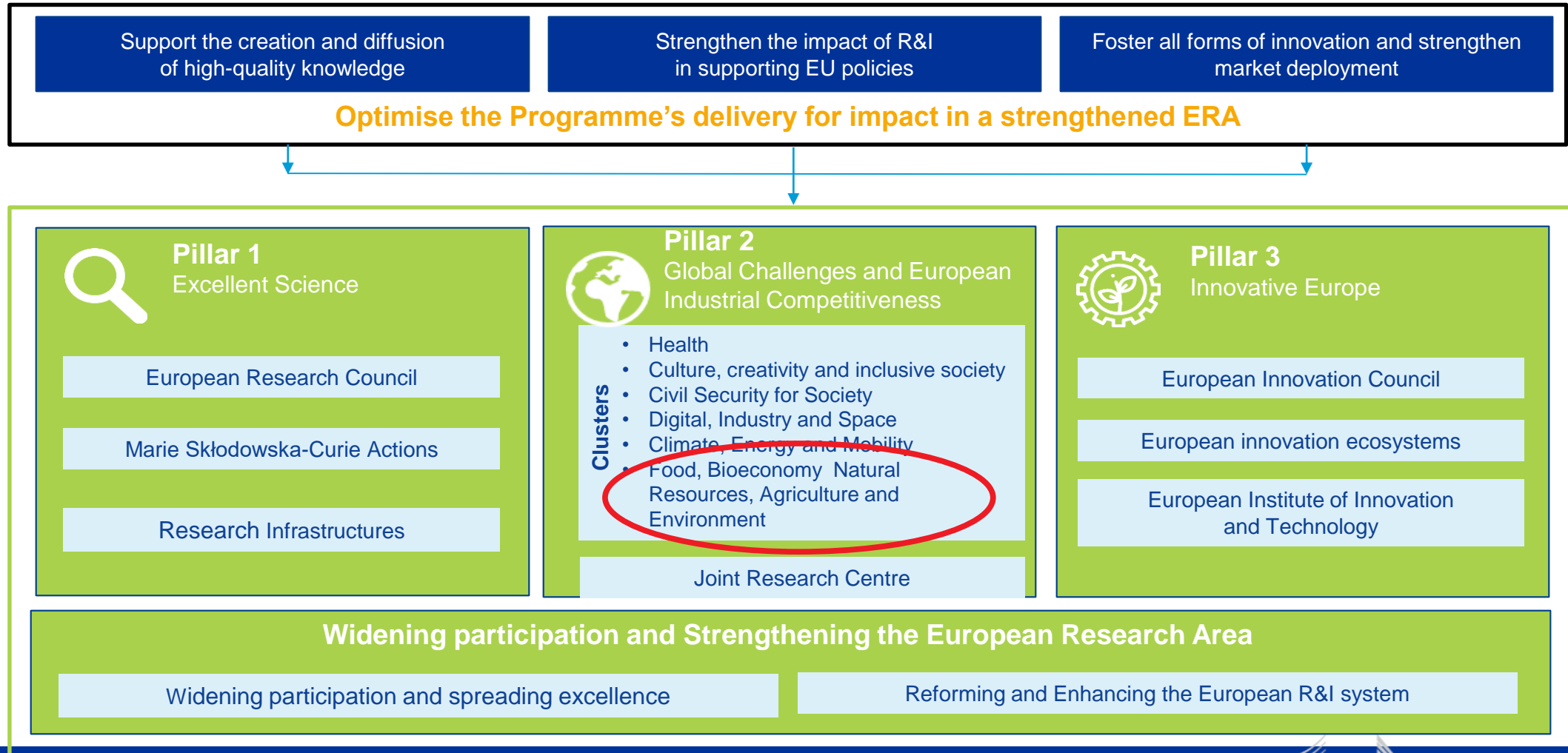
Indicative Budget & Funding forms

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Horizon Europe 2021-2027 95 B€*

Specific objectives of the Programme



HE Cluster 6 WP 2021-2022 structure

Strategic Plan

Work Programme

Impact 31 Climate neutrality and adaptation to climate change

- Destination 5 – Land, oceans and water for climate action

Impact 32 Preservation and restoration of biodiversity and ecosystems

- Destination 1 – Biodiversity and Ecosystem Services

Impact 33 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 34 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 35: Balanced development of rural, coastal and urban areas

- Destination 6 – Resilient, inclusive, healthy and green rural, coastal and urban communities

Impact 36: Innovative governance models enabling sustainability, environmental observation

- Destination 7 – Innovative governance, environmental observations and digital solutions in support of the Green Deal

Key Strategic Orientations for Cluster 6 R&I (2021-2024)

- **Promoting an open strategic autonomy by leading the development of key digital and enabling technologies, sectors and value chains** to accelerate and steer the digital and green transitions through human-centred technologies and innovations;
- **Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources** to ensure food security and a clean and healthy environment;
- **Making Europe the first digitally led circular, climate-neutral and sustainable economy** through the transformation of its mobility, energy, construction and production systems;
- **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.

Cluster 6 WP 2021-2022 indicative budget distribution per destination

Destination	Number of topics	Topics % share	Budget [mil €]	Budget % share
1 Biodiversity and ecosystem services (3 calls)	35	19,3	374,5	20,8
2 Fair, healthy and environmentally-friendly food systems from primary production to consumption (3 calls)	41	22,7	404	22,5
3 Circular economy and bioeconomy sectors (3 calls)	22	12,2	230	12,8
4 Clean environment and zero pollution (2 calls)	14	7,7	116	6,5
5 Land, oceans and water for climate action (2 calls)	15	8,2	193	10,7
6 Resilient, inclusive, healthy and green rural, coastal and urban communities (3 calls)	13	7,2	127	7,1
7 Innovative governance, environmental observations and digital solutions in support of the Green Deal (3 calls)	41	22,7	353,5	19,7
Total	181	100	1798	100

Cluster 6 indicative budget for 2021 and 2022 calls of destinations 1-4

Calls	2021 EUR million	2022 EUR million
HORIZON-CL6-2021-BIODIV-01	218,5	20
HORIZON-CL6-2022-BIODIV-01		90
HORIZON-CL6-2022-BIODIV-02-two stage		46
Total for 2021 & 2022	374,5	
HORIZON-CL6-2021-FARM2FORK-01	175	
HORIZON-CL6-2022-FARM2FORK-01		167
HORIZON-CL6-2022-FARM2FORK-02-two stage		62
Total for 2021 & 2022	404	
HORIZON-CL6-2021-CircBio-01	93	
HORIZON-CL6-2022-CircBio-01		66
HORIZON-CL6-2022-CircBio-02-two stage		71
Total for 2021 & 2022	230	
HORIZON-CL-6-2021-ZEROPOLLUTION-01	65	
HORIZON-CL-6-2022-ZEROPOLLUTION-01		51
Total for 2021 & 2022	116	

Cluster 6 indicative budget for 2021 and 2022 calls of destinations 5-7

Calls	2021 EUR million	2022 EUR million
HORIZON-CL6-2021-CLIMATE-01	108,00	10
HORIZON-CL6-2022-CLIMATE-01		75
Total for 2021 & 2022	193	
HORIZON-CL6-2021-COMMUNITIES-01	52	
HORIZON-CL6-2022-COMMUNITIES-01		42
HORIZON-CL6-2022-COMMUNITIES-02-two stage		33
Total for 2021 & 2022	127	
HORIZON-CL6-2021-GOVERNANCE-01	183,5	
HORIZON-CL6-2022-GOVERNANCE-01		133
HORIZON-CL6-2022-GOVERNANCE-02-two stage		37
Total for 2021 & 2022	353,5	
TOTAL destinations (exl. Other actions)	895	903

Cluster 6 Calls 2021-2022: Four funding forms and 181 topics (98 topics 2021/83 topics 2022)

Research & Innovation Actions (RIA)

- Financing 100%
- Producing new information or technology
- Supporting research and development activities
 - 94 topics

Coordination and Support Actions (CSA)

- Financing 100%
- Coordinate, support and activate research (e.g. conferences, workshops, preparatory work)
 - 43 topics

Innovation Actions (IA)

- Financing 70% / non-profit 100%
- Producing new or improved products or services
- Supporting actions closer to the market (e.g. prototypes, demonstrations, pilots)
 - 41 topics

CoFund

- Financing 30% - 70%
- Different kind of activities: networking, training, mobility, research, innovation etc.
- Three European Partnerships (Biodiversity, Water and Blue Economy)

Cluster 6 WP 2021-22

Destinations

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Destination 1

Biodiversity & ecosystem services

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Destination 1: Biodiversity & ecosystem services

Sub-section	Number of topics
11. Understanding biodiversity decline	6
12. Valuing and restoring biodiversity and ecosystem services	10
13. Managing biodiversity in primary production	8
14. Enabling transformative change on biodiversity	6
15. Interconnecting biodiversity research and supporting policies	5
TOTAL	35

RIA	IA	CSA	Other (part)
13 (2021) 7 (2022)	4 (2021) 4 (2022)	4 (2021) 2 (2022)	1 (2021)

Destination 1: Biodiversity & ecosystem services

Context:

POLICY

- The new **EU Biodiversity Strategy for 2030** aims to put **Europe's biodiversity on the path to recovery by 2030**, for people, climate and the planet.
- **Green Deal's 'do no harm' vision: all EU policies** to become more biodiversity-friendly. Sustainable use of ecosystems will support post-pandemic recovery.
- EU to take a **leading role in international biodiversity negotiations** (CBD global framework to halt biodiversity loss)

HORIZON
EUROPE

- **First key strategic orientation:** *'Protecting and restoring ecosystems and biodiversity and managing sustainably natural resources on land and at sea, and achieving climate neutrality and adaptation'*.
- A pan-European **Biodiversity Partnership** to be co-created with MS.
- Links to **Missions:** "Oceans", "Soil", "Climate Adaptation", "Cities".

Destination 1: Biodiversity & ecosystem services

- Expected impact: ***Biodiversity is back on a path to recovery, and ecosystems and their services are preserved and sustainably restored on land, inland water and at sea through improved knowledge and innovation --- including***
 - Direct drivers of biodiversity loss are understood and addressed
 - Biodiversity and natural capital are integrated into public and business decision-making at all levels
 - Europe builds competitive sustainability and tackles climate change and natural disasters through the deployment of nature-based solutions
 - The interrelations among biodiversity, health, food, soil, water and climate are better known
 - Practices in agriculture and forestry support biodiversity and the provision of other ecosystems services
 - Approaches for enabling transformative changes in society for biodiversity and ecosystems recovery are identified, tested and implemented

Indicative budget and timetable for calls under Destination 1 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021-BIODIV-01	218.5	20
HORIZON-CL6-2022-BIODIV-01		90
HORIZON-CL6-2022-BIODIV-02-two-stage		46
Overall indicative budget	218.5	156

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from appr. 5 M€ to 20 M€ (one CSA of 0.5 M€ included)

Approximately 1-2 projects/topic can be funded

Destination 2

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

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

Calls and Sub-sections					Number of topics
Call - Fair, healthy and environmentally-friendly food systems from primary production to consumption					
Subsection: 21. Enabling sustainable farming					18
Subsection: 22. Enabling sustainable fisheries and aquaculture					5
Subsection: 23. Transforming food systems for health, sustainability and inclusion					11
Subsection: 24. Targeted international cooperation					7
TOTAL					41
	RIA	IA	CSA	Other	
	12 (2021)	2 (2021)	2 (2021)	0	
	17 (2022)	7 (2022)	1 (2022)		

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

Context:

- **The Farm to Fork Strategy**, which is at the heart of **the Green Deal** and key for delivering on the United Nations **Sustainable Development Goals (SDGs)**, aims to enable the transition to fair, healthy as well as climate and environment-friendly and resilient food systems.
- R&I are key drivers steering and accelerating the transition by advancing knowledge, building capacities and delivering diverse innovative systemic solutions, both technological and non-technological, that speed up the progress towards the objectives set in the Farm to Fork Strategy.
- To unlock the potential of R&I and maximise impacts, **multi-actor approaches** involving primary producers, food businesses, consumers, and other actors, will be promoted with a view to co-creating innovative systemic solutions in support of food systems sustainability goals. Furthermore, synergies between other EU funded initiatives, e.g. the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT) may be fostered.

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

Impacts

- **Accelerate the transformation of food systems** to deliver multiple benefits for climate (mitigation and adaptation), environmental sustainability, health and nutrition, social equality, and thriving communities and businesses.
- **Enable sustainable agriculture** that reduces the use and risk of pesticides and antimicrobials, minimises nutrient pollution from fertilisers, improves animal welfare, decreases pressure on ecosystems and its wide range of services as well as manages natural resources in a sustainable way, while maintaining production at appropriate levels.
- **Enable sustainable fisheries and aquaculture** that increases production while significantly reducing the pressure on the environment and diversifying seafood products; raising citizens awareness and trust on seafood responsible and sustainable consumption; minimising waste of the seafood production system.
- **Ensure quality and safety of products** and enhance transparency, traceability and accountability across the food systems and providing easily understandable recommendation for all consumers while also detailed information on all sustainability aspects of foods for the interested citizen
- **Promote sustainable food consumption** and shift to sustainable healthy diets by improving food environments, ensuring accessibility of healthy and sustainable food for all, increasing the knowledge and awareness about the relevance and utilization of healthy and sustainable food

Indicative budget and timetable for calls under Destination 2 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021-FARM2FORK-01	175	
HORIZON-CL6-2021-FARM2FORK-01		167
HORIZON-CL6-2022-FARM2FORK-02-two-stage		62
Overall indicative budget	175	229

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from 2 M€ (CSA) to 11 M€

Approximately 1-2 projects/topic can be funded

Destination 3

Circular economy and bioeconomy sectors

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Destination 3 – Circular economy and bioeconomy sectors

Context:

- This destination and its topics target climate-neutral **circular and bioeconomy transitions**, covering safe **integrated circular solutions at territorial and sectoral levels**.
- Focus on **circularity** aims at less waste and more value by extending the lifetime and retaining the value of products and materials.
- **Local and regional focus** is crucial for a circular economy and bioeconomy that is sustainable, regenerative, inclusive and just.
- **Bio-based innovation** lays the foundations for the transition.
- **Multifunctional and sustainable management and use of European forests** as well as wood and woody biomass is crucial.
- **Aquatic biological resources and blue biotechnology** are crucial for delivering Green Deal's ambition of a 'blue economy'.

Destination 3: Circular economy and bioeconomy sectors

Sub-section	Number of topics
31. Enabling a circular economy transition	6
32. Innovating sustainable bio-based systems and the bioeconomy	12
33. Safeguarding the multiple functions of EU forests	2
34. Innovating for blue bioeconomy and biotechnology value chains	2
TOTAL	22

RIA	IA	CSA	Other
0 (2021)	6(2021)	2 (2021)	0
6 (2022)	6(2022)	2 (2022)	

Indicative budget and timetable for calls under Destination 3 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021-CircBio-01	93	
HORIZON-CL6-2022-CircBio-01		66
HORIZON-CL6-2022-CircBio-02-two-stage		71
Overall indicative budget	93	137

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from 4 M€ to 20 M€

Approximately 1-3 projects/topic can be funded; in some topics up to 5

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.
- **Improved consumer and citizen benefits**, including in the rural settings by establishing circular and bio-based systems based on sustainability, inclusiveness, health and safety; reaching a significantly higher level of involvement of all actors

Destination 3 – Circular economy and bioeconomy sectors

Expected impacts (continued):

- **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.

Destination 4

Clean environment and zero pollution

Destination 4 – Clean environment and zero pollution

Sub-section	Number of topics
41. Halting emissions of pollutants to soils and waters	5
42. Protecting drinking water and managing urban water pollution	2
43. Addressing pollution on seas and oceans	1
44. Increasing environmental performances and sustainability of processes and products	6
TOTAL	14

RIA	IA	CSA	Other (part)
5 (2021) 2 (2022)	1 (2021) 2 (2022)	4 (2021)	

Destination 4 – Clean environment and zero pollution

Context:

- Anthropogenic pollution has a severe impact on Earth ecosystems and **heavily affects planetary ecosystems** that are essential for human life.
- Within the first WP, this destination addresses **pollution in fresh and marine waters, pollution through nutrients (N/P) and the environmental performance of processes** – with a view to eliminating pollutants, restoring biodiversity and ecosystems, re-balancing nutrient flows and accelerating the transition from a fossil-based to a resource-efficient and zero-pollution circular, blue and bio-economy.
- Measures envisaged will contribute to the EGD initiatives **Zero Pollution Ambition**, Farm to Fork Strategy, EU Biodiversity Strategy, the 2030 Agenda for Sustainable Development and their respective targets.

Destination 4 – Clean environment and zero pollution

Impacts:

- Advanced understanding of **diffuse and point sources of water pollution** in a global and climate changing context, enabling **novel solutions** to protect water bodies, aquatic ecosystems and soil functionality, and further enhancing water quality and its management for safe human and ecological use, while fostering the European position and role in the global water scene.
- **Balanced N/P flows well within safe ecological boundaries** at European, regional and local scale, contribute to restoring ecosystems
- **Clean, unpolluted European seas** as a result of successful behavioural, social-economic, demographic, governance and green-blue transitions
- **Circular bio-based systems reversing climate change, restoring biodiversity and protecting air, water and soil quality** along supply chain of biological feedstock and industrial value chains, within Europe and across borders
- Innovative biotechnology creating **zero-pollution bio-based solutions**

Indicative budget and timetable for calls under Destination 4 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021-COMMUNITIES-01	65	
HORIZON-CL6-2022-COMMUNITIES-01		51
Overall indicative budget	65	51

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from 5 to 6 M€

Approximately 1-2 projects/topic can be funded

Destination 5

Land, oceans and water for climate action

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Destination 5 – 15 topics for 2021 and 2022 calls

RIA	IA	CSA	Other (cofund)	Total
7 (2021) 3 (2022)	1 (2022)	2 (2021) 1 (2022)	1 (2021)	10 (2021) 5 (2022)

Timetable and total budgets for calls:

- Opening: 15 Apr 2021/28 Oct 2021
- Deadline: 01 Sep 2021 /15 Feb 2022
- Total budget 193 million EUR: 108 EUR million 2021/85 EUR million 2022
- Budget per topics varies from 3 to 23 EUR millions
- Approximately 1-2 projects per topic can be funded

Destination 5 – Context

- R&I has a significant role to play to support the design and implementation of policies that will ensure the achievement of EU policy objectives.
- The conservation and enhancement of Earth's natural carbon sinks such as soils and plants, forests, farmed lands, wetlands and the oceans is crucial to achieve EU climate objectives.
- Reducing GHG emissions and enhancing carbon sinks in primary production and natural systems are key elements of the European Green Deal. Here agriculture as well as forestry have a significant role to reduce and mitigate GHG emission and to enhance carbon sinks.
- The European Green Deal requires a careful examination of the trade-offs and synergies among the sustainability goals, including health protection, food and nutrition security, ecosystem services and biodiversity preservation both on land and at sea.
- Freshwater resources are increasingly under stress as a consequence of overuse and climate change with wide-ranging consequences for human societies and ecosystems. It is therefore necessary to define the safe operating space in terms of water quantity and availability, reduce the vulnerability to change and enhance our adaptive capacity.
- There is growing political awareness of the importance of ocean and polar regions as an integral part of the Earth's climate system and of the need to ensure the integrity and resilience of these ecosystems.

Destination 5: Expected impacts

- 1) Better understanding and enhancing the mitigation potential of ecosystems and sectors based on the sustainable management of natural resources;
- 2) 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;
- 3) 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;
- 4) 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;
- 5) Improved adaptive capacity of water and soil systems and sectors including by unlocking the potential of nature-based solutions;
- 6) 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.

Destination 6

**Resilient, inclusive, healthy and green
rural, coastal and urban communities**

HORISONTTI EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

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

- 13 topics

Call - Resilient, inclusive, healthy and green rural, coastal and urban communities			
RIA	IA	CSA	Other
3 (2021)	1 (2021)	2 (2021)	0
4 (2022)	3 (2022)		

Destination 6 - Resilient, inclusive, healthy and green rural, coastal and urban communities

Context:

- **Places matter:** SDGs, ecological and digital transitions, pandemics raise challenges and opportunities that differ for rural, coastal communities and territories who play a key role in managing, protecting and using natural resources
- **People matter:** social and behavioural drivers play an important role in enabling or slowing down transitions (as producers, service providers, businesses, consumers, citizens, inhabitants...)
- To achieve the Green deal objectives in an economy that works for all and leaves no one behind:
 - Need to better understand territorial differences + social/behavioural drivers of change
 - Need to innovate in tailoring policy responses at various governance levels
 - Need to empower communities to innovate bottom-up: develop, test and upscale solutions tailored to their needs
- Transdisciplinary R&I with strong focus on social and community innovation

Destination 6 - Resilient, inclusive, healthy and green rural, coastal and urban communities

Impacts:

- Improved **cohesion, social inclusion, gender balance, skills and capacity to act for change** at community level.
- Rural, coastal and urban communities are **better prepared to achieve climate-neutrality, adapt to climate change and turn digital and ecological transitions into increased resilience and positive long-term prospects**.
- **Smarter rural communities** with improved access to services and opportunities and adequate innovation ecosystems, including for women, youth, vulnerable groups. Reduced “**feeling of being left behind**”.
- **Sustainably developed and more resilient coastal areas** (nature-based coastal protection and solutions to socio-economic and environmental threats, new social, economical and governance frameworks, community-led innovations).
- **Re-shaped and healthier urban food environments** (people can access, afford and choose healthier and nutritious food). More **circular urban and regional food systems**.
- Enhanced **resilience, health, well-being, social inclusion and economic growth** of local communities through **nature-based solutions**.

Indicative budget and timetable for calls under Destination 6 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021-COMMUNITIES-01	52	
HORIZON-CL6-2022-COMMUNITIES-01		42
HORIZON-CL6-2022-COMMUNITIES-02-two-stage		33
Overall indicative budget	52	75

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from 5 to 6 M€

Approximately 1-2 projects/topic can be funded

Destination 7

**Innovative governance, environmental
observations and digital solutions in
support of the Green Deal**

HORISONTTI EUROOPPA

— EU:N TUTKIMUS- JA INNOVAATIO-OHJELMA —

Innovative governance, environmental observations and digital solutions in support of the Green Deal

Sub-section	Number of topics
71. Innovating with governance models and supporting policies	19
72. Deploying and adding value to Environmental Observations	7
73. Digital and data technologies as key enablers	7
74. Strengthening agricultural knowledge and innovation systems	9
TOTAL	42

RIA	IA	CSA	Other (partn)
9 (2021) 7 (2022)	2 (2021) 2 (2022)	14 (2021) 7 (2022)	1 (2022)

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

Context: A facilitating environment that would speed up transition towards sustainability is necessary

- In order to deliver the European Green Deal, while ensuring that no one is left behind, will **require complex decisions**, given the interdependencies across existing policies.
- In order to inform these decisions with best available information, **we need to create knowledge and innovative solutions.**
- For this, we need to take advantage of **Environmental Observations as well as digital solutions**, assessed through the “do no harm” principle of the Green Deal.
- We need to support the **dissemination of this knowledge and innovation to key stakeholders**, in particular through effective Agricultural Knowledge and Innovation Systems.

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

Impacts:

- **Innovative governance models** enabling sustainability and resilience notably to achieve better informed decision-making processes, societal engagement and innovation
- **Data and products** from Environmental Observation to Green Deal related domains
- A strengthened **Global Earth Observation System of Systems (GEOSS)**
- **Better sustainability performance and competitiveness** in Cluster 6 domains through further deployment of digital and data technologies as key enablers
- **More informed and engaged stakeholders and end users** including primary producers and consumers 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

The European Commission is a member and co-chair of the Group on Earth Observations (GEO), as such the European Commission adopted the GEO Canberra Declaration (https://earthobservations.org/canberra_declaration.php and Commission Decision C(2019)7337/F1) and committed to contribute to the GEO objectives, including to the Global Earth Observation System of Systems (GEOSS).

Indicative budget and timetable for calls under Destination 7 in 2021-2022

Call	2021 €Million	2022 €Million
HORIZON-CL6-2021- GOVERNANCE-01	183.5	
HORIZON-CL6-2022- GOVERNANCE-01		133
HORIZON-CL6-2022- GOVERNANCE-02-two- stage		37
Overall indicative budget	183.5	170

Timetable **2021** calls:

- Opening: 15 Apr 2021
- Deadline(s): 01 Sep 2021

Budget/topic varies from 2 to 23 M€

Approximately 1-2 projects/topic can be funded

Kiitos!

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