

APRE

Agenzia per la Promozione
della Ricerca Europea



SAPIENZA
UNIVERSITÀ DI ROMA

“HORIZON EUROPE: OPPORTUNITÀ NELL’AMBITO DEL CLUSTER FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT”

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Il Work Programme CL6 non è ancora pubblicato. Le informazioni sono pertanto da considerarsi non ufficiali e confermate.



#HorizonEU

THE EU RESEARCH & PROGRAMME 2021 – 27 INNOVATION

This presentation is based on the political agreement of 11 December 2020 on the Horizon Europe. Information on some parts is pending revision.

19 March 2021

Research and
Innovation



Mariya Gabriel, European Commissioner
for Innovation, Research, Culture,
Education and Youth

*“The programme aims at giving Europe a new push to a global positioning. Horizon Europe is to be **the biggest and most ambitious EU Research Innovation programme ever**. It builds on the **success of Horizon 2020** and improves it further by fostering a stronger support to **breakthrough innovation** through the European Innovation Council, by creating greater **impact** through R&I **missions** and by streamlining **partnerships** landscape.”*



HORIZON EUROPE

95,5 miliardi €
(prezzi correnti)

L'ambizioso programma quadro dell'UE per la ricerca e l'innovazione (2021-2027)



rafforzare le **basi scientifiche e tecnologiche** dell'UE e lo spazio europeo della ricerca (SER)



migliorare la **capacità innovativa**, la **competitività** e l'**occupazione in Europa**



conseguire gli obiettivi prioritari per i **cittadini** e sostenere il **nostro modello socio-economico** e i nostri **valori**

dimensione

SCIENTIFICA

ECONOMICA

SOCIALE

di Horizon Europe

Lessons Learned

from Horizon 2020 Interim Evaluation



Support breakthrough innovation



European Innovation Council



Create more impact through mission-orientation and citizens' involvement



EU Missions



Rationalise partnerships' landscape



New approach to partnerships



Reinforce openness



Open science policy



Strengthen international cooperation



Extended association possibilities



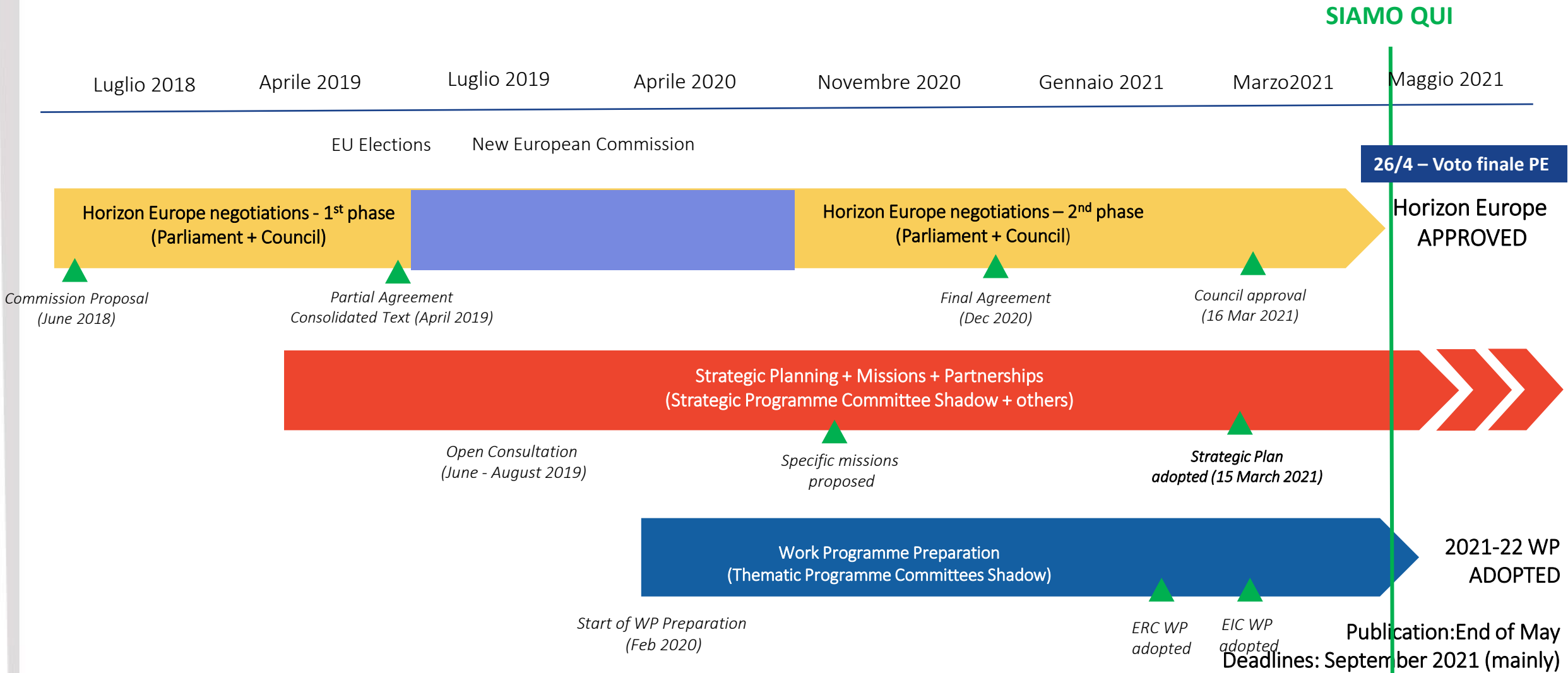
Encourage participation



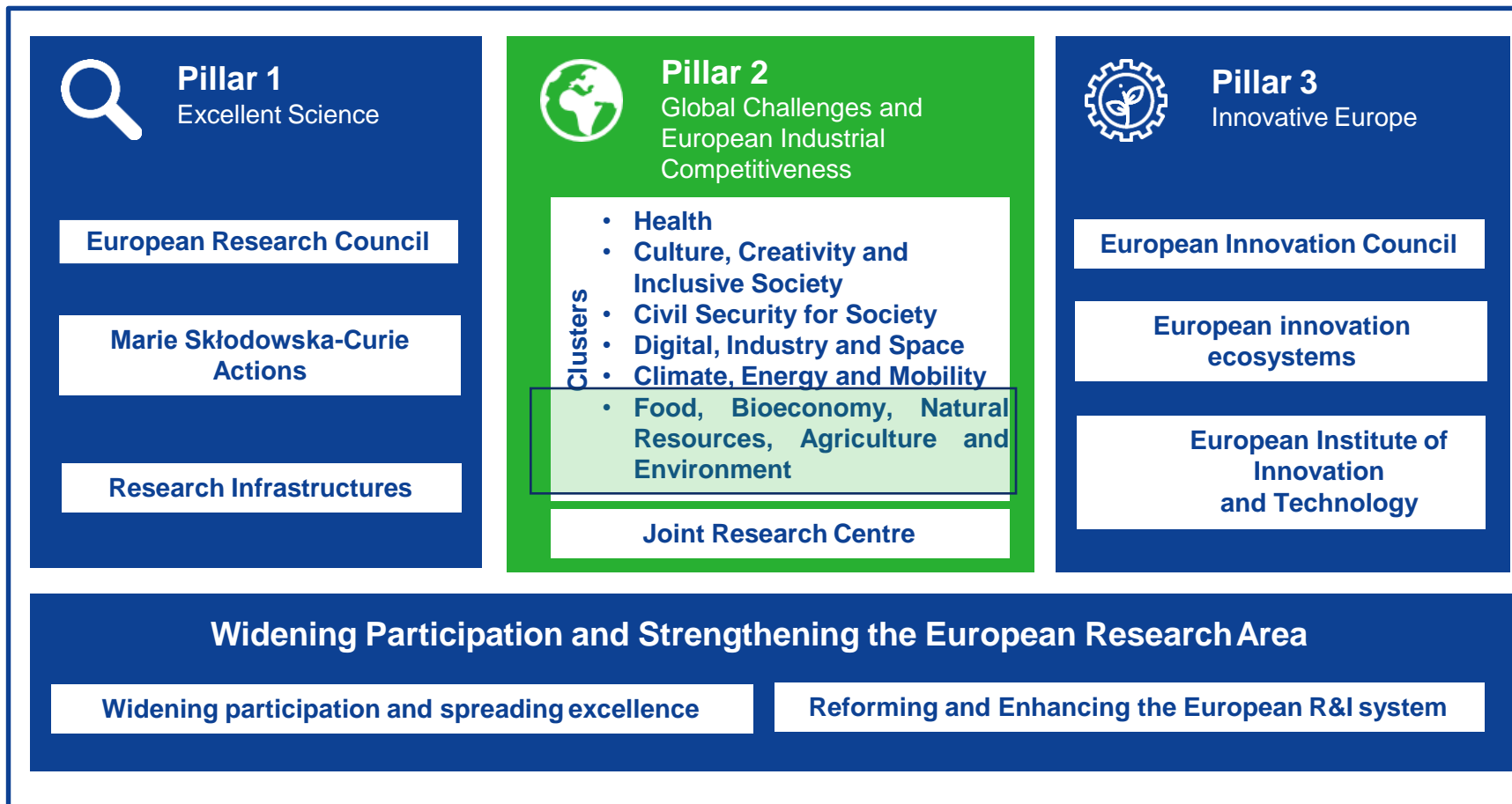
Spreading Excellence



UN MESE AL TRAGUARDO

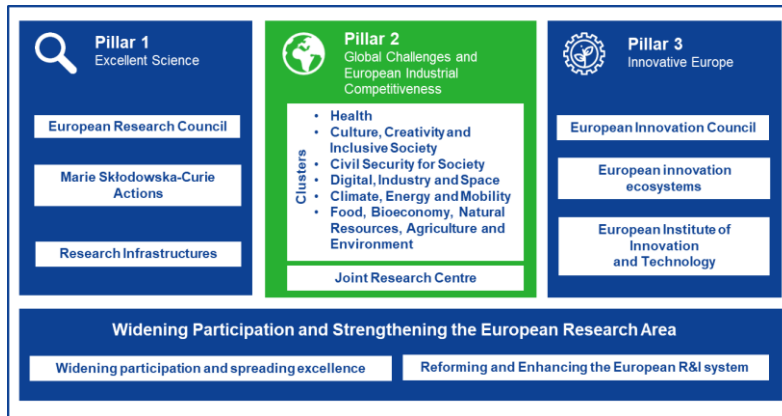


Horizon Europe: struttura



SPECIFIC OBJECTIVES

Pillar 2- Global Challenges and European Industrial Competitiveness



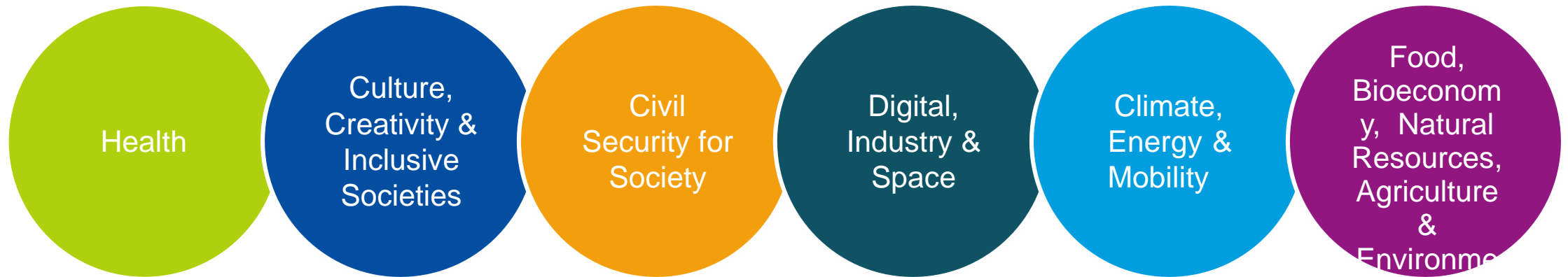
to generate knowledge, strengthen **the impact of research and innovation** in developing, supporting and implementing Union policies and support the access to and uptake of innovative solutions in European industry, notably in SMEs, and society to address global challenges, including climate change and the Sustainable Development Goals;

- Coerenza tra le diverse parti del programma
- **Approccio sistemico basato sull'impatto**
(interdisciplinare e intersettoriale)

Pillar II - Clusters

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS:

boosting **key technologies** and solutions underpinning **EU policies & Sustainable Development Goals** (6 clusters and JRC – non-nuclear direct actions)



€53.5 billion

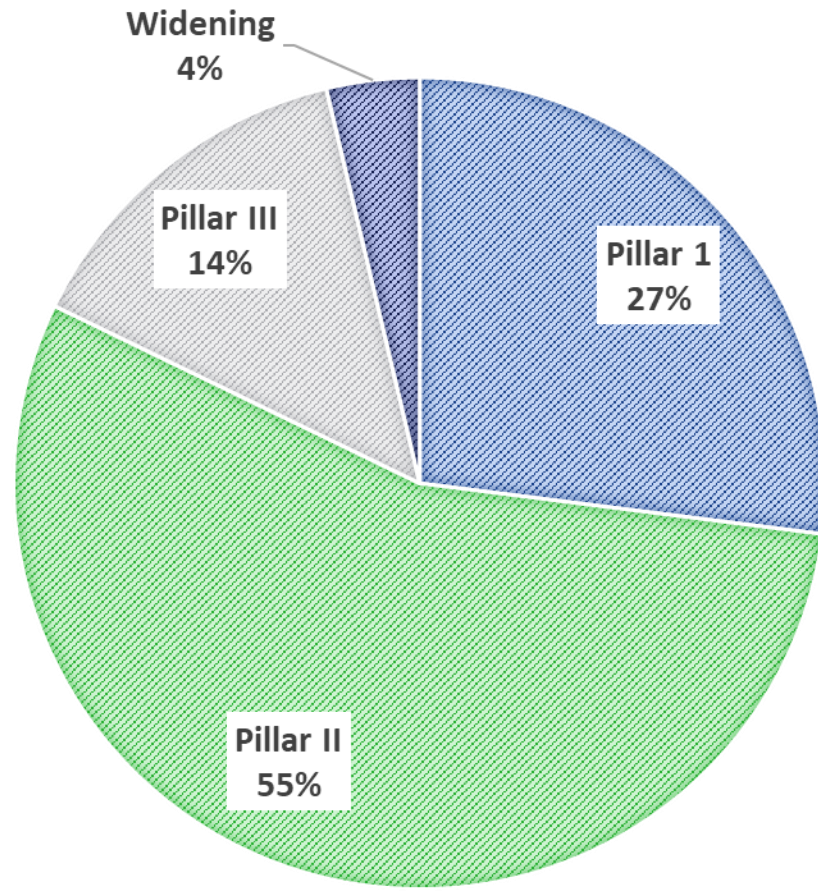
Pillar II Budget for clusters & for JRC

in current prices

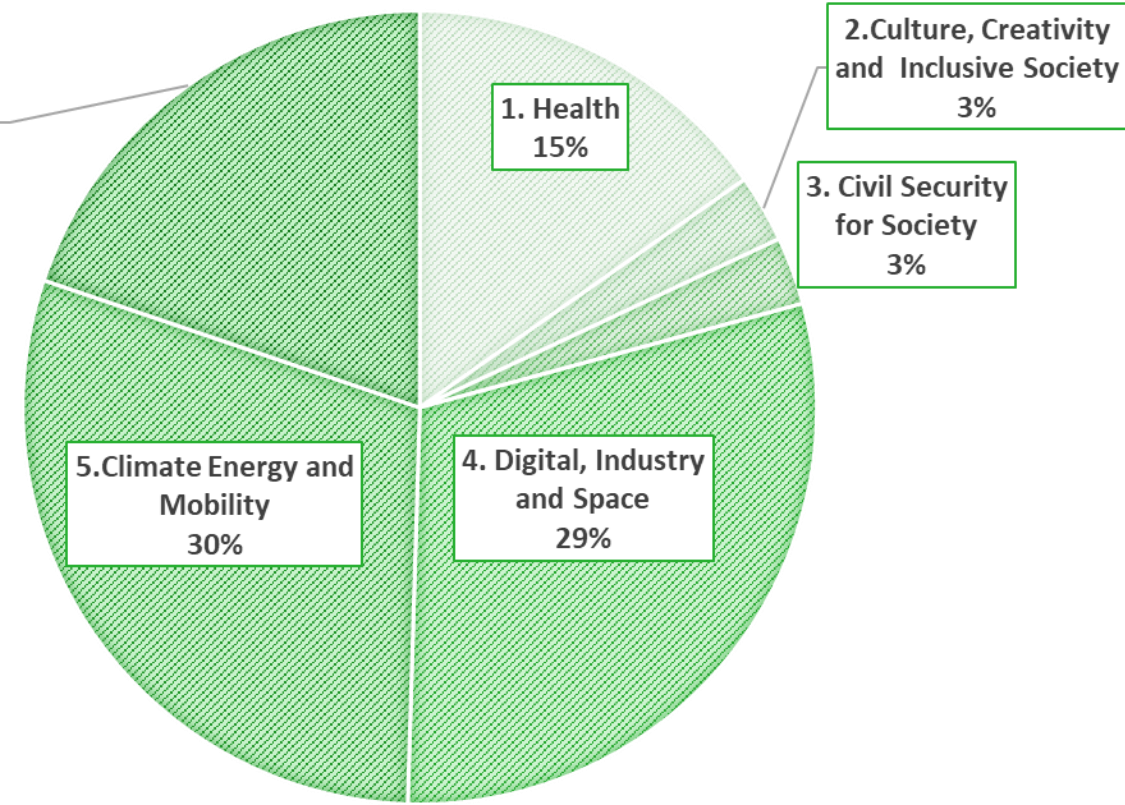
Cluster 1	Health	€8.246 billion (including €1.35 billion from NGEU)
Cluster 2	Culture, Creativity & Inclusive Societies	€2.280 billion
Cluster 3	Civil Security for Society	€1.596 billion
Cluster 4	Digital, Industry & Space	€15.349 billion (including €1.35 billion from NGEU)
Cluster 5	Climate, Energy & Mobility	€15.123 billion (including €1.35 billion from NGEU)
Cluster 6	Food, Bioeconomy, Natural Resources, Agriculture & Environment	€8.952 billion
	JRC (non-nuclear direct actions)	€1.970 billion

Clusters are including a budget for Partnerships and Missions
NGEU is Next Generation EU programme – Recovery Fund

Budget - Distribuzione



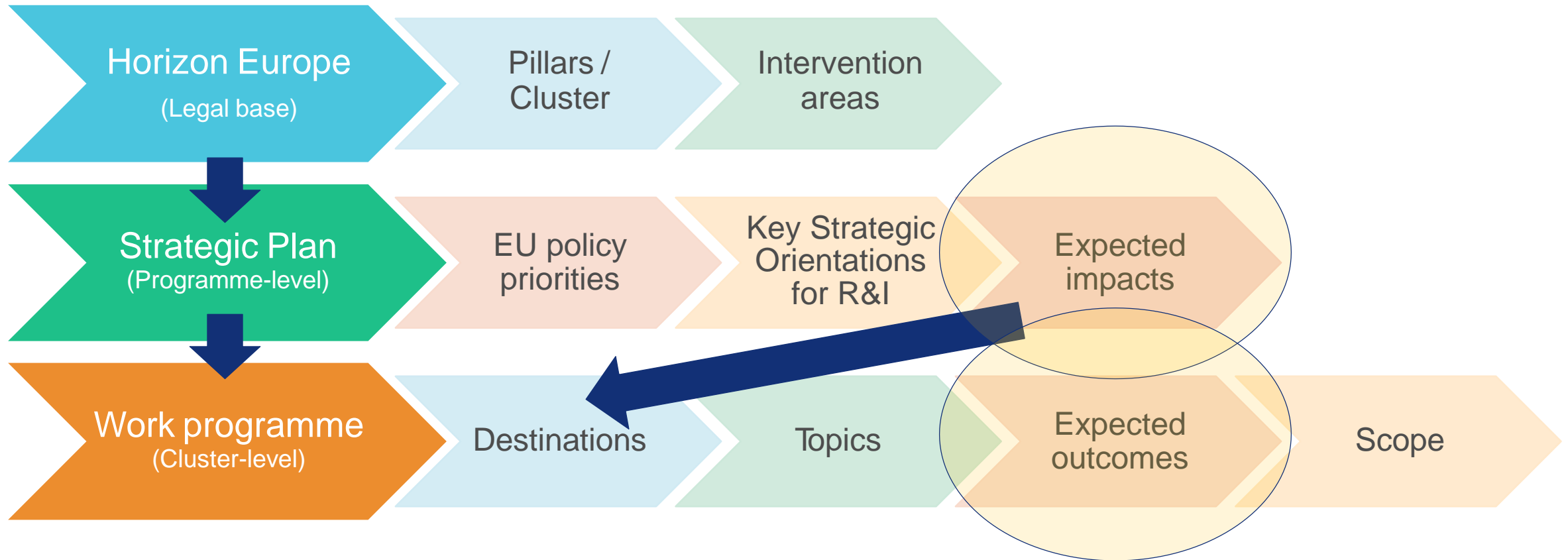
6. Food, Bioeconomy, Natural Resources, Agriculture and Environment
20%
8,952 mlr €



From policy priorities to concrete action



Horizon Europe Intervention Logic





STRATEGIC PLAN

WORK PROGRAMME

PROJECT

EC POLICY PRIORITIES

Political Guidelines for the European Commission 2019-2024 (and other key strategic documents - **e.g. Green Deal**)

KEY STRATEGIC ORIENTATIONS FOR R&I

Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference

IMPACT AREAS

Group of expected impacts highlighting the most important transformation to be fostered through R&I

EXPECTED IMPACTS ⇒ **DESTINATIONS**

= *General objectives*

Wider effects on society (incl. the environment), the economy and science enabled by the outcomes of R&I investments (long term)

EXAMPLE

Strategic Plan & Work Programme: R&I contribution to seamless, smart, inclusive and sustainable mobility services

Project : Increase maximum passenger capacity by 15% and passenger average throughput by 10%, leading to a 28% reduction in infrastructure expansion costs

EXPECTED OUTCOMES ⇒ **TOPICS**

= *Specific objectives*

Effects of Horizon Europe projects such as uptake, diffusion, use and deployment of the projects' results by direct target groups (medium term)

EXAMPLE

Work Programme : Innovative accessibility and logistics solutions applied by the European Transport sector

Project : At least 9 European airports adopt the advanced forecasting system that was demonstrated during the project

EXPECTED OUTPUTS ⇒ **PROJECT RESULTS**

= *Operational objectives*

What is produced during the project implementation, such as innovative solutions, algorithms, new business models, guidelines, policy recommendations, methodologies, publications, database, prototypes, trained researchers, new infrastructures, proof of feasibility, networks, etc. (short term)

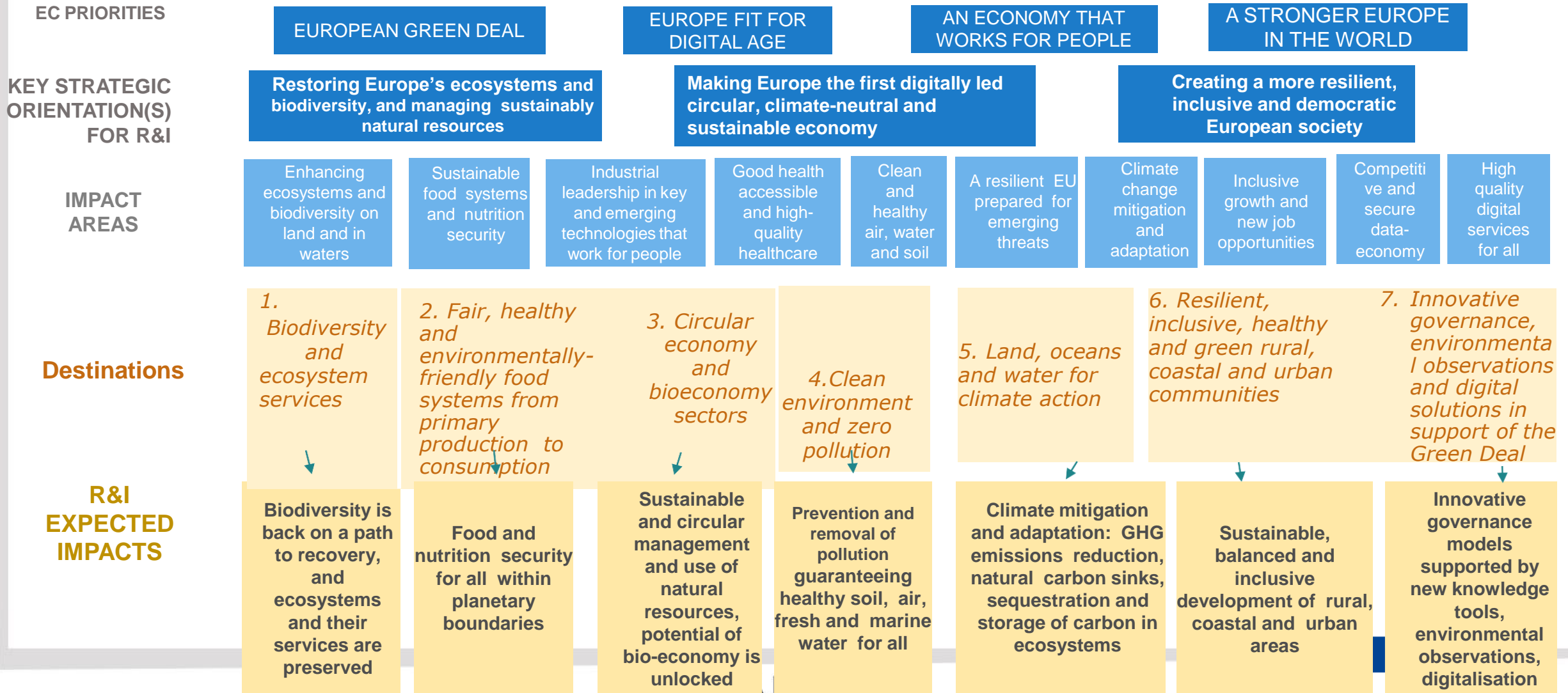
EXAMPLE

Project (by the end of its implementation): Successful large-scale demonstration trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management

CLUSTER 6 INTERVENTION LOGIC



SDG 2 – Zero Hunger; SDG 3 – Good Health and Well-Being; SDG 6 - Clean Water and Sanitation; SDG 8 – Decent Work and Economic Growth; SDG 9 – Industry, Innovation, and Infrastructure; SDG 11 – Sustainable Cities and Communities; SDG 12 - Responsible Consumption and Production; SDG 13 – Climate Action, SDG 14 – Life Below Water and SDG 15 - Life on Land".



ELEMENTI POLICY

Priorità politiche Commissione Von der Leyen

- **“European Green Deal”**, con le iniziative:

Climate Action, Farm to Fork Strategy, EU Biodiversity Strategy, Circular Economy Action Plan, Zero Pollution Ambitions, EU Industrial Strategy for Europe

- **“An economy that works for people”**
- **“A Europe fit for the digital age”**
- **“A stronger Europe in the world”**

Altre politiche

- Common Agricultural Policy,
- Common Fisheries Policy,
- Maritime Policy
- EU Arctic Policy
- EU General Food Law,
- EU Bioeconomy Strategy,
- EU Forest Strategy,
- Blue Growth Strategy,
- Chemicals Strategy for Sustainability,
- EU Plastics Strategy,
- Data Strategy for Europe,
- Food 2030 initiative



**KEY
STRATEGIC
ORIENTATIONS
FOR R&D**

KSO B: Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources

Enhancing ecosystems and biodiversity on land and in waters

Clean and healthy air, water and soil
Sustainable food systems from farm to fork on land and sea

KSO C: Making Europe the first digitally enabled circular, climate-neutral and sustainable economy

Circular and clean economy

**IMPACT
AREAS**

**EXPECTED
IMPACTS**

- 27. Reduced emissions and enhanced CSS in ecosystems
- 28. Biodiversity and ecosystems preservation and restoration on land, inland water and at sea
- 30. Food and nutrition security for all from farm to fork
- 31. Sustainable rural, coastal and urban areas

- 29. Sustainable and circular management and use of natural resources
- 32. Innovative governance models enabling sustainability and resilience

Strategic Plan: Cluster 6 expected impacts

Intervention Areas

Impact 1 Climate neutrality and adaptation to climate change



Impact 2 Preservation and restoration of biodiversity and ecosystems



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



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



Impact 5 Balanced development of rural, coastal and urban areas



Impact 6 Innovative governance models enabling sustainability, environmental observation



Environmental Observation

Biodiversity
and Natural Resources

Agriculture, Forestry
and Rural Areas

Seas, Oceans
and Inland Waters

Food Systems

Bio-based Innovation Systems
in the EU Bioeconomy

Circular Systems

From expected impacts to destinations...

Strategic Plan

Work Programme




Impact 1 Climate neutrality and adaptation to climate change

- Destination: Land, oceans and water for climate action



Impact 2 Preservation and restoration of biodiversity and ecosystems

- Destination: Biodiversity and ecosystem services



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

- Destination: Circular economy and bioeconomy sectors
- Destination: Clean environment and zero pollution



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

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



Impact 5 Balanced development of rural, coastal and urban areas

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



Impact 6 Innovative governance models enabling sustainability, environmental observation

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



DESTINATIONS

- Biodiversity and Ecosystem Services
- Fair, healthy and environmentally-friendly food systems from primary production to consumption
- Circular economy and bioeconomy sectors
- Clean environment and zero pollution
- Land, oceans and water for climate action
- Resilient, inclusive, healthy and green rural, coastal and urban communities
- Innovative governance, environmental observations and digital solutions in support of the Green Deal

CL6 - Destinations

Destination #1 “Biodiversity and Ecosystem Services” Sostiene la ripresa e il ripristino degli ecosistemi attraverso una gestione sostenibile del suolo, delle acque interne e del mare, che ne protegga l’integrità e favorisca l’integrazione tra settori.

Destination #2 “Fair, healthy and environmentally-friendly food systems from primary production to consumption” Contribuisce a guidare e accelerare la transizione verso sistemi alimentari sostenibili, sicuri, sani e inclusivi, dal produttore al consumatore, e a garantire la sicurezza alimentare.

Destination #3 “Circular economy and bioeconomy sectors” Sostiene soluzioni circolari, guidate dalla neutralità climatica e dalla bioeconomia per generare soluzioni, integrate, sicure a livello territoriale e in settori diversi.

Destination #4 “Clean environment and zero pollution” Arresta e previene l’inquinamento, sostenendo azioni di R&I su acque interne e marine, suolo, aria, comprese le emissioni di azoto e fosforo, sulle prestazioni ambientali e sulla sostenibilità dei processi nei sistemi a base biologica

CL6 - Destinations

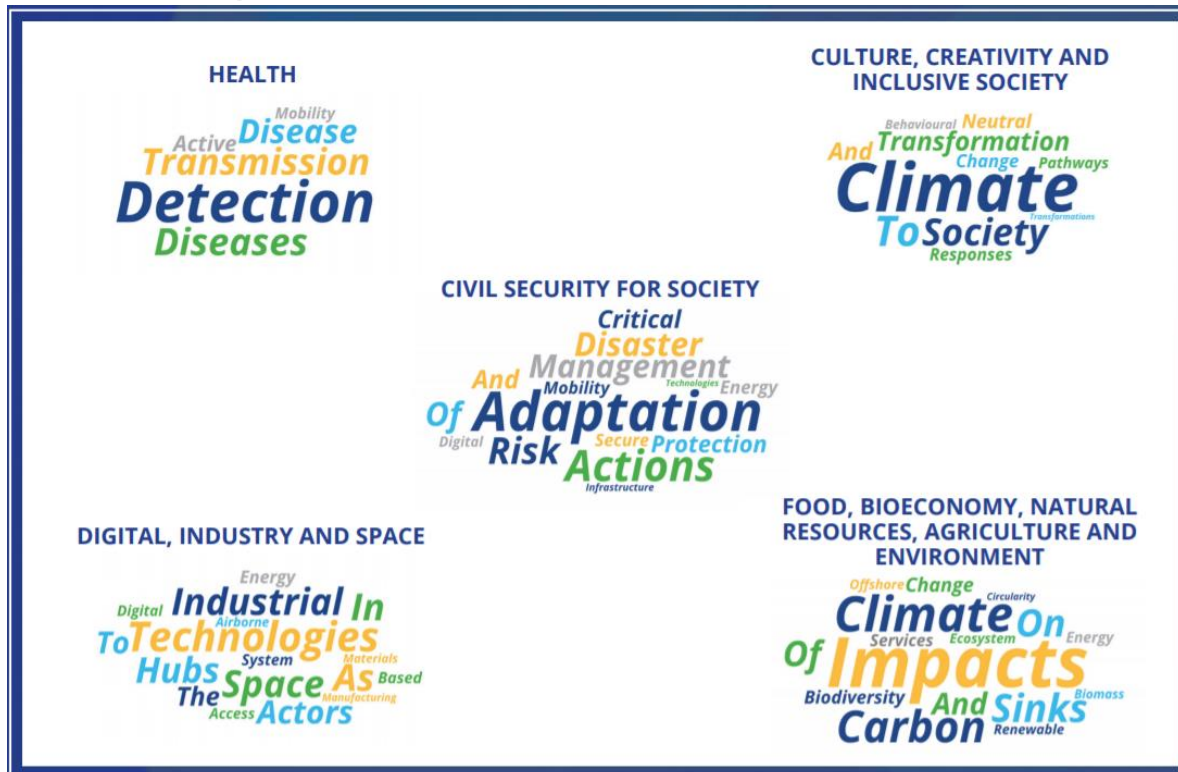
Destination #5 “Land, oceans and water for climate action” Studia l’impatto del cambiamento climatico sugli ambienti terrestri e marini, sulle risorse naturali, l’agricoltura e i sistemi agroalimentari, identificando azioni di mitigazioni e percorsi di adattabilità.

Destination #6 “Resilient, inclusive, healthy and green rural, coastal and urban communities” Mette al centro i luoghi, dalle aree rurali e a quelle costiere, e le persone per raggiungere un’Europa più sostenibile e resiliente, anche nella reazione alla recente pandemia, nell’utilizzo, protezione e gestione delle risorse naturali.

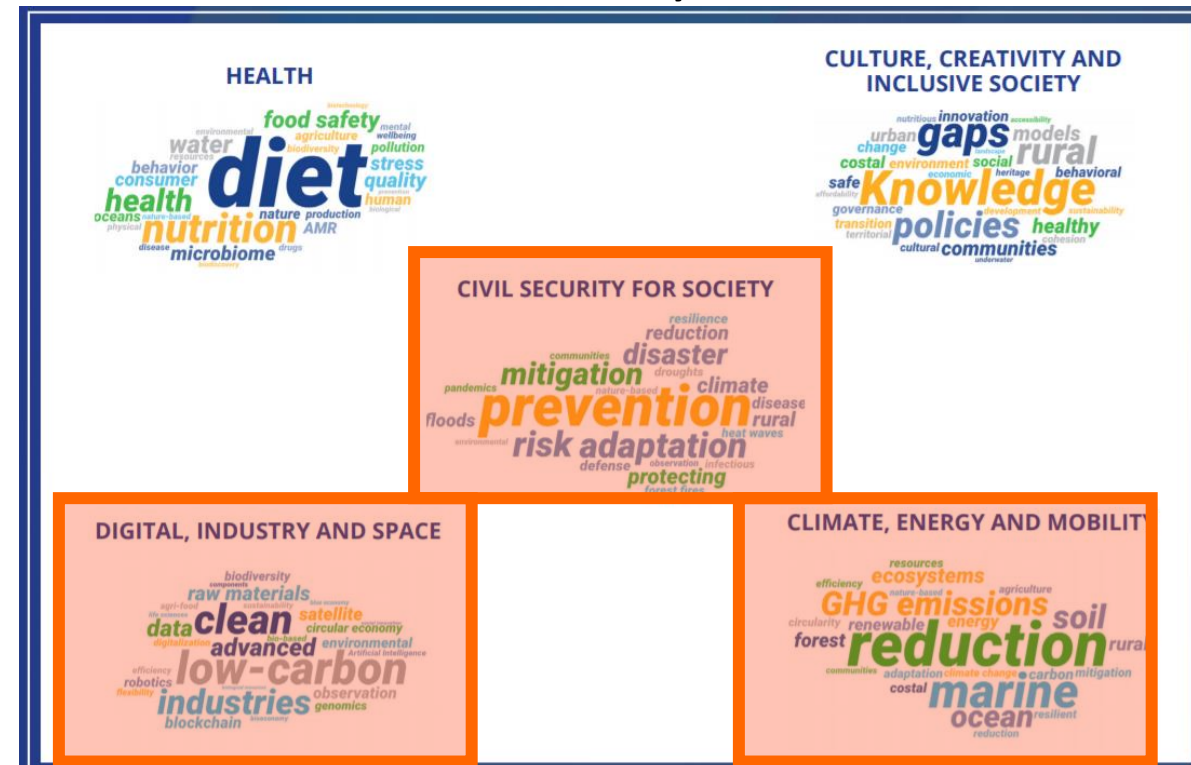
Destination #7 “Innovative governance, environmental observations and digital solutions in support of the Green Deal” Assicura che il processo di transizione verde passi per un’innovazione nei modelli di governance, un’informazione e conoscenza disponibile e accessibile, un utilizzo diffuso delle osservazioni ambientali e delle soluzioni digitali.

CROSS CLUSTER COMPLEMENTARITIES

CLUSTER 5 – CLIMATE, ENERGY, MOBILITY



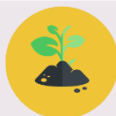


CLUSTER 6 – FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE



CL6: Food, bioeconomy, natural resources, agriculture and environment

- aims at reducing **environmental degradation**, halting and reversing the decline of **biodiversity** on land, inland waters and sea and better managing **natural resources** through social and economic changes in both urban and rural areas.
- will ensure **food and nutrition security** for all through knowledge, innovation and digitalisation in agriculture, fisheries, aquaculture and food systems and accelerate the transition to a **circular economy** and sustainable bioeconomy, including forestry.
- R&I activities under CL6 will contribute to the objectives of the [European Green Deal](#) related to the [Biodiversity Strategy to 2030](#), the [Farm to Fork strategy](#), [the European Climate Pact](#) and initiatives under [sustainable industry](#) and [eliminating pollution](#), as well as the [long-term vision for rural areas](#), and the Sustainable Development Goals.

Cluster 6 Budget over 7 years

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

Disclaimer: Information included in this presentation is provisional and 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.

Cluster 6: Work Programme 2021-2022

budget distribution per destination

DEADLINES (tbc)

Call 2021: September 2021

Call 2022: February 2022



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%

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Cluster 6 WP calls structure

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	

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Destination 1: Biodiversity and Ecosystem Services

Destination 1



Convention on
Biological Diversity



HE 1st Key Orientation
'Protecting and restoring ecosystems and biodiversity and managing sustainably natural resources on land and at sea, and achieving climate neutrality and adaptation'.

- R&I for the Green Deal - EU Biodiversity Strategy – EU policies & global conventions
- Impacts in the nexus biodiversity-food-health-water-climate and to achieving the goal of healthy and resilient ecosystems by 2030
- Enable transformational change
- Develop Nature-based Solutions and holistic approaches to address the main causes of biodiversity loss
- Restore the integrity of terrestrial, aquatic and marine ecosystems, currently under multiple pressures, and their capacity to deliver a wide range of essential services.
- Long-term strategic research agenda for biodiversity across natural and managed ecosystems

Five Headings in Destination 1

- 11. **Understanding Biodiversity Decline**
- 12. **Valuing and restoring biodiversity and ecosystem services**
- 13. **Managing biodiversity in primary production**
- 14. **Enabling transformative change on biodiversity**
- 15. **Interconnecting biodiversity research and supporting policies**

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Understanding biodiversity decline	HORIZON-CL6-2021-BIODIV-01-01: European participation in global biodiversity genomics endeavours aimed at identifying all biodiversity on Earth.	RIA	EUR 20.00 million	Between EUR 10.00 and 20.00 million
Understanding biodiversity decline	HORIZON-CL6-2021-BIODIV-01-02: Data and technologies for the inventory, fast identification and monitoring of endangered wildlife and other species groups.	RIA	EUR 10.00 million	Between EUR 3.00 and 5.00 million
Understanding biodiversity decline	HORIZON-CL6-2021-BIODIV-01-03: Understanding and valuing coastal and marine biodiversity and ecosystems services	RIA	EUR 16.00 million	Around EUR 16.00 million
Understanding biodiversity decline	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	EUR 10.00 million	Around EUR 10.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
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	EUR 5.00 million	Around EUR 5.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-06: Nature-based solutions, prevention and reduction of risks and the insurance sector	CSA	EUR 4.00 million	Around EUR 4.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-07:Ecosystems and their services for an evidence-based policy and decision-making.	RIA	EUR 13.00 million	Around EUR 13.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-08: Supporting the development of a coherent and resilient Trans-European Nature Network .	IA	EUR 10.00 million	Around EUR 10.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-09: Assessing and consolidating recent scientific advances on freshwater ecosystem restoration.	CSA	EUR 0.50 million	Around EUR 0.50 million
Valuing and restoring biodiversity and ecosystem services	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	EUR 10.00 million	Around EUR 10.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-11:What else is out there? Exploring the connection between biodiversity, ecosystems services, pandemics and epidemic risk	RIA	EUR 13.00 million	Between EUR 4.00 and 6.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2021-BIODIV-01-12: Improved science based maritime spatial planning and identification of marine protected areas	RIA	EUR 7.00 million	Between EUR 3.00 and 4.00 million

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Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Managing biodiversity in primary production	HORIZON-CL6-2021-BIODIV-01-13:Breeding for resilience: focus on root-based traits .	RIA	EUR 16.00 million	Around EUR 8.00 million
Managing biodiversity in primary production	HORIZON-CL6-2021-BIODIV-01-14:Fostering organic crop breeding	IA	EUR 10.00 million	Around EUR 5.00 million
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	EUR 10.00 million	Between EUR 2.00 and 3.00 million
Enabling transformative change on biodiversity	HORIZON-CL6-2021-BIODIV-01-16:Biodiversity, water, food, energy, transport, climate and health nexus in the context of transformative change	RIA	EUR 5.00 million	Around 5.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling transformative change on biodiversity	HORIZON-CL6-2021-BIODIV-01-17:Policy mixes, governance (including financing) and decision-making tools for transformative action on biodiversity	RIA	EUR 8.00 million	Between EUR 2.00 and 3.00 million
Enabling transformative change on biodiversity	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	EUR 5.00 million	Between EUR 2.00 and 3.00 million
Interconnecting biodiversity research and supporting policies	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	EUR 13.00 million	Between EUR 11.00 and 13.00 million
Interconnecting biodiversity research and supporting policies	HORIZON-CL6-2021-BIODIV-01-20: Support to processes triggered by IPBES and IPCC	CSA	EUR 5.00 million	Around 5.00 million
Interconnecting biodiversity research and supporting policies	HORIZON-CL6-2021-BIODIV-01-21: Impact and dependence of business on biodiversity	RIA	EUR 5.00 million	Between EUR 2.00 and 3.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling transformative change on biodiversity	HORIZON-CL6-2021-BIODIV-02-01: European partnership rescuing biodiversity to safeguard life on Earth	Programme Co-fund Action	EUR 40.00 million	Between EUR 40.00 and 165.00 million
Understanding biodiversity decline	HORIZON-CL6-2022-BIODIV-01-01: Observing and mapping biodiversity and ecosystems, with particular focus on coastal and marine ecosystems	RIA	EUR 14.00 million	Between EUR 4.00 and 14.00 million
Understanding biodiversity decline	HORIZON-CL6-2022-BIODIV-01-02: Building taxonomic research capacity near biodiversity hotspots and for protected areas by networking natural history museums and other taxonomic facilities	IA	EUR 6.00 million	Around EUR 6.00
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2022-BIODIV-01-03: Network for nature: multi-stakeholder dialogue platform to promote nature-based solutions	CSA	EUR 6.00 million	Around 6.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2022-BIODIV-01-04: Natural capital accounting: Measuring the biodiversity footprint of products and organizations	IA	EUR 10.00 million	Around EUR 10.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling transformative change on biodiversity	HORIZON-CL6-2021-BIODIV-02-01: European partnership rescuing biodiversity to safeguard life on Earth	Programme Co-fund Action	EUR 40.00 million	Between EUR 40.00 and 165.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Understanding biodiversity decline	HORIZON-CL6-2022-BIODIV-01-01: Observing and mapping biodiversity and ecosystems, with particular focus on coastal and marine ecosystems	RIA	EUR 14.00 million	Between EUR 4.00 and 14.00 million
Understanding biodiversity decline	HORIZON-CL6-2022-BIODIV-01-02: Building taxonomic research capacity near biodiversity hotspots and for protected areas by networking natural history museums and other taxonomic facilities	IA	EUR 6.00 million	Around EUR 6.00
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2022-BIODIV-01-03: Network for nature: multi-stakeholder dialogue platform to promote nature-based solutions	CSA	EUR 6.00 million	Around 6.00 million
Valuing and restoring biodiversity and ecosystem services	HORIZON-CL6-2022-BIODIV-01-04: Natural capital accounting: Measuring the biodiversity footprint of products and organizations	IA	EUR 10.00 million	Around EUR 10.00 million

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-01-05: Intercropping – understanding and using the benefits of complexity in farming and value chains	RIA	EUR 16.00 million	Around EUR 8.00 million
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-01-06: Monitoring and effective measures for agrobiodiversity	RIA	EUR 8.00 million	Around EUR 8.00 million
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-01-07: Protection and sustainable management of forest genetic resources of high interest for biodiversity, climate change adaptation, and forest reproductive materials	RIA	EUR 8.00 million	Around EUR 8.00
Enabling transformative change on biodiversity	HORIZON-CL6-2022-BIODIV-01-08: Assessing the nexus of extraction, production, consumption, trade and behaviour patterns and of climate change action on biodiversity in the context of transformative change	RIA	EUR 12.00 million	Around 3.00 million

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Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling transformative change on biodiversity	HORIZON-CL6-2022-BIODIV-01-09: Understanding the role of behaviour, gender specifics, lifestyle, religious and cultural values, and addressing the role of enabling players (civil society, policy makers, financing and business leaders, retailers) in decision making	RIA	EUR 10.00 million	Between EUR 3.00 and 4.00 million
Interconnecting biodiversity research and supporting policies	HORIZON-CL6-2022-BIODIV-01-10: Cooperation with the Convention on Biological Diversity	CSA	EUR 5.00 million	Around EUR 5.00 million
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-02-01-two-stage: Maintaining and restoring pollinators and pollination services in European agricultural landscapes	IA	EUR 20.00 million	Between EUR 6.00 and 10.00 million
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-02-02-two-stage: Boosting breeding for a sustainable, resilient and competitive European legume sector	IA	EUR 14.00 million	Around EUR 7.00
Managing biodiversity in primary production	HORIZON-CL6-2022-BIODIV-02-03-two-stage: Resilient beekeeping	RIA	EUR 12.00 million	Around 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

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

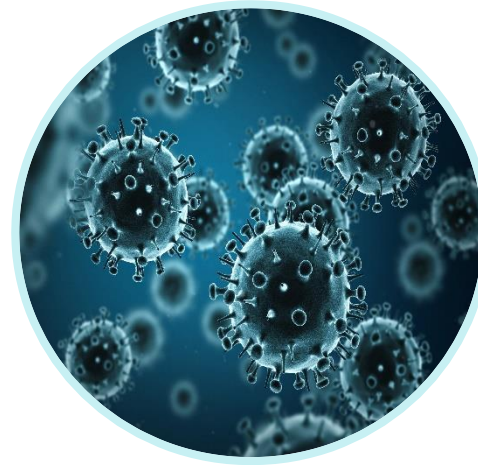
2030 Targets for sustainable food production



Reduce by 50% the overall use and risk of **chemical pesticides** and reduce use by 50% of more hazardous **pesticides**



Reduce **nutrient losses** by at least 50% while ensuring no deterioration in soil fertility; this will reduce use of **fertilisers** by at least 20 %



Reduce sales of **antimicrobials** for farmed animals and in aquaculture by 50%



Achieve at least 25% of the EU's agricultural land under **organic farming**

Challenges to the EU food system

SOCIAL SUSTAINABILITY



Healthier diets –
reduce
overweight



Improve
animal
welfare



Social rights
workers in food
chain



Food
affordability

ENVIRONMENTAL SUSTAINABILITY



Tackle climate
change



Protect the
environment



Preserve
biodiversity



Reduce food
losses and waste



Circular bio-based
economy

ECONOMIC SUSTAINABILITY



Fairer incomes for
farmers & fishers

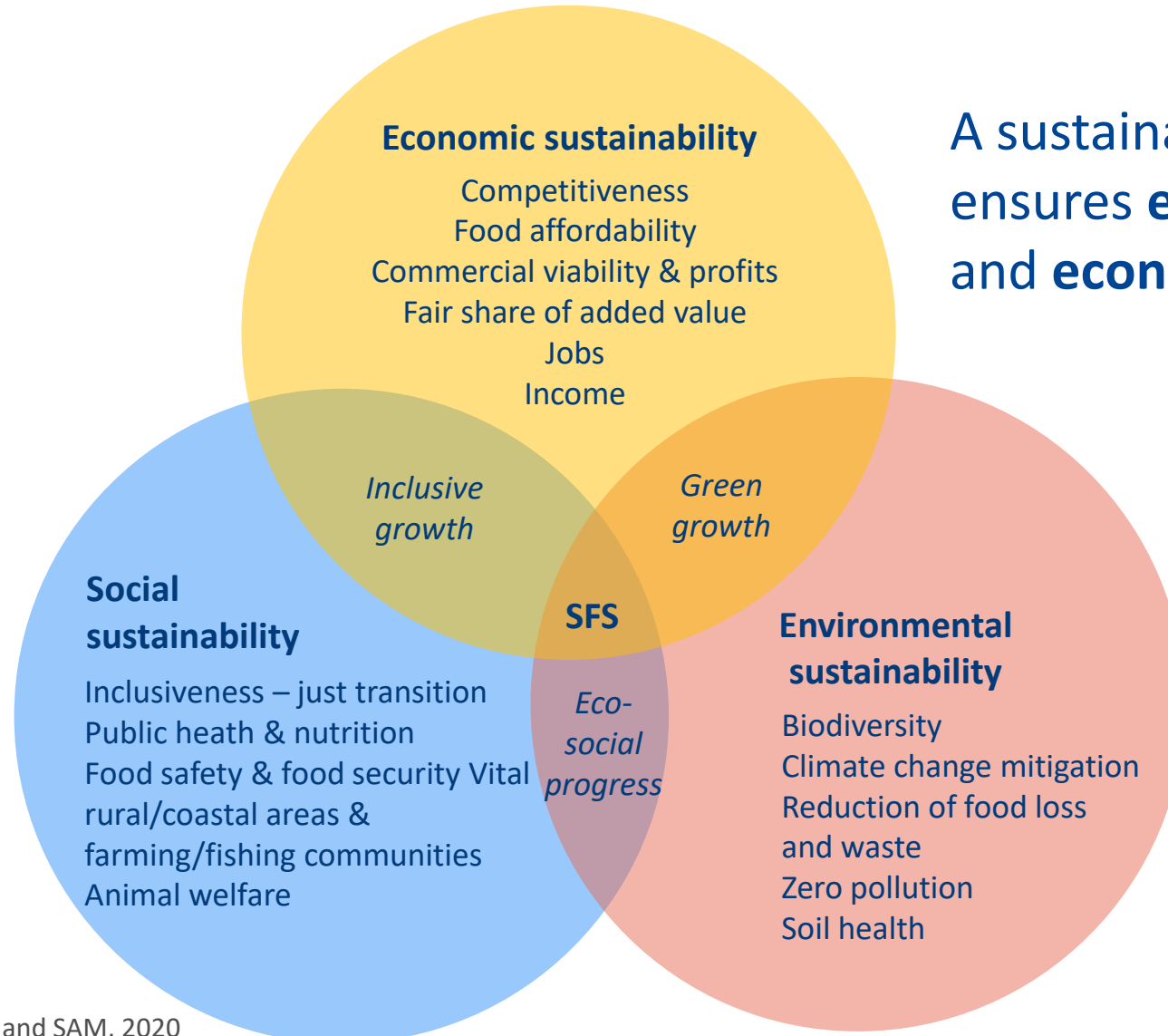


Just
transition



New business & job
opportunities

Sustainable food systems for sustainable societies

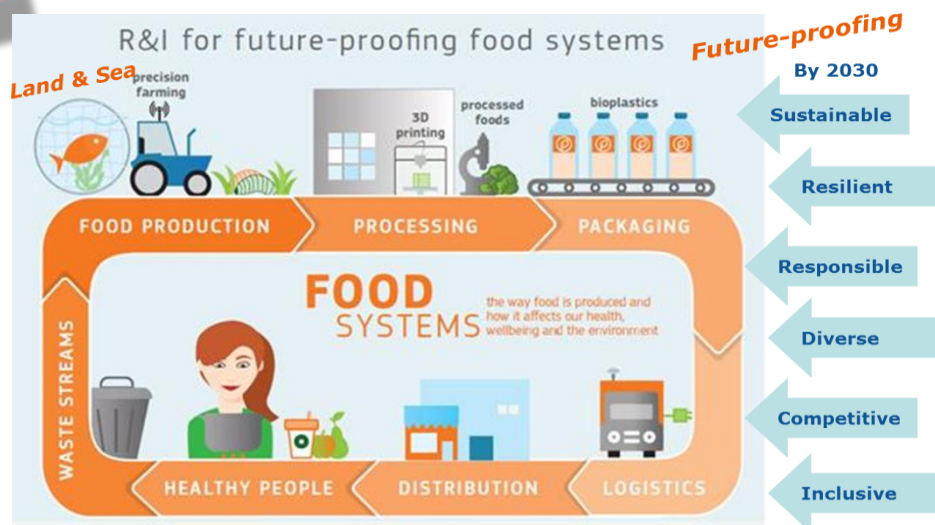


A sustainable food system (SFS) ensures **environmental, social and economic sustainability**



FOOD 2030

R&I for tomorrow's nutrition & food systems



- Perfect Storm: climate change, population growth, resource scarcity, malnutrition, obesity & NCDs
- Political opportunity: response to SDGs, COP21+, Junker priorities
- Investment opportunity: EU underinvesting in food & agri R&I despite high returns on investment
- Need for a systemic approach to future-proofing food systems via more impactful R&I

Priorities

-  **NUTRITION** for sustainable and healthy diets
-  **CLIMATE** smart and environmentally sustainable food systems
-  **CIRCULARITY** and resource efficiency of food systems
-  **INNOVATION** and empowerment of communities

Drivers

-  **Research breakthroughs**
-  **Innovation and Investment**
-  **Open Science**
-  **International collaboration**

 **#FOOD2030EU**

Four headings in Destination 2

21. Enabling sustainable agriculture

22. Enabling sustainable fisheries and aquaculture

23. Transforming food systems for health, sustainability and inclusion

24. Targeted international cooperation

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
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	EUR 4.00 million	Around EUR 4.00 million
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-02: Developing sustainable and competitive land-based protein crop systems and value chains	IA	EUR 9.00 million	Around EUR 9.00 million
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-03: Digitalisation as an enabler of agroecological farming systems	CSA	EUR 2.00 million	Around EUR 2.00
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-04: Tackling outbreaks of plant pests	RIA	EUR 14.00 million	Around 7.00 million
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-05: Animal welfare 2.0	RIA	EUR 8.00 million	Around EUR 8.00 million
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-06: Vaccines and diagnostics for priority animal diseases	IA	EUR 12.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling sustainable farming	HORIZON-CL6-2021-FARM2FORK-01-07: Research & innovation roadmap for blockchain technologies in the agri-food sector	CSA	EUR 3.00 million	Around EUR 3.00 million
Enabling sustainable farming	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	EUR 12.00 million	Around EUR 4.00
Enabling sustainable farming	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	EUR 8.00 million	Around EUR 8.00 million
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2021-FARM2FORK-01-10: Sea to fork transparency and consumer engagement	IA	EUR 10.00 million	Around EUR 5.00 million
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2021-FARM2FORK-01-11: Digital transition supporting inspection and control for sustainable fisheries	IA	EUR 10.00 million	Around EUR 5.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
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	EUR 11.00 million	Around EUR 11.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-13: Evidence-based decision-making to change social norms towards zero food waste	RIA	EUR 12.00 million	Between EUR 6.00 and 7.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-14: Microbes for healthy and sustainable food and diets	RIA	EUR 12.00 million	Around EUR 12.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-15: Transition to healthy and sustainable dietary behaviour	RIA	EUR 12.00 million	Around EUR 12.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-16: Identification, assessment and management of existing and emerging food safety issues	RIA	EUR 12.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Transforming food systems for health, sustainability and inclusion	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	EUR 11.00 million	Around EUR 11.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-18: One Health approach for Food Nutrition Security and Sustainable Agriculture (FNSSA)	RIA	EUR 18.00 million	Around EUR 6.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2021-FARM2FORK-01-19: EU-China international cooperation on integrated pest management in agriculture	RIA	EUR 6.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-01-01: Risk assessment of new low risk pesticides	RIA	EUR 7.00 million	Around EUR 7.00 million
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-01-02: Socio-economics of pesticide use in agriculture	RIA	EUR 6.00 million	Around EUR 6.00 million
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-01-03: Enhancing biosecurity in terrestrial livestock production	RIA	EUR 10.00 million	Around EUR 5.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-04: Innovative solutions to prevent adulteration of food bearing quality labels: focus on organic food and geographical indications	IA	EUR 8.00 million	Around EUR 4.00 million
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2022-FARM2FORK-01-05: Integrated and sustainable freshwater bioeconomy: Combining aquaculture, biodiversity preservation, biotechnology and other uses	RIA	EUR 10.00 million	Around EUR 5.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2022-FARM2FORK-01-06: Biosecurity, hygiene, disease prevention and animal welfare in aquaculture	RIA	EUR 12.00 million	Around EUR 6.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-07: Building alternative protein-friendly sustainable and healthy food environments	IA	EUR 12.00 million	Around EUR 12.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-08: Research and innovation for food losses and waste prevention and reduction through harmonised measurement and monitoring	RIA	EUR 14.00 million	Around EUR 7.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-09: Microbiomes in food production systems	RIA	EUR 10.00 million	Around EUR 5.00 million
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-10: Integrated surveillance system to prevent and reduce diet-related non communicable diseases (NCDs)	RIA	EUR 11.00 million	Around EUR 11.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Transforming food systems for health, sustainability and inclusion	HORIZON-CL6-2022-FARM2FORK-01-11: Effective systems for authenticity and traceability in the food system	RIA	EUR 10.00 million	Around EUR 10.00 million
Targeted international cooperation	HORIZON-CL6-2022-FARM2FORK-01-12: Agro-ecological approaches in African agriculture systems	RIA	EUR 28.00 million	Around EUR 7.00 million
Targeted international cooperation	HORIZON-CL6-2022-FARM2FORK-01-13: AU-EU Combatting all forms of malnutrition	RIA	EUR 11.00 million	Around EUR 11.00 million
Targeted international cooperation	HORIZON-CL6-2022-FARM2FORK-01-14: African food cities	RIA	EUR 12.00 million	Around EUR 6.00 million
Targeted international cooperation	HORIZON-CL6-2022-FARM2FORK-01-15: Support for international research on infectious animal diseases	CSA	EUR 3.00 million	Around EUR 3.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-02-01-two-stage: Agroecological approaches for sustainable weed management	RIA	EUR 14.50 million	Around EUR 5.00 million
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-02-02-two-stage: Emerging and future risks to plant health	RIA	EUR 7.00 million	Around EUR 7.00 million
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-02-03-two-stage: Ecology of infectious animal diseases	RIA	EUR 12.00 million	Around EUR 6.00 million
Enabling sustainable farming	HORIZON-CL6-2022-FARM2FORK-02-04-two-stage: Smart solutions for the use of digital technologies for small- and medium-sized, farms and farm structures	IA	EUR 15.00 million	Around EUR 5.00 million
Enabling sustainable fisheries and aquaculture	HORIZON-CL6-2022-FARM2FORK-02-05-two-stage: Innovative food from marine and freshwater ecosystems	IA	EUR 18.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Destination 3: Circular economy and bioeconomy sectors

The bioeconomy as driver and enabler of the European Green Deal

The new Circular Economy Action Plan

TEXTILES



Worldwide, a full truck of **textiles** is sent to incineration or landfilled every second.
It is estimated that less than 1% of all textiles worldwide are recycled into new textiles.



Driving new business models will boost sorting, reuse and recycling of textiles, and allow consumers to choose sustainable textiles. Ecodesign will apply to a broader range of products: clothes will be made to last longer.



PLASTICS



Consumption of plastics is expected to double in the coming 20 years.

By 2050, plastics could account for 20% of oil consumption, 15% of greenhouse gas emissions, and there could be more plastics than fish in the ocean.



Single-use products will be phased out wherever possible and replaced by durable products for multiple use.

Acting on microplastics - restricting intentionally added microplastics, increasing the capture of microplastics at all relevant stages of the product lifecycle.



FOOD and PACKAGING



In 2017 packaging waste reached in Europe a record of **173 kg per inhabitant**.



New legislative initiatives on reuse to **substitute single-use packaging**, tableware and cutlery by reusable products in food services, as well as targets for reducing packaging waste will be proposed.

WASTE



Each citizen produces nearly **half a tonne of municipal waste** per year.



Measures will be introduced for **waste prevention and reduction**, increasing recycled content, minimising waste exports outside EU. An EU model for separate collection and labelling of products will be launched.



European
Commission

Four headings in Destination 3

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

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling a circular economy transition	HORIZON-CL6-2021-CIRCBIO-01-01: Circular Cities and Regions Initiative (CCRI)'s circular systemic solutions	IA	EUR 21.50 million	Between EUR 5.00 and 10.00 million
Enabling a circular economy transition	HORIZON-CL6-2021-CIRCBIO-01-02: Circular Cities and Regions Initiative's project development assistance (CCRI-PDA)	CSA	EUR 10.00 million	Between EUR 0.40 and 2.00 million
Enabling a circular economy transition	HORIZON-CL6-2021-CIRCBIO-01-03: Innovative solutions to over-packaging and single-use plastics, and related microplastic pollution	IA	EUR 18.00 million	Between EUR 5.00 and 7.00 million
Enabling a circular economy transition	HORIZON-CL6-2021-CIRCBIO-01-04: Increasing the circularity in textiles, plastics and/or electronics value chains	IA	EUR 22.00 million	Between EUR 6.00 and 8.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2021-CIRCBIO-01-05: Novel, non-plant biomass feedstocks for industrial applications	IA	EUR 12.00 million	Around EUR 6.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2021-CIRCBIO-01-06: Contained biomass solutions for sustainable and zero-Indirect Land Use Change (ILUC) production systems for high value applications	IA	EUR 10.00 million	Around EUR 5.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2021-CIRCBIO-01-07: Microbiomes for bio-based innovation and environmental applications	IA	EUR 6.00 million	Around EUR 6.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2021-CIRCBIO-01-08: Mainstreaming inclusive small-scale bio-based solutions in European rural areas	CSA	EUR 9.00 million	Around EUR 9.00 million
Innovating for blue bioeconomy and biotechnology value chains	HORIZON-CL6-2021-CIRCBIO-01-09: Unlocking the potential of algae for a thriving European blue bioeconomy	IA	EUR 18.00 million	Around EUR 9.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Enabling a circular economy transition	HORIZON-CL6-2022-CIRCBIO-02-01-two-stage: Integrated solutions for circularity in buildings and the construction sector	IA	EUR 21.00 million	Between EUR 6.00 and 8.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2022-CIRCBIO-02-02-two-stage: Exploring extreme environments: novel adaptation strategies at molecular level for bio-based innovation	RIA	EUR 10.00 million	Around EUR 5.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2022-CIRCBIO-02-03-two-stage: Sustainable biodegradable novel bio-based plastics: innovation for sustainability and end-of-life options of plastics	IA	EUR 12.00 million	Around EUR 6.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2022-CIRCBIO-02-04-two-stage: Photosynthesis revisited: climate emergency, “no pollution and zero-emission” challenge and industrial application	RIA	EUR 6.00 million	Around EUR 6.00 million
Innovating sustainable bio-based systems and the bioeconomy	HORIZON-CL6-2022-CIRCBIO-02-05-two-stage: Life sciences and their convergence with digital technologies for prospecting, understanding and sustainably using biological resources	RIA	EUR 12.00 million	Around EUR 6.00 million
Safeguarding the multiple functions of EU forests	HORIZON-CL6-2022-CIRCBIO-02-06-two-stage: Harnessing the digital revolution in the forest-based sector	IA	EUR 15.00 million	Between EUR 6.00 and 8.00 million

Destination 4: Clean environment and zero pollution

Destination narrative

Combating pollution of
water, soils, air and oceans

- preserving, restoring and monitoring the quality of water, soils, air and oceans
- developing prevention and mitigation strategies while halting biodiversity decline and protecting ecosystems
- limiting nitrogen/phosphorus pollution, i.a. by recovering nutrients from and adopting agro-ecological practices

Environmental performance
and **sustainable** processes
and products

- accelerating the transition from a fossil-based to a resource-efficient and zero-pollution circular, blue and bio-economy by tracing, assessing and reducing environmental impacts of bio-based value chains

Synergies with Destination 1 on Biodiversity, Destination 2 on F2F and Destination 3 on CE&BE sectors

Destination 4 – Headings



**Halting emissions
of pollutants to
soils and waters**



**Protecting drinking
water and
managing urban
water pollution**



**Addressing
pollution on seas
and oceans**



**Increasing
environmental
performances and
the sustainability
of processes/
products**

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
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	EUR 6.00 million	Around EUR 2.00 million
Halting emissions of pollutants to soils and waters	HORIZON-CL6-2021-ZEROPOLLUTION-01-02: Optimisation of nutrient budget in agriculture	RIA	EUR 7.00 million	Around EUR 7.00 million
Protecting drinking water and managing urban water pollution	HORIZON-CL6-2021-ZEROPOLLUTION-01-03: Preventing and managing diffuse pollution in urban water runoff	RIA	EUR 10.00 million	Between EUR 2.00 and 4.00 million
Addressing pollution on seas and ocean	HORIZON-CL6-2021-ZEROPOLLUTION-01-04: Achieving zero polluted seas and ocean	CSA	EUR 3.00 million	Around 3.00 million
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	EUR 6.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Increasing environmental performances and sustainability of processes and products	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	EUR 7.00 million	Around EUR 3.50 million
Increasing environmental performances and sustainability of processes and products	HORIZON-CL6-2021-ZEROPOLLUTION-01-07: International and EU sustainability certification schemes for bio-based systems	CSA	EUR 6.00 million	Around EUR 2.00 million
Increasing environmental performances and sustainability of processes and products	HORIZON-CL6-2021-ZEROPOLLUTION-01-08: New genomic techniques (NGT): understanding benefits and risks – focus on bio-based innovation	RIA	EUR 5.00 million	Around 5.00 million
Increasing environmental performances and sustainability of processes and products	HORIZON-CL6-2021-ZEROPOLLUTION-01-09: Environmental impacts and trade-offs of alternative fertilising products at global/local scale.	CSA	EUR 4.00 million	Around 2.00 million
Increasing environmental performances and sustainability of processes and products	HORIZON-CL6-2021-ZEROPOLLUTION-01-10: Environmental services: improved bioremediation and revitalization strategies for soil, sediments and water	RIA	EUR 11.00 million	Around EUR 5.50 million

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Halting emissions of pollutants to soils and waters	HORIZON-CL6-2022-ZEROPOLLUTION-01-01: Preventing groundwater contamination and protecting its quality against harmful impacts of global and climate change	RIA	EUR 12.00 million	Between EUR 2.00 and 4.00 million
Halting emissions of pollutants to soils and waters	HORIZON-CL6-2022-ZEROPOLLUTION-01-02: Piloting innovative governance solutions to limit nitrogen and phosphorus emissions at the interface of rural/coastal and urban/industrial environments	IA	EUR 12.00 million	Around EUR 6.00 million
Halting emissions of pollutants to soils and waters	HORIZON-CL6-2022-ZEROPOLLUTION-01-03: EU-China international cooperation on nature-based solutions for nutrient management in agriculture	IA	EUR 12.00 million	Around EUR 6.00 million
Protecting drinking water and managing urban water pollution	HORIZON-CL6-2022-ZEROPOLLUTION-01-04: Securing drinking water quality by protecting water sources against pollution, providing innovative monitoring and treatment solutions and ensuring safe distribution	RIA	EUR 15.00 million	Between EUR 2.00 and 4.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Destination 5: Land, oceans and water for climate action

Policy objectives

- With the **European Green Deal** and the Commission's proposal for a **Climate Law**, the EU objectives are to reach climate neutrality – net zero greenhouse gas emissions - by 2050 and to increase the target of emission reduction for the period 1990-2030 from 40% to 55%
- Ensuring continuous progress in enhancing the **adaptive capacity**, strengthening **resilience** and **reducing vulnerability** to climate change



Destination narrative

- Assessing impact of climate change and identify pathways for mitigation and adaptation requires inter/multidisciplinary R&I across a large range of activities
- Crucial role of R&I to help design and implement policies that will ensure reaching EU climate objectives
- Need to foster deployment and uptake of solutions for mitigation and for adaptation

Call 2021

Topic	Type of action	Budget topic	Indicative budget for project
HORIZON-CL6-2021-CLIMATE-01-01: Improved understanding, observation and monitoring of water resources availability	RIA	EUR 10.00 million	Between EUR 3.00 and 5.00 million
HORIZON-CL6-2021-CLIMATE-01-02: European Partnership Water Security for the Planet (Water4All)	Programme Co-fund Action	EUR 20.00 million	Between EUR 20.00 and 126.00 million
HORIZON-CL6-2021-CLIMATE-01-03: Key oceanic and polar processes driving regional & global climate change	RIA	EUR 15.00 million	Between EUR 7.00 and 8.00 million
HORIZON-CL6-2021-CLIMATE-01-04: Demonstration network on climate-smart farming – linking pilot farms	CSA	EUR 23.00 million	Around EUR 23.00 million
HORIZON-CL6-2021-CLIMATE-01-05: Agroecological approaches for climate change mitigation, resilient agricultural production and enhanced biodiversity	RIA	EUR 7.00 million	Around EUR 7.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Topic	Type of action	Budget topic	Indicative budget for project
HORIZON-CL6-2021-CLIMATE-01-06: Resilient livestock farming systems under climate change	RIA	EUR 12.00 million	Around EUR 12.00 million
HORIZON-CL6-2021-CLIMATE-01-07: International Research Consortium on (agricultural) soil carbon	CSA	EUR 3.00 million	Around EUR 3.00 million
HORIZON-CL6-2021-CLIMATE-01-08: Agroforestry to meet climate, biodiversity and farming sustainability goals	RIA	EUR 8.00 million	Around EUR 4.00 million
HORIZON-CL6-2021-CLIMATE-01-09: Enhancing science-based knowledge on EU forests', including old-growth forests, capacities to mitigate climate change	RIA	EUR 10.00 million	Around EUR 5.00 million
HORIZON-CL6-2021-CLIMATE-01-10: EU-China international cooperation on increasing the resilience of forests	RIA	EUR 10.00 million	Around EUR 10.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Topic	Type of action	Budget topic	Indicative budget for project
HORIZON-CL6-2022-CLIMATE-01-01: Climate sensitive water allocation systems and economic instruments.	IA	EUR 10.00 million	Between EUR 4.00 and 5.00 million
HORIZON-CL6-2022-CLIMATE-01-02: Understanding the oceanic carbon cycle	RIA	EUR 15.00 million	Around EUR 15.00 million
HORIZON-CL6-2022-CLIMATE-01-03: Demonstration network on climate-smart farming – boosting the role of advisory services	CSA	EUR 20.00 million	Around EUR 20.00 million
HORIZON-CL6-2022-CLIMATE-01-04: Fostering the resilience of agricultural production: from observation of changes to the development of resilience strategies	RIA	EUR 15.00 million	Around EUR 15.00 million
HORIZON-CL6-2022-CLIMATE-01-05: Forestry - European observatory of climate change impacts and demonstration network of climate smart restoration pilots	RIA	EUR 15.00 million	Around EUR 15.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

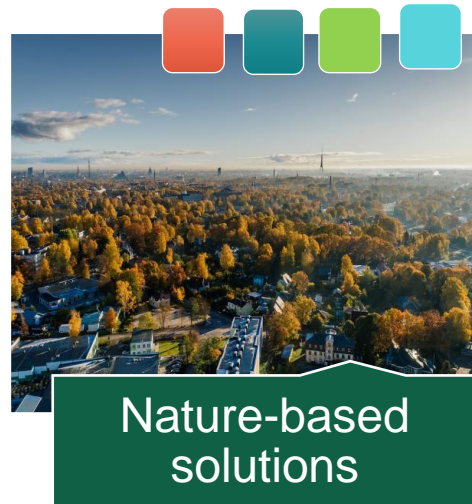
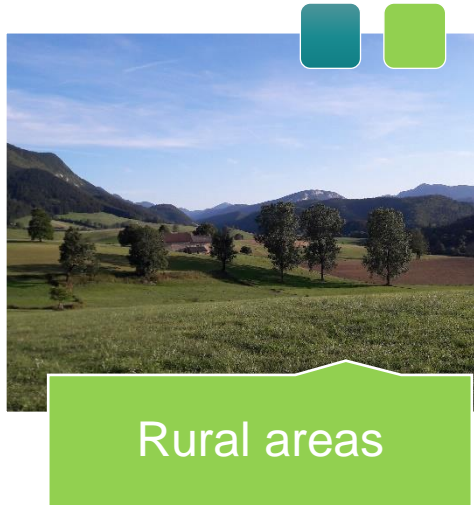
Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities

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 **empower communities** to innovate bottom-up: develop, test and upscale solutions tailored to their needs
 - Need to **innovate in tailoring policy responses** at various governance levels
- **Transdisciplinary R&I** with strong focus on social and community-led innovation

Four groups of topics



Call 2021

Topic	Type of action	Budget topic	Indicative budget for project
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	EUR 15.00 million	Between EUR 7.00 and 7.50 million
HORIZON-CL6-2021-COMMUNITIES-01-02: Expertise and training centre on rural innovation	CSA	EUR 5.00 million	Around EUR 5.00 million
HORIZON-CL6-2021-COMMUNITIES-01-03: Smart XG, last-mile and edge solutions for remote farming, forestry and rural areas	RIA	EUR 10.00 million	Around EUR 5.00 million
HORIZON-CL6-2021-COMMUNITIES-01-04: Socio-economic empowerment of the users of the sea	RIA	EUR 6.00 million	Around 6.00 million
HORIZON-CL6-2021-COMMUNITIES-01-05: Integrated urban food system policies – how cities and towns can transform food systems for co-benefits	IA	EUR 12.00 million	Around EUR 12.00 million
HORIZON-CL6-2021-COMMUNITIES-01-06: Inside and outside: educational innovation with nature-based solutions	CSA	EUR 5.00 million	Around EUR 5.00 million

Call 2022

Topic	Type of action	Budget topic	Indicative budget for project
HORIZON-CL6-2022-COMMUNITIES-01-01: Boosting women-led innovation in farming and rural areas	RIA	EUR 6.00 million	Around EUR 3.00 million
HORIZON-CL6-2022-COMMUNITIES-01-02: Assessing and improving labour conditions and health and safety at work in farming	RIA	EUR 5.00 million	Around EUR 5.00 million
HORIZON-CL6-2022-COMMUNITIES-01-03: Integration of marine ecosystem service valuation, conservation and restoration in socio-economic models	IA	EUR 9.00 million	Around EUR 9.00 million
HORIZON-CL6-2022-COMMUNITIES-01-04: Social innovation in food sharing to strengthen urban communities' food resilience	IA	EUR 10.00 million	Around 10.00 million
HORIZON-CL6-2022-COMMUNITIES-01-05: Assessing the socio-politics of nature-based solutions for more inclusive and resilient communities	RIA	EUR 12.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Topic	Type of action	Budget topic	Indicative budget for project
HORIZON-CL6-2022-COMMUNITIES-02-01-two-stage: Smart solutions for smart rural communities: empowering rural communities and smart villages to innovate for societal change	IA	EUR 14.00 million	Around EUR 7.00 million
HORIZON-CL6-2022-COMMUNITIES-02-02-two-stage: Developing nature-based therapy for health and well-being	RIA	EUR 19.00 million	Around EUR 6.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

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

Destination narrative

Transformative changes require appropriate governance

Importance of networks providing data and information

Objectives:

- **experiment new ways to govern the transition process**
- **modernise the governance, in particular by making information and knowledge available and accessible**
- **take advantage of the use, uptake and deployment of environmental observations as well as digital solutions**
- **disseminate knowledge, including with AKIS**

Four headings in Destination 7

- 71. Innovating with governance models and supporting policies
- 72. Deploying and adding value to Environmental Observations
- 73. Digital and data technologies as key enablers
- 74. Strengthening agricultural knowledge and innovation systems

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Innovating with governance models and supporting policies	HORIZON-CL6-2021-GOVERNANCE-01-01: Mobilising the network of national contact points in Cluster 6	CSA	EUR 3.50 million	Around 3.50 million
Innovating with governance models and supporting policies	HORIZON-CL6-2021-GOVERNANCE-01-02: Furthering food systems science and federating researchers across the European Research Area	RIA	EUR 17.00 million	Around EUR 6.00 million
Innovating with governance models and supporting policies	HORIZON-CL6-2021-GOVERNANCE-01-03: Preparatory action for the Horizon Europe Food System Partnership	CSA	EUR 5.00 million	Around EUR 5.00 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-03: Preparatory action for the Horizon Europe Food System Partnership	CSA	EUR 5.00 million	Around EUR 5.00 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-04: Strengthening bioeconomy innovation and deployment across sectors and all governance levels	CSA	EUR 4.00 million	Around EUR 4.00 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-05: Fostering strategic advice and synergies between national and EU research and innovation agendas, including SCAR foresight	CSA	EUR 4.00 million	Around EUR 4.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-06: Environmental and social cross-compliance of marine policies	RIA	EUR 8.00 million	Between EUR 2.00 and 3.00 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-07: Regional governance models in the bioeconomy	CSA	EUR 5.00 million	Around EUR 2.50 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-08: Improving understanding of and engagement in bio-based systems with training and skills development	CSA	EUR 5.00 million	Around EUR 2.50 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-09: Revitalisation of European local communities with innovative bio-based business models and social innovation	CSA	EUR 5.00 million	Around EUR 2.50 million
Food System Partnership	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	EUR 4.00 million	Around EUR 4.00 million
Food System Partnership	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	EUR 2.00 million	Around EUR 2.00 million

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-12: EU agriculture within a safe and just operating space and planetary boundaries	RIA	EUR 10.00 million	Around EUR 10.00 million
Food System Partnership	HORIZON-CL6-2021-GOVERNANCE-01-13: Modelling land use and land management in the context of climate change	RIA	EUR 10.00 million	Around EUR 5.00 million
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	EUR 20.00 million	Between EUR 3.00 and 5.00 million
Deploying and adding value to Environmental Observations	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	EUR 2.00 million	Around EUR 2.00 million
Deploying and adding value to Environmental Observations	HORIZON-CL6-2021-GOVERNANCE-01-16: Tools to support the uptake and accessibility/exploitability of environmental observation information at European and global level	IA	EUR 13.00 million	Around EUR 13.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Deploying and adding value to Environmental Observations	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	EUR 10.00 million	Between EUR 3.00 and 5.00 million
Digital and data technologies as key enablers	HORIZON-CL6-2021-GOVERNANCE-01-18: Mapping and improving the data economy for food systems	RIA	EUR 10.00 million	Around EUR 10.00 million
Digital and data technologies as key enablers	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	EUR 4.00 million	Between EUR 2.00 and 4.00 million
Digital and data technologies as key enablers	HORIZON-CL6-2021-GOVERNANCE-01-20: Data economy in the field of agriculture – effects of data sharing and big data	RIA	EUR 4.00 million	Between EUR 2.00 and 4.00 million
Digital and data technologies as key enablers	HORIZON-CL6-2021-GOVERNANCE-01-21: Potential of drones as multi-purpose vehicle – risks and added values	RIA	EUR 12.00 million	Around EUR 6.00 million

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Digital and data technologies as key enablers	HORIZON-CL6-2021-GOVERNANCE-01-22: Assessing the impacts of digital technologies in agriculture – cost, benefits and potential for sustainability gains	RIA	EUR 15.00 million	Around EUR 7.50 million
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	EUR 4.00 million	Around EUR 2.00 million
Strengthening agricultural knowledge and innovation systems	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	RIA	EUR 15.00 million	Around EUR 15.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2021-GOVERNANCE-01-25: Improving national AKIS organisation in a co-creative process across the EU	CSA	EUR 10.00 million	Around EUR 10.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2021-GOVERNANCE-01-26: Deepening the functioning of innovation support	CSA	EUR 5.00 million	Around EUR 5.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2021

Area	Topic	Type of action	Budget topic	Indicative budget for project
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2021-GOVERNANCE-01-27: Developing EU advisory networks on consumer-producer chains	CSA	EUR 8.00 million	Around EUR 4.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2021-GOVERNANCE-01-28: Thematic networks to compile and share knowledge ready for practice	CSA	EUR 8.50 million	Around EUR 3.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-01: Mobilisation of society to transform food systems for co-benefits	CSA	EUR 8.00 million	Around EUR 8.00 million
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate neutral, sustainable and productive Blue Economy	Programme Co-fund Action	EUR 23.00 million	Between EUR 23.00 and 150.00 million
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-03: Multi-layer governance performance of marine policies	RIA	EUR 6.00 million	Around EUR 6.00 million
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-04: Consumer-focused labelling options for bio-based products	CSA	EUR 3.00 million	Around EUR 3.00 million
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-05: Innovative tools and methods to evaluate the design and support, monitoring and implementation of effective CAP strategic plans	CSA	EUR 4.00 million	Around EUR 4.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Innovating with governance models and supporting policies	HORIZON-CL6-2022-GOVERNANCE-01-06: Water governance, economic and financial sustainability of water systems	RIA	EUR 10.00 million	Around EUR 3.00 million
Deploying and adding value to Environmental Observations	HORIZON-CL6-2022-GOVERNANCE-01-07: New technologies for acquiring in-situ observation datasets to address climate change effects	IA	EUR 20.00 million	Around EUR 3.00 million
Deploying and adding value to Environmental Observations	HORIZON-CL6-2022-GOVERNANCE-01-08: Uptake and validation of citizen observations to complement authoritative measurement within the urban environment and boost related citizen engagement	IA	EUR 14.00 million	Between EUR 3.00 and 5.00 million
Deploying and adding value to Environmental Observations	HORIZON-CL6-2022-GOVERNANCE-01-09: Environmental observations solutions contributing to meeting “One Health” challenges	RIA	EUR 10.00 million	Around EUR 5.00 million
Digital and data technologies as key enablers	HORIZON-CL6-2022-GOVERNANCE-01-10: Piloting approaches and tools to empower citizens to exercise their “data rights” in the area of food and nutrition	RIA	EUR 8.00 million	Around EUR 4.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Call 2022

Area	Topic	Type of action	Budget topic	Indicative budget for project
Digital and data technologies as key enablers	HORIZON-CL6-2022-GOVERNANCE-01-11: Upscaling (real-time) sensor data for EU-wide monitoring of production and agri-environmental conditions	RIA	EUR 15.00 million	Between EUR 5.00 and 7.50 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2022-GOVERNANCE-01-12: Thematic networks to compile and share knowledge ready for practice	CSA	EUR 9.00 million	Around EUR 3.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2022-GOVERNANCE-01-13: Broaden EIP Operational Group outcomes across borders by means of thematic networks, compiling and sharing knowledge ready for practice	CSA	EUR 4.00 million	Around 2.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2022-GOVERNANCE-01-14: Improving preparation of multi-actor projects to enable the relevant actors to work in a co-creative way	CSA	EUR 5.00 million	Around EUR 5.00 million
Strengthening agricultural knowledge and innovation systems	HORIZON-CL6-2022-GOVERNANCE-01-15: Developing EU advisory networks on water use	CSA	EUR 8.00 million	Around EUR 4.00 million

RIA Research and innovation actions; IA Innovation actions; CSA Coordination and support actions .

Nuovo approccio ai partenariati europei: panoramica

Una nuova generazione di partenariati più ambiziosi a sostegno degli obiettivi politici dell'UE



Caratteristiche principali

- Architettura semplificata
- Approccio strutturato e trasparente all'intero ciclo di vita del partenariato
- Orientamento strategico

Co-programmed

Basati su protocolli d'intesa / accordi contrattuali; attuati in modo indipendente dai partner e dalla Commissione via Horizon Europe

Co-funded

Sulla base di un programma congiunto concordato dai partner; impegno dei partner con contributi finanziari e in natura e contributo finanziario da Horizon Europe

Institutionalised

Basati su una visione a lungo termine e sulla necessità di un'elevata integrazione; partenariati basati su Art.185 /187 del TFUE e sul regolamento EIT

Overview of 49 candidate European Partnerships

HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185/7)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility	Animal Health & Welfare*
Rare diseases*	Photonics	(CC-001) Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

■	Institutionalised Partnerships (Art 185/7)
■	Institutionalised Partnerships / EIT KICs
■	Co-Programmed
■	Co-Funded

* Calls with opening dates in 2023-24

** Calls with opening dates not before 2022

PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II & III

European Open Science Cloud



Portafoglio di Partenariati Europei (49) nel piano strategico

2021-2024

HEALTH

1. EU-Africa Global
2. Health Innovative Health Initiative
3. Chemicals Risk Assessment
4. Fostering an ERA for Health research
5. Transforming Health and Care Systems
6. Personalised Medicine
7. Rare Diseases
8. One Health AMR

DIGITAL, INDUSTRY AND SPACE

1. High Performance Computing
2. Key Digital Technologies
3. Smart Networks and Services
4. AI, data and robotics
5. Photonics Europe
6. Clean Steel - Low Carbon Steelmaking
7. European Metrology
8. Made in Europe
9. Carbon Neutral and Circular Industry
10. Global competitive space systems

PILLAR III AND CROSS-PILLAR

1. EIT Climate KIC
2. EIT Health
3. EIT Manufacturing
4. EIT Food
5. EIT InnoEnergy
6. EIT Raw Materials
7. EIT Digital
8. EIT Urban Mobility
9. EIT Cultural and Creative Industries
10. Innovative SMEs

Cluster allocation tbc

Pandemic Preparedness and



CLIMATE, ENERGY AND MOBILITY

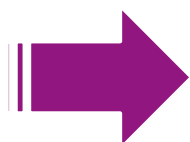
1. Transforming Europe's rail system
2. Integrated Air Traffic Management
3. Clean Aviation
4. Clean Hydrogen
5. Built environment and construction
6. Towards zero-emission road transport
7. Mobility and Safety for Automated Road Transport
8. Batteries
9. Clean Energy Transition
10. Sustainable, Smart and Inclusive Cities and Communities
11. Smart and zero-emission waterborne transport

FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

1. Accelerating farming systems transition
2. Animal health: Fighting infectious diseases
3. Agriculture of data
4. Safe and Sustainable Food System for People, Planet & Climate
5. Rescuing biodiversity to safeguard life on Earth
6. A climate neutral, sustainable and productive Blue Economy
7. Circular bio-based Europe
8. Water4All: Water security for the planet

Cluster 6 Co-funded partnerships in Work Programmes

Co-funded partnership	Work Programme where the topic is introduced	HE expected contribution (7 years; mIn 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



Total budget for all co-funded partnerships around EUR 1 billion
(figures are subject to changes depending on MS commitments).

Outside the WP: Circular bio-based Europe (Joint Undertaking): EUR 1 billion

Partnerships in Work Programme 2021-2022

Rescuing Biodiversity to Safeguard Life on Earth

- co-funded European Partnership
- Topic in Destination 1 (Interconnecting biodiversity research and supporting policies)

A climate neutral, sustainable and productive Blue Economy

- co-funded European Partnership
- Topic in Destination 7 (Innovating with governance models and supporting policies)

Water Security for the Planet (Water4All)

- co-funded European Partnership
- Topic in Destination 5, sub-section 71 (Innovating with governance models and supporting policies) – to be included in the next version

Four partnerships to be introduced in WP 2023-2024

Accelerating farming systems transition: agro-ecology living labs and research infrastructures

- co-funded European Partnership

Animals and health

- co-funded European Partnership

Agriculture of data

- co-funded European Partnership

Safe and Sustainable Food Systems

- co-funded European Partnership

One institutionalised Partnership

Circular bio-based Europe

- Outside Cluster 6 WP part

Fonti di informazioni utili

1. [European partnerships webpage](http://europa.eu) (europa.eu):

- ✓ Qui sono pubblicate tutte le proposte dettagliate sulle quali si basano i futuri partenariati.

2. www.era-learn.eu

- ✓ Contiene una grande varietà di informazioni dettagliate sulla gestione finanziaria delle partnership europee, linee guida sullo sviluppo di SRIA, ecc.



Missioni di R&I

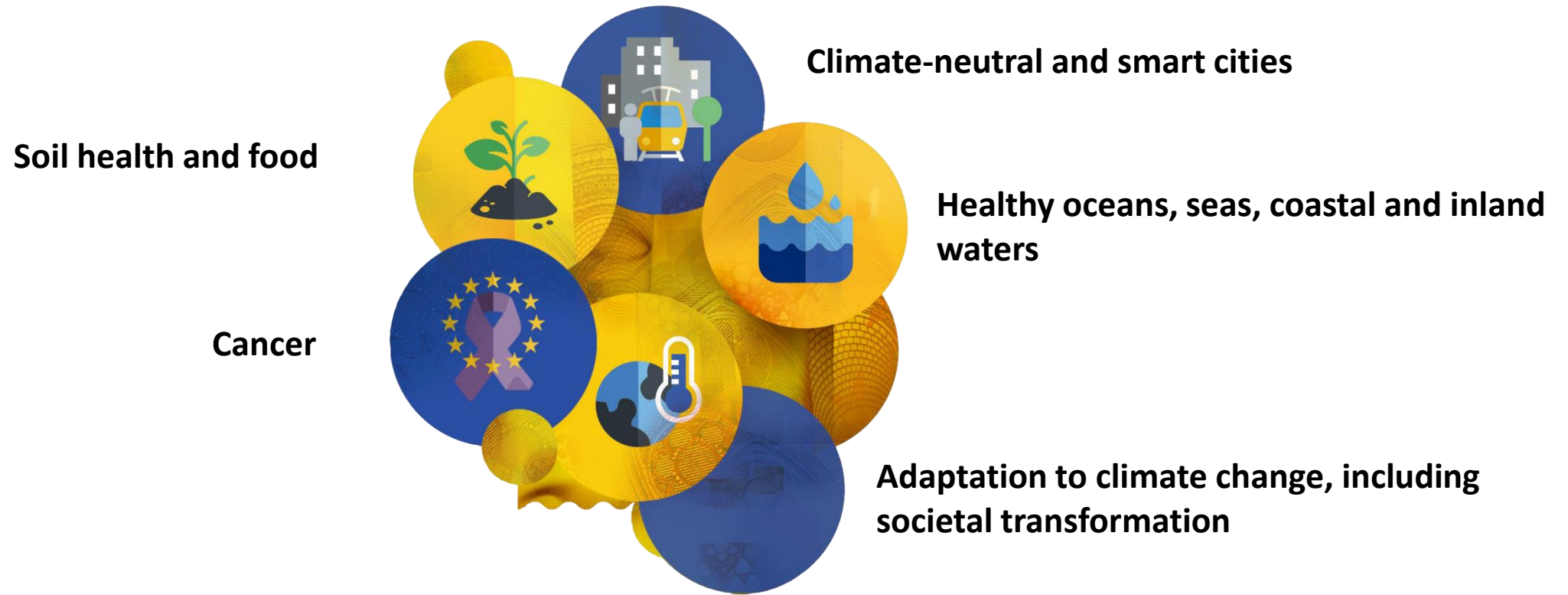
Missioni di R&I

Migliore correlazione tra la ricerca e l'innovazione dell'UE e la società e le esigenze dei cittadini; grande visibilità e impatto

Una missione è un portafoglio di azioni interdisciplinari volte a conseguire entro un periodo prestabilito un **obiettivo audace, stimolante e misurabile**, che abbiano un **impatto** sulla società e sull'elaborazione delle politiche e siano rilevanti per una parte significativa della popolazione europea e un ampio spettro di cittadini europei.

Horizon Europe definisce le caratteristiche della missione e gli elementi di *governance*. Le missioni specifiche saranno programmate nell'ambito del pilastro "Sfide globali e competitività industriale europea" (attingendo ai contributi di altri pilastri)

MISSIONI



- Le Mission includono un portafoglio di azioni - progetti di ricerca, misure di policy o iniziative legislative - dirette a raggiungere, entro un arco di tempo prestabilito, un obiettivo audace, misurabile e rilevante per la società

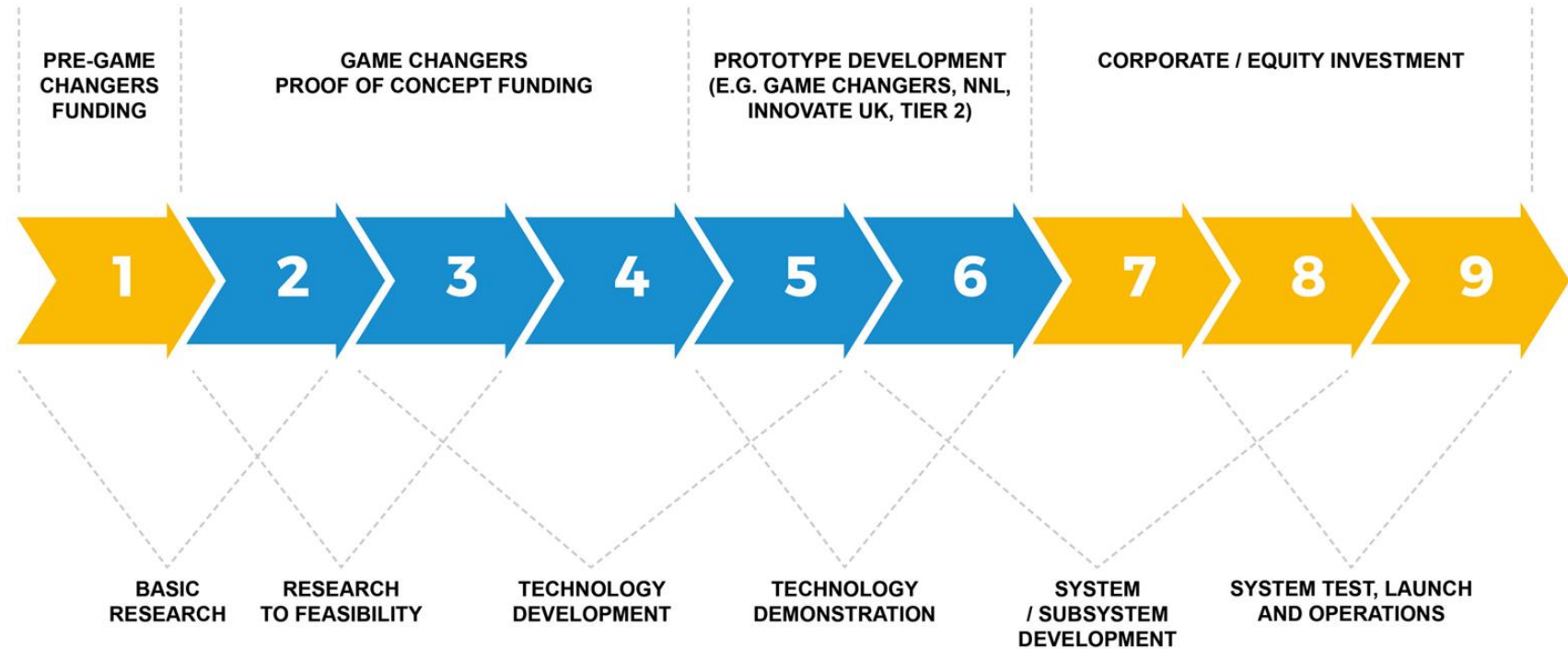
MISSIONS

Mission means a portfolio of excellence-based and impact-driven R&I actions across disciplines and sectors, intended to:

- achieve, ***within a set timeframe***, a measurable goal that could not be achieved through individual actions
- have ***impact on society and policy-making*** through science and technology
- be ***relevant for*** a significant part of the European population and a wide range of ***European citizens***

MISSION – TRL

TRL



encompasses activities from a broad range of TRLs, including lower TRLs, as appropriate to achieving the goal of the mission

MISSION – BUDGET

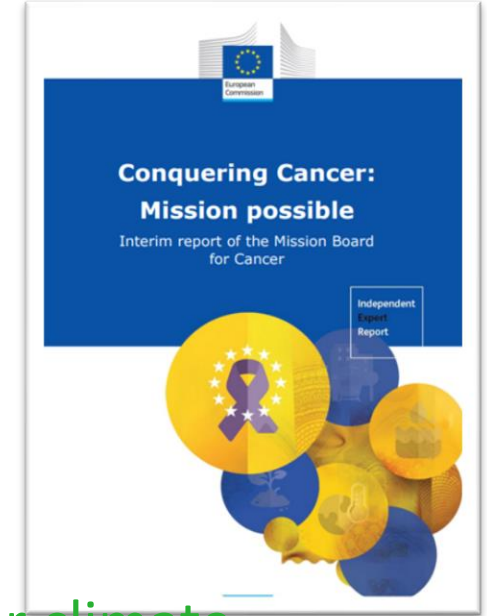
- There is **no fixed budget** for each mission
- During the **first three years** of the programme, a **maximum of 10%** of the annual budget of **Pillar II** shall be programmed through specific calls for implementing the missions
- For the remaining part of the programme, and **only after a positive assessment** of the mission selection and management process, this percentage may be increased

MISSION – UN NUOVO STRUMENTO?

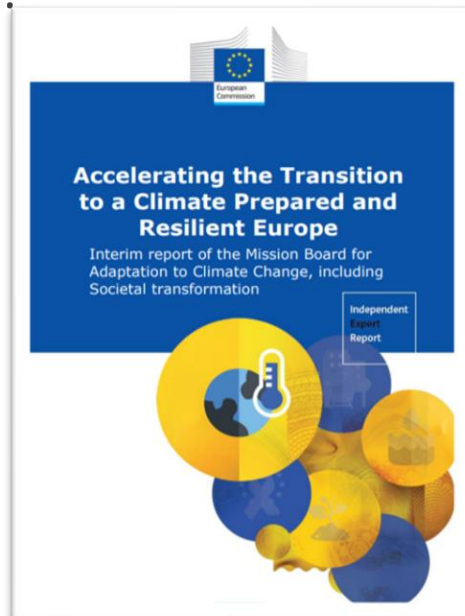
- Each mission may involve one or more of the following:
 - **Launch specific calls** in Horizon Europe and other programmes. These calls will encourage creativity and bottom-up working from the proposer;
 - Identify **specific actions to change/** improve policy context, which are critical for missions success, such as framework conditions;
 - **Make use** of the appropriate **partnerships**;
 - **Mobilise structural** funds to the alignment to mission goals;
 - **Establish** the appropriate **links** with **national programmes**;
 - **Influence** the **international agenda**, **combining efforts** with similar **third country programmes**.

- Conquering Cancer: Mission Possible

Targets by 2030: more than 3 million lives saved, living longer and better: achieve a thorough understanding of cancer, prevent what is preventable, optimise diagnosis and treatment, support the quality of life of all people exposed to cancer, and ensure equitable access to the above across Europe.



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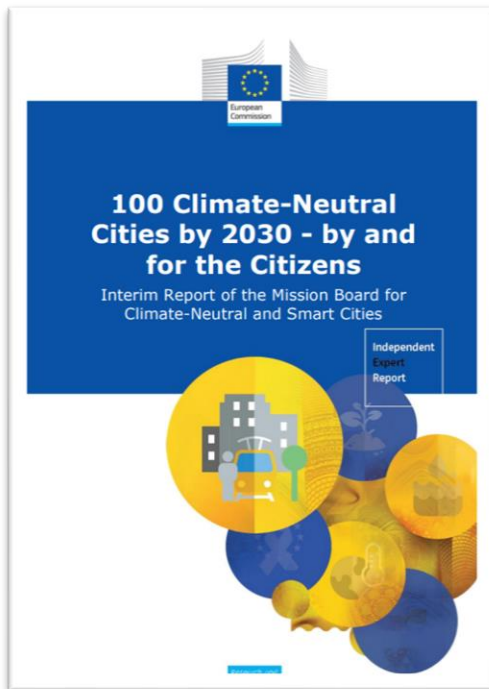


- A Climate Resilient Europe - Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and just Europe by 2030

Targets by 2030: prepare Europe to deal with climate disruptions, accelerate the transition to a healthy and prosperous future within safe planetary boundaries, and scale up solutions for resilience that will trigger transformations in society.

- Mission Starfish 2030: Restore our Ocean and Waters

Targets by 2030: filling the knowledge and emotional gap, regenerating marine and freshwater ecosystems, zero pollution, decarbonising the blue economy, and revamping governance. These mutually supportive objectives will enable the regeneration of the water cycle as a whole.

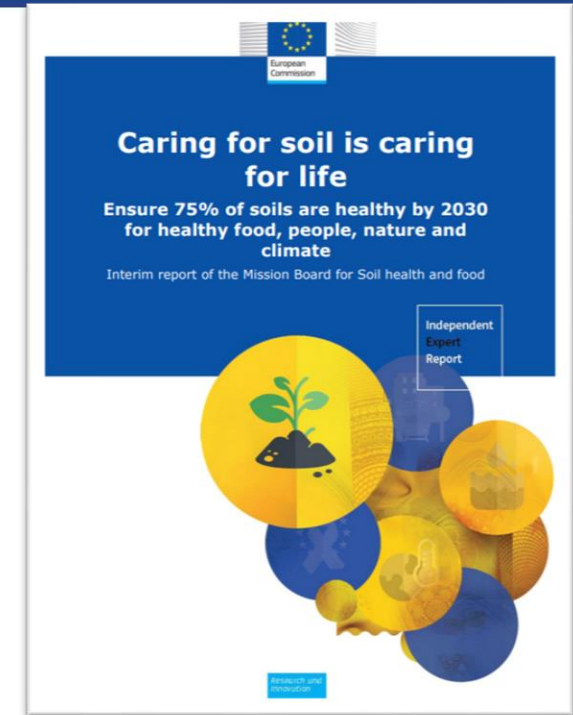


- 100 Climate-Neutral Cities by 2030 - by and for the citizens

Targets by 2030: support, promote and showcase 100 European cities in their systemic transformation to climate neutrality by 2030 and turn these cities into innovation hubs for all cities, benefitting quality of life and sustainability in Europe.

- Caring for Soil is Caring for Life

Targets by 2030: at least 75% of 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).



The EU missions' idea is to tackle these societal challenges in a new way: targeted, time-bound and with a measurable goal. They bring together policies and instruments as a coherent, joined-up approach to ensure a strong impact on society and drive long-term, systemic and disruptive change. It is a huge ambition that we plan to fulfil together for a sustainable Europe for all. M. GAbriel

3 Missions with specific interest for Cluster 6

Mission Starfish 2030: Restore our Ocean and Waters by 2030

Mission Caring for Soil is Caring for Life - Ensure 75% of soils are healthy by 2030 for food, people nature and climate

A Climate Resilient Europe – Prepare Europe for climate disruptions and accelerate the transformation to a climate resilient and just Europe by 2030



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HORIZON EUROPE – LA GUIDA

COS'È, COSA FINANZIA, COME PARTECIPARE



APREbrief
HORIZON EUROPE



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

CLUSTER 6

L'ambizione del Cluster 6 è quella di fornire opportunità per migliorare e bilanciare gli obiettivi ambientali, sociali ed economici e per impostare le attività economiche umane su un percorso verso la sostenibilità.

Il paradigma alla base del Cluster 6 è quindi la necessità di un cambiamento trasformativo dell'economia e della società dell'UE volto a ridurre il degrado ambientale, arrestare e invertire il declino della biodiversità e gestire meglio le risorse naturali, al servizio degli obiettivi climatici dell'UE e garantire cibo e acqua in sicurezza.

BUDGET ASSEGNATO: 8,952 (MIO EUR)



CLUSTERS

1. HEALTH
2. CULTURE, CREATIVITY AND INCLUSIVE SOCIETY
3. CIVIL SECURITY FOR SOCIETY
4. DIGITAL, INDUSTRY AND SPACE
5. CLIMATE, ENERGY AND MOBILITY
6. FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

PILLAR 2
Global Challenges and
European Industrial
Competitiveness

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GRAZIE!

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