

# NATIONAL INFORMATION CAMPAIGN JOIN HORIZON EUROPE



Pillar 2: Global Challenges & European Industrial  
Competitiveness

9 March 2021

# Cluster 6 - Food, Bioeconomy, Natural Resources, Agriculture and Environment

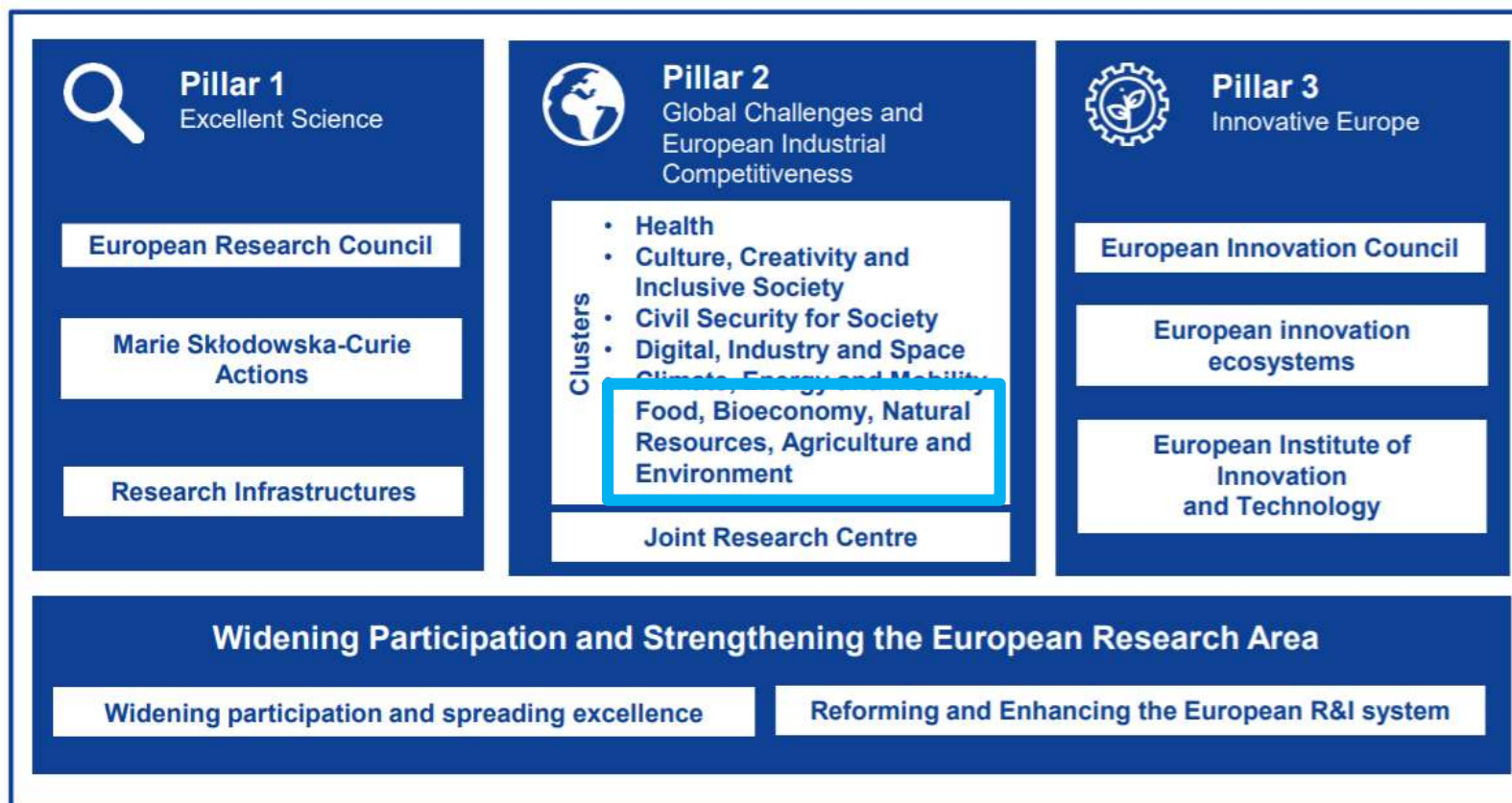
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National contact points for Food, Bioeconomy, Natural Resources,  
Agriculture and Environment



# Name of the area



# Strategic documents and initiatives

- UN's Sustainable Development Goals (SDGs) -  
<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- European Green Deal
- EU Biodiversity Strategy for 2030
- Circular economy Action Plan
- Bioeconomy Strategy
- EU Forest Strategy
- ...

# Work programme

- Work programme for 2021-2022



## **1 paradigm**

- » need for a transformative change of the EU economy and society
- » aimed at reducing environmental degradation, halting and reversing the decline of biodiversity and to better manage natural resources
- » serving the EU's climate objectives and ensuring food and water security



## **6 impacts**

- » climate neutrality
- » biodiversity aiming to recovery, ecosystems preserved
- » circular management and use of natural resources, bioeconomy
- » food and nutrition security
- » sustainable development of rural, coastal and urban areas
- » innovative governance models

## **7 destinations**

- Separate calls for each destination (1 for 2021, 1-2 for 2022)
- Opening: 15 April 2021

# Table of all topics under preparation by TC



HORIZON EUROPE  
Témata „CLUSTER 6“ (Food, Bioeconomy Natural Resources, Agriculture and Environment)  
pro období 2021-2022

| Destination 1 - Biodiversity and Ecosystem Services  | Nástroj | Příspěvek EU na projekt (mil. €) | Rozpočet tématu (mil. €) | Odhad podpoř. projektů |
|--|---------|----------------------------------|--------------------------|------------------------|
| <b>Výzva HORIZON-CL6-2021-BIODIV-01 pro rok 2021, uzávěrka 1.9.2021</b>  |         |                                  |                          |                        |
| HORIZON-CL6-2021-BIODIV-01-01: European participation in global biodiversity genomics endeavours aimed at identifying all biodiversity on Earth                                    | RIA     | 10-20                            | 20                       | 2                      |
| HORIZON-CL6-2021-BIODIV-01-02: Data and technologies for the inventory, fast identification and monitoring of endangered wildlife and other species groups                         | RIA     | 3-5                              | 10                       | 2                      |
| HORIZON-CL6-2021-BIODIV-01-03: Understanding and valuing coastal and marine biodiversity and ecosystems services   | RIA     | 16                               | 16                       | 1                      |
| HORIZON-CL6-2021-BIODIV-01-04: Assess and predict integrated impacts of cumulative direct and indirect stressors on coastal and marine biodiversity, ecosystems and their services | RIA     | 10                               | 10                       | 1                      |
| HORIZON-CL6-2021-BIODIV-01-05: The economics of nature-based solutions: cost-benefit analysis, market development and funding  | RIA     | 5                                | 5                        | 1                      |
| HORIZON-CL6-2021-BIODIV-01-06: Nature-based solutions, prevention and reduction of risks and the insurance sector  | CSA     | 5                                | 5                        | 1                      |
| HORIZON-CL6-2021-BIODIV-01-07: Ecosystems and their services for an evidence-based policy and decision-making  | RIA     | 13                               | 13                       | 1                      |
| HORIZON-CL6-2021-BIODIV-01-08: Supporting the development of a coherent and resilient Trans-European Nature Network  | IA      | 7                                | 10                       | 1                      |
| HORIZON-CL6-2021-BIODIV-01-09: Assessing and consolidating recent scientific advances on freshwater ecosystem restoration.   | CSA     | 0,5                              | 0,5                      | 1                      |
| HORIZON-CL6-2021-BIODIV-01-10: Demonstration of measures and management for coastal and marine ecosystems restoration and resilience in simplified socio-ecological systems        | IA      | 10                               | 10                       | 1                      |
| HORIZON-CL6-2021-BIODIV-01-11: What else is out there? Exploring the connection between biodiversity, ecosystems services, pandemics and epidemic risk                             | IA      | 4-12                             | 12                       | 2                      |

## Destination 1 - Biodiversity and Ecosystem Services

- all action should contribute to the impact = **biodiversity back on path to recovery**; ecosystems and their services preserved and sustainably restored on land, inland water and at sea through improved knowledge and innovation
- under HE long-term strategic research agenda for biodiversity will be developed
- **for 2021:**
  - 1stage call
  - budget: 218,5 mil. eur; deadline: **1 September 2021**
- **22 topics** (13 RIA, 4, IA, 4 CSA, 1 Cofund):
  - DNA-based biodiversity identification; monitoring of endangered wildlife; impact of stressors on marine biodiversity; economics of nature-based solutions; Trans-European Nature Network; freshwater ecosystem restoration; biodiversity in primary production; crop breeding; governance and decision-making tools, ...

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

- **sustainable** farming systems, fisheries and aquaculture
- food systems for health, sustainability and inclusion
- **for 2021:**
  - 1stage call
  - budget: 175 mil. eur; deadline: **1 September 2021**
- **18 topics** (12 RIA, 4 IA, 2 CSA):
  - organic farming and aquaculture; digitalisation in agroecological farming systems; plant pests; animal diseases and welfare; decision-making towards zero food waste; microbes for healthy food; dietary behaviour; food safety issues; EU-China pest management in agriculture, ...



## Destination 3 - Circular economy and bioeconomy sectors

- focus on circularity aims at **less waste** and more value by **extending the lifetime** and retaining the value of products and materials
- integrated circular solutions at territorial and sectoral levels
- **key bioeconomy sectors** such as sustainable bio-based systems, sustainable forestry, small-scale rural bio-based solutions, and aquatic value chains
- **for 2021:**
  - 1stage call
  - budget: 93 mil. eur; deadline: **1 September 2021**
- **8 topics** (6 IA, 2 CSA):
  - Circular Cities and Regions Initiative – solutions and project development assistance; over-packaging and single-use plastics; non-plant biomass for industrial applications; algae potential,...

## Destination 4 - Clean environment and zero pollution

- **pollution must be halted** and eliminated to guarantee clean and healthy soils, air, fresh and marine water
- it is crucial to advance the knowledge of pollution sources and pathways to enable **preventive measures**, improve **monitoring** and control, introduce effective **remediation** methods
- **for 2021:**
  - 1stage call
  - budget: 65 mil. eur; deadline: **1 September 2021**
- **10 topics** (5 RIA, 1 IA, 4 CSA):
  - N and P load reduction; optimization of nutrient budget in primary production; pollution in urban waters runoff; envi performance in bio-based sectors; certification schemes for bio-based systems; impacts and trade-offs of alternative fertilising products; bioremediation for soil, sediments, water,...

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

- assessing the impacts of climate change on our land and marine environments, natural resources, agriculture and food systems
- identifying **mitigation options and adaptation pathways**
- **for 2021:**
  - 1stage call
  - budget: 108 mil. eur; deadline: **1 September 2021**
- **10 topics** (7 RIA, 2 CSA, 1 Cofund):
  - water resources availability; polar processes driving climate change; network on climate-smart farming; agroecological approaches for climate change mitigation; forests including agroforestry or old-growth forests; EU-China on resilience of forests, ...

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

- better understanding of the environmental, socio-economic, behavioural, cultural and demographic drivers of change
- better preparation to achieve climate neutrality, adapt to climate change, and turn digital and ecological transitions into increased resilience
- innovative and smarter solutions
- **for 2021:**
  - 1stage call
  - budget: 52 mil. eur; deadline: **1 September 2021**
- **6 topics** (3 RIA, 1 IA, 2 CSA):
  - rural diversity for tailored policies; training centre for rural innovation; smart solutions for remote farming, forestry and rural areas; urban food system policies,...

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

- activities aim at experimenting with **new ways to govern the transition process** and modernising the governance
- taking advantage of the use, uptake, deployment and exploitation of environmental observations
- develop innovative digital and data based solutions
- **for 2021:**
  - 1stage call
  - budget: 183,5 mil. eur; deadline: **2 September 2021**
- **25 topics** (9 RIA, 2 IA, 14 CSA):
  - furthering food system science; regional governance models; education; environmental observations; land use; data economy, ...

## Budget and instruments for 2021

| Destination             | Budget for 2021 (mil. €) | Number of topics for |     |     |        |
|-------------------------|--------------------------|----------------------|-----|-----|--------|
|                         |                          | IA                   | RIA | CSA | Cofund |
| <b>1 – Biodiversity</b> | 218,5                    | 4                    | 13  | 4   | 1      |
| <b>2 – Food</b>         | 175                      | 4                    | 12  | 2   |        |
| <b>3 – Circular</b>     | 93                       | 6                    |     | 2   |        |
| <b>4 – Pollution</b>    | 65                       | 1                    | 5   | 4   |        |
| <b>5 – Climate</b>      | 108                      |                      | 7   | 2   | 1      |
| <b>6 – Communities</b>  | 52                       | 1                    | 3   | 2   |        |
| <b>7 – Governance</b>   | 183,5                    | 2                    | 9   | 14  |        |

## Missions related to Cluster 6

- = portfolio of actions across disciplines
  - to achieve a bold and inspirational and measurable goal within a set timeframe
  - impact on society and policy making
  - relevance for the significant part of the European population
- 5 Mission areas (-> concrete missions should be achieved by 2030)
- relevant for cluster 6:
  - **Soil health and food** (-> 75% of soils healthy and able to provide essential ecosystem services)
  - **Healthy oceans, seas, coastal and inland waters** (-> restore our ocean and waters)
- specific WP for Missions; implementation in preparation



[https://ec.europa.eu/info/horizon-europe/missions-horizon-europe\\_en](https://ec.europa.eu/info/horizon-europe/missions-horizon-europe_en)

## Partnerships in Cluster 6

- New architecture, simplified, more transparent
  - » Co-programmed
  - » Co-funded
  - » Institutionalised
- Accelerating farming systems transition
- Animal health: Fighting infectious diseases
- Environmental Observations for a sustainable EU agriculture
- **Rescuing biodiversity to safeguard life on Earth** (Cofund in 2021 WP)
- A climate neutral, sustainable and productive Blue Economy
- Safe and Sustainable Food System for People, Planet & Climate
- Circular bio-based Europe
- **Water4All: Water security for the planet** (Cofund in 2021 WP)

[https://ec.europa.eu/info/horizon-europe/european-partnerships-horizon-europe\\_en](https://ec.europa.eu/info/horizon-europe/european-partnerships-horizon-europe_en)





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