



## **Environment** in

## **HORIZON EUROPE**

**10 February 2021** Jana Čejková, TC CAS



Cluster 5
Cluster 5
Missions & Partnerships
Technology Centre CAS Services



### **HORIZON EUROPE STRUCTURE**



#### Pillar 1 **Excellent Science**

European Research Council

Marie Skłodowska-Curie **Actions** 

Research Infrastructures



#### Pillar 2

Global Challenges and European Industrial Competitiveness

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

Joint Research Centre



#### Pillar 3 Innovative Europe

**European Innovation Council** 

European innovation ecosystems

European Institute of Innovation and Technology

#### Widening participation and strengthening the European Research Area

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system



## STRATEGIC DOCUMENTS AND INITIATIVES

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

- ...



# CLUSTER 6 - FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

### 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



#### **WORK PROGRAMME 2021-2022**

- ✓ Third (final) draft version, still under development
- ✓ Separate calls for each destination (1 for 2021, 1-2 for 2022)
- ✓ Opening: 15 April 2021
- ✓ Deadlines for 2021: beginning of September 2021 (one stage calls only)
- ✓ Deadlines for 2022: middle of February 2022 (1 stage call and 1st stage of 2 stage call); beginning of September 2022 (2nd stage of 2 stage call)
- √ 531 pages!



## 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					
Výzva HORIZON-CL6-2021-BIODIV-01 pro rok 2021, uzávěrka 1.9.2021									
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					
ORIZON-CL6-2021-BIODIV-01-02: Data and technologies for the inventory, fast identification and monitoring of dangered wildlife and other species groups		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		10	10	1					
HORIZON-CL6-2021-BIODIV-01-05: The economics of nature-based solutions: cost-benefit analysis, market development and funding		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		13	13	1					
HORIZON-CL6-2021-BIODIV-01-08: Supporting the development of a coherent and resilient Trans-European Nature Network		7	10	1					
ORIZON-CL6-2021-BIODIV-01-09: Assessing and consolidating recent scientific advances on freshwater ecosystem estoration.		0,5	0,5	1					
HORIZON-CL6-2021-BIODIV-01-10: Demonstration of measures and management for coastal and marine ecosystems estoration and resilience in simplified socio-ecological systems		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					



#### **DESTINATIONS**

## 1 - Biodiversity and Ecosystem Services

(biodiversity identification; impact of stressors; economics of nature-based solutions; ecosystem restoration; biodiversity in primary production; crop breeding; decision-making,...)

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

(organic farming; plant pests; animal diseases; food safety issues; microbes for healthy food; dietary behaviour ...)

### 3 - Circular economy and bioeconomy sectors

(circular cities and regions; over-packaging; biomass for industrial applications; algae potential,...)



#### **DESTINATIONS – CONT.**

## 4 - Clean environment and zero pollution

(N and P load reduction; pollution in urban waters, seas; envi performance in bio-based sectors; certification schemes for bio-based systems; bioremediation,...)

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

(water resources; polar processes; agroforestry, EU-China forests, ...)

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

(rural innovation; urban food system policies,...)

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

(furthering food system science, bioeconomy innovation, 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	
1 - Biodiversity	218,5	4	13	4	1	
2 - Food	175	4	12	2		
3 – Circular	93	6		2		
4 - Pollution	65	1	5	4		
5 - Climate	108		7	2	1	
6 - Communities	52	1	3	2		
7 - Governance	183,5	2	9	14		



## CLUSTER 5 - CLIMATE, ENERGY, MOBILITY

#### Aim

- transformation of economy, industry and society with a view to achieving climate neutrality in Europe by 2050

#### 8 destinations

The most relevant:

## **Destination 1 – Climate sciences and responses**

(greenhouse gas fluxes, CO<sub>2</sub> removal technologies; Earth system models; Integrated Assessment Models; climate services; restoration of natural wetlands, ...)



### **MISSIONS**

- = 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 (-> missions by 2030):

- > Adaptation to climate change, including societal transformation (-> 100 demonstrations of resilience across a number of European communities)
- Cancer (-> more than 3 million more lives saved, living longer and better)
- Soil health and food (-> 75% of soils healthy and able to provide essential ecosystem services)
- Climate-neutral and smart cities (-> showcase 100 European cities in systemic transformation towards climate neutrality)
- Healthy oceans, seas, coastal and inland waters (-> restore our ocean and waters)
- specific WP for Missions; implementation has to be identified



#### 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)



#### **OUR SERVICES**

## **NICER - National Information Centre for European Research**

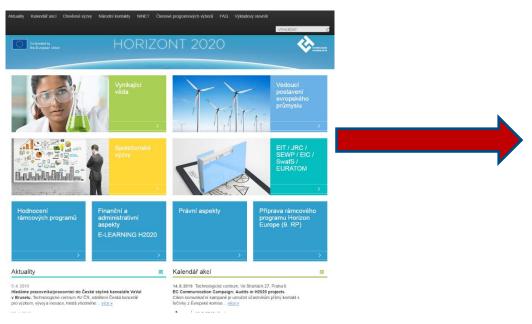
- Individual consultations and assistance to proposers
- Information events
- Workshops/trainings on request of research organizations
- Workshop "How to approach H2020?" (8 different modules; twice a year)
- Czech Days for European Research (annual conference)
- Publications (Vademecum edition, Echo journal,...)
- Monitoring and analyses of Czech participation in H2020



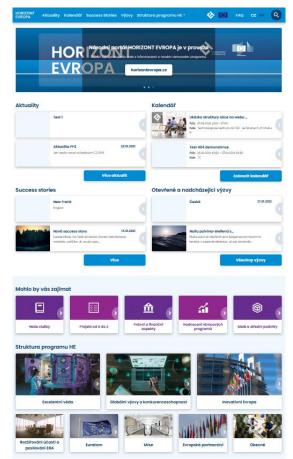




### **INFORMATION**



www.horizont2020.cz



www.horizontevropa.cz

✓ news, events, e-learning, analyses, tailor-made notifications, success stories, ...



## **Any questions?**

