

### **MISSIONS AND PARTNERSHIPS IN HORIZON EUROPE**

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#### **HEU MISSIONS**

= a portfolio of actions across disciplines intended to achieve a bold and inspirational and measurable goal within a set timeframe, with impact on society and policy making as well as relevance for the significant part of the European population and wide range of European citizens

#### **5 Mission areas** have been identified:

- Adaptation to climate change, including societal transformation
- Cancer
- Soil health and food
- Climate-neutral and smart cities
- Healthy oceans, seas, coastal and inland waters



# ADAPTATION TO CLIMATE CHANGE, INCLUDING SOCIETAL TRANSFORMATION

### Mission: A Climate Resilient Europe

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



By 2030, the Mission will:

- Prepare Europe to deal with climate disruptions, and assist all citizens, communities and regions in better understanding, preparing for and managing climate risks;
- 2. Accelerate the transformation to a climate resilient future, supporting 200 European communities and regions in cocreating a vision, innovation pathways, and developing solutions for transformative adaptation within safe planetary boundaries;
- 3. Build deep resilience by scaling up actionable solutions triggering societal transformations through **100 deep demonstrations** of resilience across a number of European communities and regions, with emphasis on cross-border cooperation and cohesion.



### CLIMATE-NEUTRAL AND SMART CITIES

## Mission: 100 climate-neutral cities by 2030 - by and for the citizens

- To support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030 and make these cities into experimentation and innovation hubs for all cities
- mission is fully anchored on the European Green Deal Strategy to make Europe climate neutral by 2050



# HEALTHY OCEANS, SEAS, COASTAL AND INLAND WATERS

Mission: Mission Starfish 2030: Restore our ocean and waters

Inspired by the shape of the starfish, the Mission has five overarching objectives for 2030:

- (i) Filling the knowledge and emotional gap,
- (ii) regenerating marine and freshwater ecosystems,
- (iii) zero pollution,
- (iv) decarbonising our ocean, and waters
- (v) revamping governance.



#### **CANCER**



Mission: Conquering cancer - Mission possible

Goal: by 2030, more than **3 million lives saved**, living longer and better"

13 recommendations for bold actions:

- to understand cancer, its risk factors and impact
- to prevent what is preventable
- to optimise diagnostics and treatment
- and to support the quality of life of people living with and after cancer, while ensuring equitable access for all





#### **SOIL HEALTH AND FOOD**

Mission: Caring for Soil is Caring for Life

Goal: to ensure that 75% of soils are healthy by 2030 and are able to provide essential ecosystem services, such as the provision of food and other biomass, supporting biodiversity, storing and regulating the flow of water, or mitigating the effects of climate change



#### **HEU PARTNERSHIPS**

The aim of European partnerships with EU and associated countries, the private sector, foundations and other stakeholders is to deliver on global challenges and modernise industry.

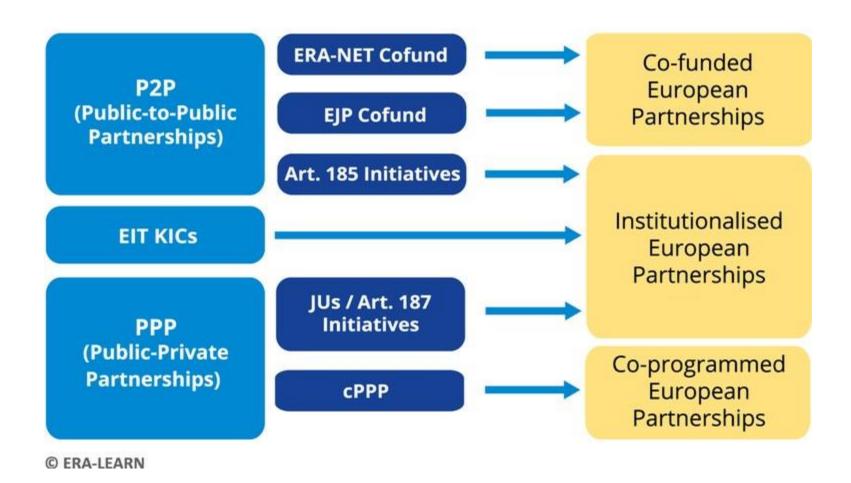
New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

### Key features:

- Simple architecture and toolbox
- Common set of criteria
- Coherent life-cycle approach
- Strategic orientation

### Horizon 2020

### Horizon Europe





## FORMS OF EUROPEAN PARTNERSHIPS

- Co-programmed
- Co-funded
- Institutionalised based on Article 185/187 TFEU

### Examples for candidates with MS as partners

- Co-programmed: European Open Science Cloud
- Co-funded: Chemical Risk Assessment
- Institutionalised based on Article 185/187 TFEU
  - Article 185: Metrology
  - Article 187: Key Digital Technologies

### Portfolio of candidates for European Partnerships (49)

#### **HEALTH**

EU-Africa Global Health
Innovative Health Initiative
Chemicals Risk Assessment
Fostering an ERA for Health research
Large-scale innovation and
transformation of health systems in a
digital and ageing society
Personalised Medicine
Rare Diseases
One Health AMR

#### CLIMATE, ENERGY AND MOBILITY

Transforming Europe's rail system
Integrated Air Traffic Management
Clean Aviation
Clean Hydrogen
Built environment and construction
Towards zero-emission road transport
Mobility and Safety for Automated
Road Transport
Batteries
Clean Energy Transition

Sustainable, Smart and Inclusive Cities

and Communities

Smart and zero-emission waterborne

transport

#### **DIGITAL, INDUSTRY AND SPACE**

High Performance Computing
Key Digital Technologies
Smart Networks and Services
AI, data and robotics
Photonics Europe
Clean Steel - Low Carbon Steelmaking
European Metrology
Made in Europe
Carbon Neutral and Circular Industry
Global competitive space systems
Pandemics

#### FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT

Accelerating farming systems transition
Animal health: Fighting infectious diseases
Environmental Observations for a
sustainable EU agriculture
Rescuing biodiversity to safeguard life on

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

#### PILLAR III AND CROSS-PILLAR

EIT Climate KIC
EIT Health
EIT Manufacturing
EIT Food
EIT InnoEnergy
EIT Manufacturing
EIT Raw Materials
EIT Digital
EIT Urban Mobility
EIT Cultural and
Creative Industries

**Innovative SMEs** 

European Open Science Cloud (EOSC)







## EUROPEAN PARTNERSHIP FOR RESCUING BIODIVERSITY TO SAFEGUARD LIFE ON EARTH

- connecting national, local and European research and innovation programmes and combining in-cash and in-kind resources in support of one goal - by 2030 biodiversity in Europe is back on a path of recovery
- European network of harmonised observatories for biodiversity monitoring, and implement a broad range of activities to increase the relevance, impact and visibility of EU research and innovation in tackling the biodiversity crisis
- https://ec.europa.eu/info/files/european-partnership-rescuing-biodiversitysafeguard-life-earth en



## EUROPEAN PARTNERSHIP FOR A CLIMATE NEUTRAL, SUSTAINABLE AND PRODUCTIVE BLUE ECONOMY

- a climate-neutral, sustainable and productive Blue Economy that preserves biodiversity by 2030
- digital technologies, observation, circular economy, ecosystem based management and renewable energy.
- alignment of regional, national and European research and innovation programmes combining financial and in-kind resources, infrastructures, building on transnational sea basin research initiatives
- https://ec.europa.eu/info/files/climate-neutral-sustainable-and-productive-blueeconomy en



# **EUROPEAN PARTNERSHIP WATER SECURITY FOR THE PLANET (WATER4ALL)**

- systemic transformations across the entire water research and innovation
- reduced water stress, increased protection of water resources and ecosystems and enhanced resilience, mitigation and adaptation of water systems to global changes
- <a href="https://ec.europa.eu/info/files/european-partnership-water4all-water-security-planet\_en">https://ec.europa.eu/info/files/european-partnership-water4all-water-security-planet\_en</a>



## **EUROPEAN PARTNERSHIP FOR A CIRCULAR BIO-BASED EUROPE**

- increase sustainability and circularity of production and consumption systems in line with the European Green Deal
- sustainable sourcing and conversion of biomass into bio-based products focusing on multiscale biorefinery processing and apply circular economy approaches such as utilisation of biological waste from agriculture, industry and municipal sectors
- deploy bio-based innovation at regional scale
- https://ec.europa.eu/info/files/european-partnership-circular-bio-basedeurope en



#### **PARTNERSHIPS CANDIDATES 2023-24**

- European Partnership accelerating farming systems transition: agroecology living labs and research infrastructures
- European Partnership for Animal health (PAH)
- Agriculture of data
- European Partnership for Safe and Sustainable Food Systems



#### **INFORMATION SOURCES**

https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/european-partnerships-horizon-europe\_en

https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme\_en#missions-in-horizon-europe

https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme en#proposal