



OVERARCHING STRATEGIC OVERVIEW OF THE HORIZON EUROPE WORK PROGRAMME 2023-2024 AND THE MAIN STEPS TOWARDS 2025-2027



Research and Innovation

#### **HORIZON EUROPE**

#### **EURATOM**



\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

 = covered by the 'main' Horizon Europe work programmes, which also include a General Introduction, part on Missions, and General Annexes



## The Horizon Europe story so far...



N.B. The focus here is on the 'main' work programmes, and not the separate work programmes for the European Research Council (ERC), European Innovation Council (EIC), Joint Research Centre (JRC) or other activities of Horizon Europe

## Key Priorities for 2023-2024





## Work Programme 2023-2024 in a nutshell

- Total budget ca. €13.5 billion for research and innovation (R&I)
- Support to the green and digital transitions:
  - climate objectives and biodiversity
  - digital transition in a wide range of sectors and core digital technologies
- Investment in EU's safety, security and resilience:
  - economic recovery from the COVID-19 pandemic
  - clean energy transition and reducing energy dependency
  - pandemic preparedness
  - fighting physical and cyber threats
- Targeted support for Ukraine
- Multiannual approach over the two-year period 2023-2024





## **Green transition**



- Aim = to accelerate the delivery of the Green Deal
- 35% of the whole Horizon Europe programme dedicated to climate objectives, i.e. to advance the science of climate change and to develop solutions to reduce greenhouse gas emissions and adapt to the changing climate
- Work Programme 2023-2024 (excluding MSCA) contributes:

✓ €5.67 billion to **climate action** = 42.2% of the work programme budget

✓ €1.67 billion to **biodiversity** = 12.4% of the work programme budget

• **New European Bauhaus** aims to show the benefits of the green transition in people's daily lives and living spaces through holistic transformation of built environment and land-use complex with regenerative design approach



## **Digital transition**



- Aim = lay the groundwork to ensure that all actors of society, including enterprises, master the complex interplay of technology and humankind, for a better society and life, fully respecting universal human rights and planetary boundaries
  - ✓ maximise full potential of human-centric digital tools and data-enabled research and innovation in a wide range of sectors (e.g. healthcare, cultural and creative industries, energy, mobility, food production)
  - support deep transformations required for modernisation of traditional industrial models
- 34.5% of the work programme budget in 2023-2024 contributes to the digital transition



## Safety, security & resilience



- Aim = contribute to a safe and secure Europe, help reduce energy- and other dependencies, and build a more robust economic base
  - ✓ accelerate the clean energy transition in line with the REPowerEU Plan
  - ✓ improve food security
  - ✓ support cybersecurity
  - ✓ help ensure open strategic autonomy
  - ✓ reduce dependencies on critical raw materials
- Targeted support to (previously) Ukraine-based researchers and innovators



## **International Cooperation**



- Open to the World: any consortium can include international partner(s) for almost all topics
- 22% of topics in 2023-2024 specifically encourage international cooperation, including dedicated actions in 2024 on:
  - ✓ renewable energy
  - ✓ global health
  - ✓ environmental observations
  - ✓ ocean- coastal and arctic research
  - ✓ disaster management
  - ✓ fair, healthy and environment-friendly food systems
- Africa initiative/Mediterranean initiative/China flagships
- Balance openness with safeguarding European strategic autonomy and assets: 11 topics in the 2024 calls restrict participation



## Support to scientists, researchers and innovators

### **Continuing to:**



- foster excellence in research and support fellowships, training and exchanges for researchers through Marie Skłodowska-Curie Actions (MSCA)
- build more connected and efficient European innovation ecosystems
- create world-class **research infrastructures**
- enable an operational, open and fair EOSC ecosystem
- widen participation in the programme
- attract and mobilise the best scientific talents
- strengthen the European Research Area



## Reflecting the key strategic orientations of the Horizon Europe Strategic Plan 2021-2024

#### **Key Strategic Orientation A**

Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains to accelerate and steer the digital and green transitions through human-centred technologies and innovations

#### Key Strategic Orientation B

Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources to ensure food security and a clean and healthy environment

#### **Key Strategic Orientation C**

Making Europe the first digitally enabled circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems

#### **Key Strategic Orientation D**

Creating a more resilient, inclusive and democratic European society, prepared and responsive to threats and disasters, addressing inequalities and providing highquality health care, and empowering all citizens to act in the green and digital transitions



## From the key strategic orientations to the work programme



- The work programme parts are structured by 'Destination'.
- Each 'Destination' in the Cluster work programme parts mirrors one specific expected impact of the strategic plan, while also contributing to other expected impacts
- All 32 expected impacts of the strategic plan are covered by the work programme
- The expected impacts are also used for monitoring and programme evaluation
- The expected impacts of the strategic plan cover the 4-year period 2021-2024, so are reflected in the 'Destinations' of the work programmes for 2021-2022 **and** 2023-2024



### **EU Missions**

- Adaptation to Climate Change: support at least 150 European regions and communities to become climate resilient by 2030
- Cancer: improving the lives of more than 3 million people by 2030 through prevention, cure and for those affected by cancer including their families, to live longer and better
- Restore our Ocean and Waters by 2030: restore the health of our ocean and waters by 2030
- 100 Climate-Neutral and Smart Cities by 2030 and these cities should act as demonstration and innovation hubs to allow for all European cities to become climate-neutral by 2050
- Improve the health of soils in Europe: Create 100 living labs and lighthouses to lead the transition towards healthy soils by 2030





### **EU Missions: state of play**

- Work Programme 2023-2024 currently only includes actions to support Missions using budget from 2023
- Horizon Europe legal basis requires review and assessment of EU Missions and Mission areas no later than 2023, before any decision is taken on creating new missions, or on continuing, terminating or redirecting ongoing missions
- Commission Communication "EU Missions two years on: assessment of progress and way forward" of 17 July 2023 presented the assessment and review, and confirmed continuation of the five EU Missions
- Amendment to Work Programme 2023-2024 in preparation to roll out actions to support Missions using budget from 2024 adoption expected in Q1 2024

## Towards the main work programmes from 2025: Horizon Europe Strategic Plan 2025-2027





## Looking ahead...



## Strategic Plan: content and process set out in the Horizon Europe Specific Programme

- Article 6: "[...] the implementation of the Specific Programme shall be facilitated by a multiannual Strategic Plan of R&I activities, also promoting consistency between the work programmes, EU priorities and national priorities. The result of the strategic planning shall be set out in a multiannual Strategic Plan, for preparing the content in the work programmes, [...]"
- Coverage: In particular Pillar II, 'Global Challenges and European Industrial Competitiveness' and cover also relevant activities in other pillars and the Widening Participation and Strengthening the European Research Area part.
- Content: Key strategic orientations for R&I support, including a description of expected impacts, identification of co-programmed and co-funded European Partnerships and Missions; Areas for international cooperation; Specific issues such as SSH, Gender, Ethics etc.
- Process: Early involvement and extensive exchanges the Member States; extensive exchanges with the European Parliament, complemented by consultation with stakeholders and the general public.
- ✓ Analysis of key elements to be taken into account.



## **Towards the Strategic Plan 2025-2027**



Creating the analytical foundation for the plan (analysis published May 2023)
 Collecting data and consulting stakeholders (results published April 2023)

Drafting of the Strategic Plan Q2 2023 – Q4 2023



Adoption of the Strategic Plan Q1 2024

More information can be found on the <u>webpage of the Strategic</u> <u>Plan</u>



## Horizon Europe Strategic Plan 2025-2027 analysis: overview



Horizon Europe Strategic Plan 2025-2027

### Some key messages



- investments in R&I to strengthen EU's resilience
- EU patenting
  world leader, but
  declining due to
  China's rise
  - underperformance in digital technologies
- ¾ proposals unfunded due to lack of budget
- improving the EU's ability to take up research into market is a priority

More information can be found online in the analysis

### **Strategic Plan public consultation: main figures**



More information can be found online in the analysis of responses to the public consultation



### **European Partnerships included in strategic planning**



- A new approach to European Partnerships in Horizon Europe: strategic, coherent and impact-driven
- European Partnerships established only in cases where they will achieve objectives of Horizon Europe more effectively than other activities of the Framework Programme.
- 49 European Partnerships identified in the Horizon Europe Strategic Plan 2021-2024



### 2025-2027: new candidate Partnerships



- 17 July 2023: <u>Second batch of candidate co-funded and co-programmed</u> European Partnerships proposed
- Selection takes place in context of Strategic Coordinating Process for European Partnerships that complements the strategic planning
- Early involvement of Member States is ensured through the Partnership Knowledge Hub and the Strategic configuration of the Horizon Europe Programme Committee
- Selection criteria based on Annex III of the Horizon Europe Regulation



# Thank you for your attention!



http://ec.europa.eu/horizon-europe





© European Union 2021 Unless otherwise noted the reuse of



Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0</u> license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders. Image credits: © ivector #235536634, #249868181, #251163013, #266009682, #273480523, #362422833, #241215668, #244690530, #245719946, #251163053, #252508849, 2020. Source: Stock.Adobe.com. Icons © Flaticon – all rights reserved.