# HORIZON EUROPE

Horizon Europe Strategic Planning – the way to future R&I priorities



SBRA meeting, 31 March 2023

Niels Mayer European Commission, DG Research and Innovation, Common Strategic Planning & Programming Service



### In this presentation

- WHAT IS THE HORIZON EUROPE STRATEGIC PLAN?
- PROCESS OF DEVELOPING THE STRATEGIC PLAN 2025-2027 AND THE NEXT STEPS
- FROM STRATEGIC PLAN TO WORK PROGRAMME



# What is the Horizon Europe Strategic Plan?





# 6 Commission priorities for 2019-24

#### A European Green Deal

Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.

#### A Europe fit for the digital age

The EU's digital strategy will empower people with a new generation of technologies.

#### An economy that works for people

The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.

#### A stronger Europe in the world

The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.

#### Promoting our European way of life

Europe must protect the rule of law if it is to stand up for justice and the EU's core values.

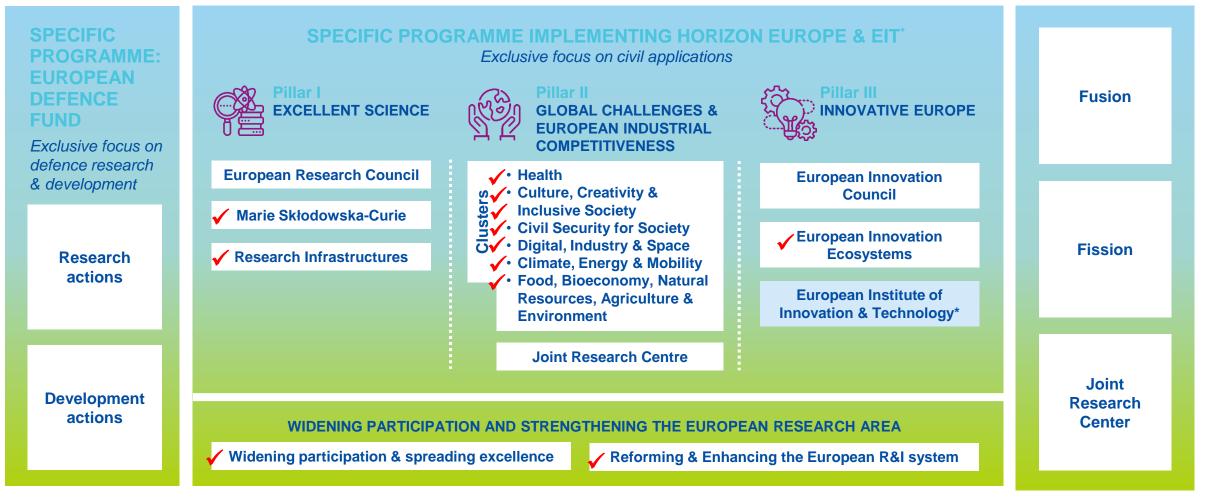
#### A new push for European democracy

We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages



#### **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, together with a General Introductions, WP part on Missions, and General Annexes



### Overview





# Rationale for strategic planning

- Research and innovation projects funded by Horizon Europe can make a great contribution to key EU policy priorities
- What is required is an effective interface between EU policy priorities and programme activities ⇒ Strategic plan
- Strategic plan as intermediate step towards the work programme:
  - Defines key strategic orientations
  - Outlines important **approaches and instruments** for the implementation
  - A chance to interact with stakeholders and citizens on research priorities



# Benefits of strategic planning – increasing the impact of investments in R&I

- The Strategic Plan acts as a **reference document** with which Member States and associated countries can align activities, ensuring better coordination;
- The Strategic Plan is co-created with Commission services (including executive services) and co-designed with citizens and stakeholders and in an extensive exchanges with the Member States and the European Parliament;
- The plan takes into account inputs from **stakeholder consultations**, helping to identify and fine-tune priorities to fit societal needs.

For stakeholders strategic planning represents:

- A chance for interaction on R&I priorities in an open forum;
- Greater transparency and continuity on priorities for the work programmes.



# Content and process is 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 to be taken into account.



# Strategic Plan 2021-2024

- The <u>Horizon Europe Strategic Plan 2021-2024</u> was adopted in March 2021. It contains:
  - **key strategic orientations** for research and innovation support and their **expected impacts**
  - identification of European co-funded and coprogrammed partnerships
  - identification of EU missions
  - areas of international cooperation
  - orientations on **specific issues** like gender, the EU taxonomy and other cross-cutting issues
  - detailed Cluster-specific annexes



### 2021-2024: Four key strategic orientations

#### **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 high-quality health care, and empowering all citizens to act in the green and digital transitions





# Strategic Plan 2021-2024 New approach to Partnerships

New generation of **strategic** and **more ambitious** partnerships in support of **agreed EU policy objectives** 

Strategic Planning: identification of priorities to be addressed by partnerships

#### **CO-PROGRAMMED**

Based on Memoranda of Understanding/contractual arrangements; implemented independently by the partners and by Horizon Europe

#### **CO-FUNDED**

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and in-kind contributions

#### **INSTITUTIONALISED**

Based on long-term dimension and need for high integration; partnerships based on Art 185/187 of TFEU and the EIT legal acts for 2021-2027

Topics included in the 'main' work programmes

Initial co-funding included in the 'main' work programmes -> partnerships then implement



# Strategic Plan 2021-2024: **49 candidate European Partnerships**

#### **PILLAR II** - Global challenges & European industrial competitiveness

#### **PILLAR III - Innovative Europe**

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture,	EIT	SUPPORT TO INNOVATION ECOSYSTEMS
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	InnoEnergy	Innovative SMEs
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth	Climate	
Transformation of health systems	High Performance	Single European Sky ATM Research 3	Climate Neutral,	Digital	
Chemicals risk	Computing European Metrology	Europe's Rail	Sustainable & Productive Blue Economy	Food	
assessment	(Art. 185)	Connected and Automated	Water4All	Health	
ERA for Health	AI-Data-Robotics	Mobility (CCAM)	Animal Health & Welfare*	Raw Materials	
Rare diseases*	Photonics	Batteries	Accelerating Farming	Manufacturing	
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Systems Transitions*	Urban Mobility	
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Agriculture of Data*	Cultural and Creative Industries	
Pandemic Preparedness* Co-funded or co-	Processes4Planet	Built4People	System*		
programmed	Global competitive space systems**	Clean Energy Transition	CROSS-PILLAR II AND III European Open Science Cloud		
Institutionalised Partnerships (Art 185/7)		Driving Urban Transitions			
Institutionalised partnerships / EIT KICs		* Calls with opening dates in 2023-24			European Commission

Co-Programmed

Co-Funded

\*\* Calls with opening dates not before 2022

# PROCESS OF DEVELOPING THE STRATEGIC PLAN 2025-2027 AND THE NEXT STEPS





# Strategic planning process officially launched during R&I Days on 28 September

#### Speakers:

- Commissioner for Innovation, Research, Culture, Education and Youth Mariya Gabriel
- Member of the European Parliament and Chair of the Committee on Industry, Research and Energy Cristian Buşoi
- Deputy Minister for Higher Education, Science and Research in the Czech Republic Radka Wildová

#### References:

- Commission's news article
- Web page on the Strategic Plan





# Main phases in strategic planning 2025-2027

Creating the analytical foundation for the plan; collecting data and consulting stakeholders

Drafting the Strategic Plan

Adoption

Until end of Q1 2023

Q2 2023-Q4 2023

Q1 2024



# Analysis supporting the Strategic Plan

#### **Specific Programme requires the analysis to cover:**

- political, socio-economic and environmental drivers relevant for Union and Member States' policy priorities;
- contribution of research and innovation to the realisation of Union policy objectives, studies, scientific evidence; other relevant initiatives incl. partnerships;
- evidence from foresight, science, technology and innovation indicators, international developments and feedback from implementation, incl. on SMEs and widening; synergies with other Union programmes;
- a description of the various approaches for stakeholder consultation and citizen engagement to develop the work programme;
- complementarities with the EIT Knowledge and Innovation Communities (KICs).



# Sources of content for the analysis

- Analytical work and data from
  - Foresight for Strategic Plan 2025-2027, and other foresight work within the Commission services (e.g., <u>from JRC</u>), <u>https://www.futures4europe.eu</u>
  - Report on Science, Research and Innovation Performance of the EU (<u>SRIP report</u>)
  - Other analysis, data from evaluations
- Stakeholder consultation and citizen engagement
- Selected key messages:
  - investments in R&I to strengthen EU's resilience;
  - underperfomance in digital technologies;
  - Improving the EU's ability to take up scientific discoveries into market solutions is a priority.



# Citizens' engagement workshop

- Date: 1 December 2022 in Brussels
- Concept: held in the context of the feedback event of the Conference on the Future of Europe (CoFE)
- Goal: discuss how citizens' recommendations could influence R&I priorities for the next 3 years and beyond
- Results: lively discussions on three main topics (Green transition Digital transition Resilience), which will feed into the Strategic Plan analysis
- Participants: Representative group of around 70 citizens (and 25 Commission expert)



# Public online consultation

- Structure: to maximise participation and reduce stakeholder fatigue, the consultation covers the following three elements:
  - Performance of the past programme Horizon 2020 (Horizon 2020 ex-post evaluation)
  - Performance of Horizon Europe (input to Horizon Europe interim evaluation)
  - Looking into the R&I future priorities 2025-2027 (Horizon Europe Strategic Plan)
- Duration and timeline: 12 weeks, 1 December 2022 23 February 2023 on the <u>Have your say portal</u>.
- Results: will be analysed and published in the Strategic Plan Analysis (by May)

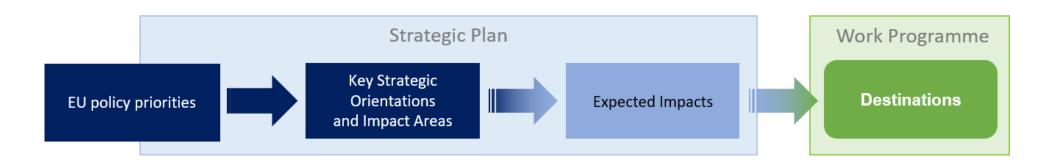


# From Strategic Plan to Work Programme





# From policy priorities to work programme



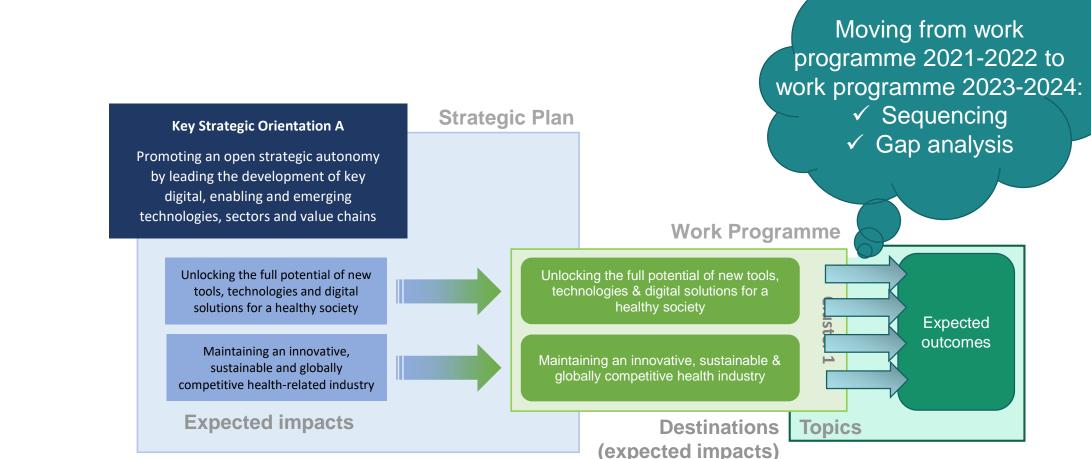
- The work programme parts are structured in sections called 'Destinations'.
- Each 'Destination' in the Cluster work programme parts mirrors one specific expected impact of the strategic plan
- The expected impacts of the strategic plan cover the 4-year period 2021-2024, so are reflected in the 'Destinations' of the work programmes for 2021-2022 and 2023-2024



# From policy priorities to work programme - example

-

Cluster



# 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:
  - recovery from the COVID-19 pandemic
  - clean energy transition and reducing energy dependency
  - pandemic preparedness
  - fighting physical and cyber threats
- Targeted support for **Ukraine**





# Thank you!

#### **# HorizonEU**

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



© European Union 2021

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 © Flation - \_\_\_\_\_examples of the second secon



European Commission