

Innovation

Commission proposal for

# **Horizon Europe**

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)

### #HorizonEU

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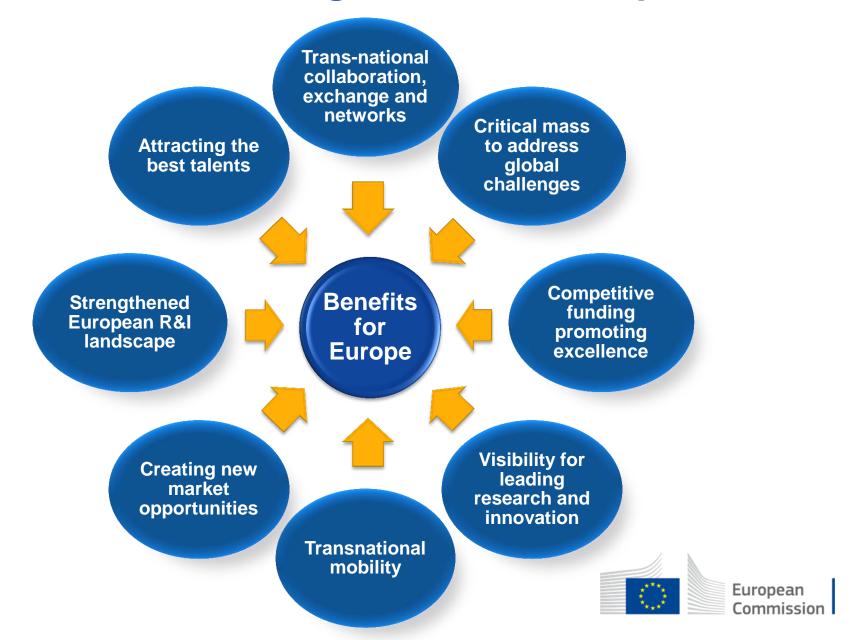
Non Communicable Diseases & the Challenge of Healthy Ageing



# **Horizon Europe – Why?**



# Added value through Horizon Europe:



# **Horizon Europe**

is the Commission proposal for a € 100 billion research and innovation funding programme for seven years (2021-2027)



to strengthen the EU's scientific and technological bases



to boost Europe's innovation capacity, competitiveness and jobs



to deliver on citizens' priorities and sustain our socioeconomic model and values

€ 4.1 billion are proposed to be allocated for defence research, in a separate proposal for a European Defence Fund

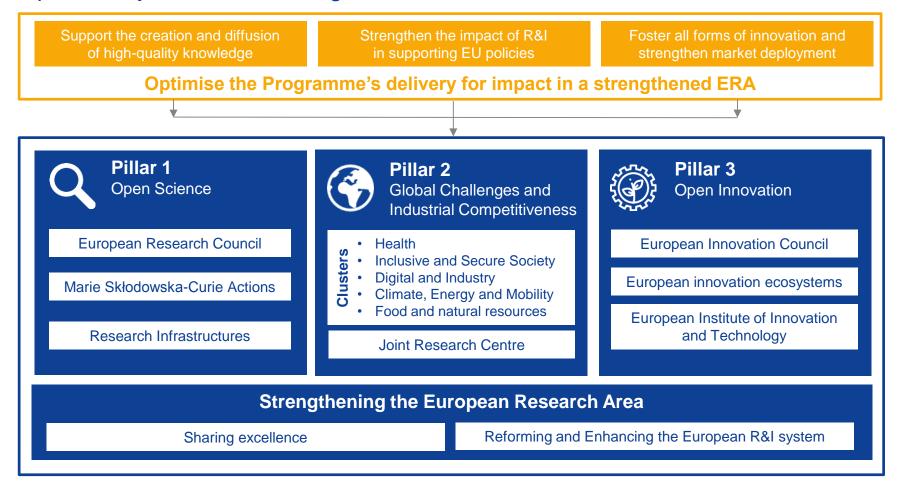


# **Horizon Europe – What?**



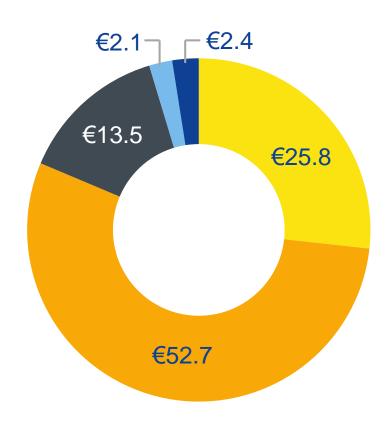
# Horizon Europe: evolution not revolution

### Specific objectives of the Programme





# **Budget: €100 billion\***



\* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

# € billion In current prices

- Open Science
- Global Challenges & Ind. Competitiveness
- Open Innovation
- Strengthening ERA
- **■** Euratom



## **OPEN SCIENCE: € 25.8billion**

reinforcing and extending the excellence of the Union's science base

# European Research Council

 Frontier research by the best researchers and their teams

€ 16.6 billion

## Marie Skłodowska-Curie Actions

 Equipping researches with new knowledge and skills through mobility and training

€ 6.8 billion

## Research Infrastructures

 Integrated and inter-connected world-class research infrastructures

€ 2.4 billion



# Global Challenges & Industrial Competitiveness:

boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals € 52.7billion

Clusters implemented through usual calls, missions & partnerships	2021-24
Health	€ 7.7
Inclusive and Secure Societies	€ 2.8
Digital and Industry	€ 15
Climate, Energy and Mobility	€ 15
Food and Natural Resources	€ 10
Joint Research Centre supports European policies with independent scientific evidence & technical support throughout the policy cycle	2021-27 € 2.2



# **OPEN INNOVATION:** € 13.5 billion

stimulating market-creating breakthroughs and ecosystems conducive to innovation

# European Innovation Council

 Support to innovations with breakthrough and market creating potential

€ 10.5 billion

# European innovation ecosystems

 Connecting with regional and national innovation actors

**€ XXX billion** 

# European Institute of Innovation and Technology (EIT)

 Bringing key actors (research, education and business) together around a common goal for nurturing innovation

€ 3 billion



# **Horizon Europe – What's new?**



# **Lessons Learned**

### from Horizon 2020 Interim Evaluation



Support breakthrough innovation





Create more impact through mission-orientation and citizens' involvement





Strengthen international cooperation





**Reinforce openness** 





Rationalise the funding landscape



# **Key Novelties** in Horizon Europe

European Innovation Council

**R&I Missions** 

Extended association possibilities

**Open science policy** 

New approach to Partnerships



# **Health Cluster**



### Six main areas of intervention



Health throughout the Life Course



Environmental and Social Health Determinants



Non-communicable and Rare Diseases



Infectious diseases

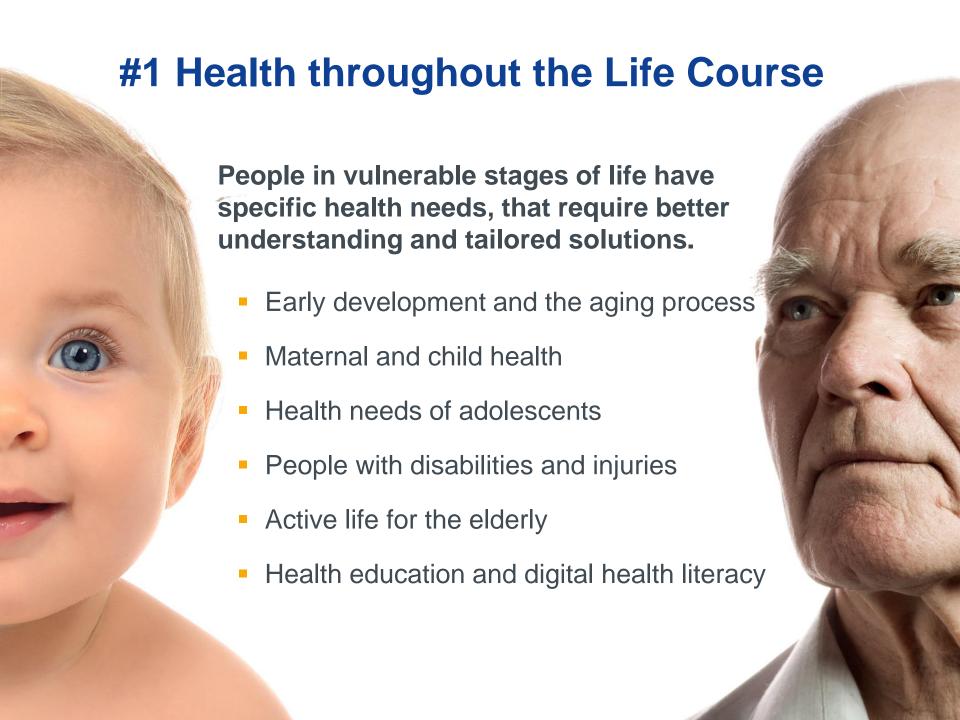


Tools, Technologies and Digital Solutions for Health and Care



**Health Care Systems** 





### #2 Environmental and Social Health Determinants



We need to better understand how the social, economic and physical environment impacts our health and mitigate health risks and threats.

- Health hazards of chemicals, pollutants and environmental stressors
- Capacity and infrastructure to collect, share and combine exposure data with health and diseases
- Environmental, occupational, social and behavioural factors impacting physical and mental health
- Risk assessment, management and communication
- Health promotion and prevention



# **#3 Non-Communicable and Rare Diseases**



Non-communicable diseases remain a major health and societal challenge requiring personalized approaches.

- Earlier and more accurate diagnoses
- Prevention and screening programmes
- Treatments and cures
- Palliative care
- Comparative effectiveness of interventions
- Scale up of health interventions





# **#4 Infectious Diseases**

We must protect people in the world from the threats of infectious diseases and AMR.

- Drivers for the emergence and re-emergence of infectious diseases and their spread
- Prediction, early detection and surveillance of infectious diseases and AMR pathogens
- Vaccines, diagnostics, treatments and cures
- Emergency preparedness, response and recovery measures
- Uptake of medical interventions in clinical practice, health systems
- Specific challenges in low- and middle-income countries (LMICs)



# #5 Tools, Technologies and Digital Solutions for Health and Care

New technologies are vital for public health and the competiveness of European Heath related industries.

- Tools and technologies for medical indications
- Integrated solutions for health incl. mobile and telehealth
- Piloting and large-scale deployment of healthcare technologies and tools in real-life settings
- Innovative processes for development, manufacturing and rapid delivery
- Safety, efficacy, quality and ethical and social impact
- Regulatory science



# **#6 Health Care Systems**

Health systems are a key asset of the EU social system. We shall keep them accessible, resilient and sustainable and harness the potential of data-driven and digital innovation.

- Reforms in public health systems and policies
- New models for health and care and future workforce
- Improving health technology assessment
- Use of health data respecting security, privacy and interoperability
- Health systems resilience crises and disruptive innovation
- Patient empowerment, self-monitoring, usercentered integrated care

European Commission

# **Horizon Europe – How?**



# Strategic planning to define multiannual work programmes and calls for proposals

- Transparency and stakeholder involvement
- Prioritisation and flexibility to align to political priorities
- Internal programme coherence & synergies with other programmes

### Multiannual Strategic R&I Plan

\* Multiannual orientations and priorities in one document \* Areas for partnerships and missions

Strategic discussions with Member States and European Parliament

Consultation with stakeholders

### **Work Programmes**



# **Next steps**

Ongoing

Parliament and Council negotiations on Union budget 2021-2027, including budget for Horizon Europe

From 7 June

Parliament and Council negotiations on the basis of the Commission proposal for Horizon Europe

2<sup>nd</sup> half 2018/2019 Strategic planning to prepare first work programmes under Horizon Europe, including codesign of missions and setting up of partnerships

1 January **2021** 

Envisaged start of Horizon Europe



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### Horizon Europe dedicated website

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

### **European Innovation Council**

http://ec.europa.eu/research/eic

### **EU** budget for the future

http://ec.europa.eu/budget/mff/index\_en.cfm

