**EUROPEAN UNION** 



**#HorizonEU** 

December 2020



"With Horizon Europe Programme, the European research community, research organizations and our citizens can count on the world largest research and innovation Programme. It is our main tool to strengthen our scientific and technological base, develop solutions for healthier living, drive digital transformation and fight climate change, for our collective resilience."

Mariya Gabriel Commissioner for Innovation, Research, Culture, Education and Youth

# THE EU RESEARCH AND INNOVATION PROGRAMME (2021-27)

## FOR A GREEN, HEALTHY, DIGITAL AND INCLUSIVE EUROPE

Research and innovation provide new knowledge and innovative solutions to overcome our societal, ecological and economic challenges. Horizon Europe helps researchers and top class innovators to develop and deploy their ideas. It supports excellent science by teaming up the best talent and equipping them with world-class infrastructures. Moreover, it supports breakthrough innovations and helps to create new services and markets.

## Keeping the EU at the forefront of global research and innovation

#### **Horizon Europe will:**

- Maximise its impact and deliver on the EU's strategic priorities, such as the recovery, green and digital transitions, and tackles global challenges to improve the quality of our daily lives;
- Strengthen excellent EU science and technology by increasing investment in highly skilled people and cutting-edge research;
- Foster the EU's industrial competiveness and its innovation performance, notably supporting market-creating innovation via the European Innovation Council and the European Institute of Innovation and Technology;
- **Enhance** access to excellence for researchers across Europe to foster participation and collaboration, as well as promoting gender balance.

#### **Novelties to advance progress**



**Support breakthrough innovation > European Innovation Council:** One-stop shop to bring the most promising ideas from lab to real world application and support the most innovative SMEs, including start-ups, to scale up their ideas.



**Deliver targeted solutions to societal challenges together with citizens > EU missions:** Ambitious, bold goals to tackle issues that affect our daily lives, ranging from fighting cancer to adapting to climate change, living in greener cities, ensuring soil health for food, nature, people and climate, and protecting our waters and ocean.



**Rationalise the funding landscape > Streamlined approach to European Partnerships:** Streamlined number of partnerships while encouraging wide participation of partners from public and private sectors.



**Strengthen international cooperation > extended association possibilities:** Extended openness to association for non-EU countries (third countries) with good capacity in science, technology and innovation.



**Reinforce openness > Open Science policy:** Mandatory open access to publications, open access to research data ensured. Use of European Open Science Cloud as appropriate.



**Encourage participation and decrease the R&I gap in Europe > widening participation and spreading excellence:** A wide spectrum of measures to support lower R&I performing countries, to build up excellence centres, to improve their capacity and facilitate collaborative links.



**Increase the R&I impact > synergies with other EU programmes and policies:** A set of practical solutions to implement Horizon Europe and relevant R&I-related programmes and policies in synergy, for example InvestEU, Erasmus+, EU Cohesion Policy, Digital Europe, European Structural and Investment Funds, Connecting Europe Facility, and the Recovery and Resilience Facility, to promote faster dissemination at national and regional level, and uptake of research and innovation results.



**Reduce administrative burden > simpler rules:** To increase legal certainty and reduce administrative burden for beneficiaries and programme administrators.

# **Enhancing impact**

Horizon Europe aims to boost growth, trade and investment and to create a significant social and environmental impact.



Up to €11 of GDP gains over 25 years can be potentially generated by each euro invested at EU level in R&I



Over 35% of Horizon Europe spending will contribute to climate objectives



To create 300.000 jobs by 2040, of which 40% will be highly skilled jobs

#### A BUDGET & STRUCTURE FIT FOR ITS AMBITIONS

Horizon Europe will have a budget of around **€95.5 billion** for 2021-2027 (current prices). This includes **€5.4** billion (current prices) from **NextGenerationEU** to boost our recovery and make the EU more resilient for the future, as well as an additional reinforcement of **€4.5** billion (current prices).

Horizon Europe will be implemented also through the **European Defence Fund** and complemented by the **Euratom Research and Training Programme**.



#### Pillar 2 Pillar 3 Pillar 1 **INNOVATIVE EUROPE EXCELLENT SCIENCE GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS European Research Council** Clusters Health **European Innovation Council** Culture, Creativity and **Inclusive Society** Marie Skłodowska-Curie Actions Civil Security for Society European innovation ecosystems • Digital, Industry and Space Climate, Energy and Mobility **Research Infrastructures European Institute** Food, Bioeconomy, Natural of Innovation and Technology **Resources, Agriculture and** Environment Joint Research Centre WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

- The Excellent Science pillar aims to increase the EU's global scientific competitiveness. It supports frontier research projects defined and driven by top researchers themselves through the European Research Council, funds fellowships for experienced researchers, doctoral training networks, exchanges for researchers and entices more young people to a career in research, through Marie Skłodowska-Curie Actions, and invests in world-class research infrastructures.
- The Global Challenges and European Industrial Competiveness pillar supports research relating to societal challenges and reinforces technological and industrial capacities through clusters. It sets EU-missions with ambitious goals tackling some of our biggest problems. It also includes activities pursued by the Joint Research Centre which supports EU and national policymakers with independent scientific evidence and technical support.

#### **THREE PILLARS FOR IMPLEMENTATION**

- The Innovative Europe pillar aims to make Europe a frontrunner in market-creating innovation via the European Innovation Council. It also helps to develop the overall European innovation landscape, by developing European Innovation ecosystems and through the European Institute of Innovation and Technology (EIT) which fosters the integration of the knowledge triangle of education, research and innovation.
- Widening Participation and Strengthening the European Research Area (ERA) increase support to EU Member States in their efforts to make the most of their national research and innovation potential and promote an ERA where researchers, scientific knowledge and technology circulate freely.

#### **HOW TO APPLY**

Work programmes announce the specific research and innovation areas that will be funded. The forthcoming calls for proposals will be accessible through the one-stop-shop <u>Funding and Tenders Portal</u>. When ready each call gives more precise information on the research and innovation issues that applicants for funding should address in their proposals.

#### **MORE INFORMATION**

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

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