



LAUNCH OF HORIZON EUROPE

2 FEBRUARY 2021

Belem Cultural Centre - CCB, LISBON

(online event)

Background note

Mobilizing *Horizon Europe* and *Next Generation EU* for promoting green and digital transitions across Europe and preparing resilient recovery through a renewed *European Research Area*

Horizon Europe is the EU's most ambitious R&I framework programme ever and the largest transnational programme of its kind worldwide, with its 95.4 billion euro budget. This innovative programme provides new instruments, such as the *European Innovation Council*, *Research Missions* and *Partnerships* to boost the EU R&I landscape. It establishes a target of at least 35% of expenditure for climate objectives as well as reinforces the EU's commitment to facilitate R&I collaborative links in Europe and sets up a broader policy for the association of third countries to the programme in order to increase a global R&I cooperation. *Horizon Europe* – as its predecessor *Horizon 2020* - is firmly anchored in excellence with a deep commitment towards fundamental science.

The renewed *European Research Area* and the launch of *Horizon Europe* serve as unique opportunity to reaffirm the 3% EU GDP research and development investment target for 2030 and to recall the need to support all Member States in articulating research and innovation funding and conducting the necessary reforms. The launch of the programme marks the start of the *European Innovation Council* - a major new endeavor under *Horizon Europe* to accelerate innovations based on breakthrough technologies and game changing innovations and to scale up Europe's most promising start ups and SMEs into a new generation of world leading companies.

The new *Recovery and Resilience Facility*, core component of the *Next Generation EU* recovery package, represents a major chance for the Member States to get large-scale financial support for R&I investments and reforms. It is essential to exploit this in full **synergy** with *Horizon Europe*, in particular in the frame of its *Research Missions* and *Partnerships*. *Horizon Europe* through its powerful measures and new level of synergies with other EU programmes and instruments will pave the way out of the current crisis towards a fair, green and resilient future to everyone.

The Portuguese Presidency of the European Union follows up on the Trio programme and recommendations, the EC communication of September 30, 2020 and the Council conclusions of December 2020. The Presidency focuses on the three main issues crucial to provide the European Research Area with more coordination and to encourage Member States to create synergies between their R&I investment and *Horizon Europe*:

1. Firstly, **science-employment-resilience relationship** is key to foster recovery of Europe while including every single European region in these efforts. Science and technology create new services and markets. Citizens need to be better informed of the significance of research and innovation for creating jobs and improving working conditions, including in professions, businesses and markets that have been hit the hardest by the pandemic, while increasing the role of socially responsible industry and entrepreneurs. Synergies

between national and European programmes are essential in the frame of the Recovery and Resilience Plans.

2. Secondly, **open and collaborative research needs to be fostered to break through the frontiers of knowledge**. Examples include cancer research, genetically improved food, the physics of the universe, advanced materials and nanoscience, or quantum physics, among many other disciplines. Human activity has an unbalanced influence on Earth, as shown by alarming signals such as climate change and zoonotic diseases. Both phenomena have been increasing due to the pressure that our societies and their economic development exert on nature (e.g., Human Development Report, 2020, UNDP, 15th December).

The eventual scientific demonstration of these relations with the pandemic, with which we now live, requires **new knowledge** to be able to ask more accurate and difficult questions to better understand the risks we run, as well as to guarantee that **Europe leads the scientific evolution in this new geological era of the “Anthropocene”**. The new knowledge across disciplines, institutional innovation across public and private institutions, and new observation methods making use of low-orbit satellite systems are needed to better guide our common future. In this respect, the role of philanthropy and private foundations is becoming more relevant in promoting European R&I and should be carefully articulated with national funding agencies, scientific organizations and the European Commission.

3. Thirdly, we need to **foster research careers and increase the professionalisation of research activities**, both in public and private sector, and make research careers more attractive for women and minorities in order to fully mobilise the R&I potential of the Union. **Europe needs more scientists** and must improve the conditions to attract talents and retain researchers. The European research ecosystem should promote transparent and coordinated recruitment procedures in R&I. Potential future avenues may consider joint recruitments schemes and joint career development across European Universities, as well as across research institutions in different EU Member States. The role of national funding agencies and their cooperation with the European Commission is crucial to ensure these synergies.

Main Topics for discussion:

Mobilizing in synergy “Horizon Europe” and “Next Generation EU” together with national public and private investments for promoting green and digital transitions across all EU regions in *the renewed European Research Area (ERA)*:

1. Strengthening **Science - Skilled Employment - Resilience relationships** through synergies between national and European programmes;
2. **Strengthening public and private investment in R&D in Europe**, including **investments** in emerging and strategic technologies, research spinouts and startups and the **role of private foundations** (philanthropy), together with promoting the ***science of the Anthropocene***, towards a new equilibrium between economic activity, inclusive society and environmental ecosystems, integrating green advanced computing, IT processing methods and AI;
3. Breaking through **new frontiers for European science through open collaborative research, innovation and brain circulation.**

Preparing a resilient recovery through a renewed, cohesive and inclusive *European Research Area (ERA)*:

1. **Promoting Researchers for Europe in the public and private systems:** promoting attractive research careers across Europe, gender equality, joint institutional recruitment and better working conditions by promoting synergies between higher education, research and innovation (Knowledge Triangle).
2. Fostering **research careers in business, together with an increased level and scope of business R&D** through the application of the recently established ***taxonomy*** for sustainable financing, as developed in close articulation with the EU New Green Deal, in a way to promote innovative, sustainable and regenerative businesses and entrepreneurial activities.
3. Strengthening **science-society linkages**, through a renewed approach to ***scientific culture in Europe***, including enhancing societal relevance through citizen engagement and gender mainstreaming in science.

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(Online Event, CET time)

PROGRAM

11h30-12h00 Session – 1: Opening remarks

Manuel Heitor, Minister for Science and Technology and Higher Education, Portugal

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

Cristian-Silviu Buşoi, Chair of the ITRE Committee, European Parliament

12h00-13h30 Session – 2 (Round Table): ***Mobilizing Horizon Europe and ‘Next Generation EU’ together with national public and private investments for promoting green and digital transitions across all EU regions in the context of a renewed European Research Area (ERA)***

Key question: How Horizon Europe, national public and private investments can mobilise synergies to accelerate green and digital transitions in the context of a renewed ERA? How these synergies can be fostered in the frame of the Recovery and Resilience Plans?

Moderator: **Jean-Eric Paquet**, Director General, DG RTD

Invited speakers (up to 5 min each):

Emmanuelle Charpentier, Max Planck Institute, Berlin, 2020 Nobel laureate in Chemistry (tbc)

Richard Roberts, 1993 Nobel Laureate in Physiology or Medicine

Chief Scientific Officer, New England Biolabs

Christian Ehler, MEP, rapporteur for Horizon Europe Specific Programme

Mark Ferguson, Director General, Science Foundation Ireland and chair, European Innovation

Council Advisory Board Chair

Teresa Czerwińska, EIB Vice-President

Miguel Bello, CEO, Atlantic International Research Centre - AIR centre

Maria Teresa Fabregas Fernandez, Director, EC Recovery and Resilience Task Force

Pascal Lamy, Chair of the Mission Board “Healthy oceans, seas, coastal and inland waters”

Peter Carlsson, CEO, Northvolt

Debate with Ministers (by preliminary registration, about 7 ministers, up to 3 min each)

13h30-14h00 Break

14h00- 15h30 Session – 3 (Round Table): ***Mobilizing Horizon Europe and 'Next Generation EU' together with national public and private investments for a healthy and resilient future***

Key question: How Horizon Europe, national public and private investments can be mobilised in full synergies for a *healthy and resilient future*, either in terms of **eradicating Covid-19 and preventing future pandemics**, or in addressing the issue of **advanced materials and biomedical systems**? How can these synergies be fostered in the frame of the Recovery and Resilience Plans?

Moderator: **Jean-Pierre Bourguignon**, President ad interim, European Research Council

Brief interventions (up to 5 min each):

Dan Nica, MEP, rapporteur for Horizon Europe Framework Programme

Ugur Sahin, President, BioNTech

Elvira Fortunato, ERC Grantee, NOVA University Lisbon, Former Chief Scientific Advisor of the EC

Lars Montellius, Director, International Iberian Nanotechnology Laboratory – INL

Peter Visser, SALD - Spatial Atom Layer Deposition

Kristina Edström, Uppsala University, Chairman of Battery 2030+ initiative

Jan-Eric Sundgren, Chairman of the Board of SwedeNanotech, former Senior Vice President at Volvo Group

Debate with Ministers (by preliminary registration, about 10 ministers, up to 3 min each)

15h30- 15h45 Break

15h45- 17h00 Session 4 (Round Table): ***Mobilizing Horizon Europe and 'Next Generation EU' together with national public and private investments for an inclusive and democratic digital society***

Key question: How **artificial intelligence, quantum science and modern IT solutions** will support the twin digital and green transitions and help promoting sustainable industrial and socio-economic systems in Europe?

Moderator: **Daniela Braga**, DefinedCrowd

Brief interventions (up to 5 min each):

Graça Carvalho, MEP, rapporteur for partnerships Horizon Europe

Cédric Viallni, Chair of the 'Office Parlementaire pour l'Évaluation des Choix Scientifiques et Technologiques', France, 2010 Fields Medal, Former Chief Scientific Advisor of the EC

Célia Reis, ALTRAN (South Europe)

Martin Vechev, ERC Grantee, ETH Zurich

João Barros, CEO, Venian

Gioia Ghezzi, Chair Governing Board European Innovation Institute (tbc)

Stoyan Markov, National Centre for Supercomputing Applications, Bulgaria (tbc)

Connie Hedegaard, Chair of the Mission Board "Adaptation to climate change including societal transformation" (tbc)

Debate with Ministers (by preliminary registration, about 10 ministers, up to 3 min each)

17h00-17h15 Session 5: Closing session

Closing remarks:

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

Anja Karliczek, Federal Minister for Education and Research, Germany

Simona Kustec, Minister of Education, Science and Sport, Slovenia

Manuel Heitor, Minister for Science, Technology and Higher Education, Portugal

17.30 Press Conference

- **Manuel Heitor**, Minister for Science, Technology and Higher Education, Portugal
- **Mariya Gabriel**, *European* Commissioner for Innovation, Research, Culture, Education and Youth

