



OVERVIEW OF HORIZON EUROPE

Nishant Shandilya Regional Coordinator – Australia & New Zealand **EURAXESS Worldwide**







The Vision

The EU's key funding programme for research and innovation:

- Tackles climate change
- Helps to achieve the UN's Sustainable Development Goals
- Boosts the EU's competitiveness and growth
- Facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges
- Supports the creation and better diffusion of excellent knowledge and technologies
- Creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.







Credits: https://www.un.org/sustainabledevelopment/sustainable-developme



EU Framework Programme for R&I

While benefiting from world-class research and strong industries... Our knowledge and skills are our main resources



6% of the world's population

17% of global R&D

25% of all highquality scientific publications ...Europe can do better at transforming this into leadership in innovation and entrepreneurship







EU Framework Programme for R&I



Approximately €95.5 billion of funding available over 7 years (2021 - 2027)







Horizon Europe Structure



- European Research Council
- Marie Skłodowska-Curie
- Research Infrastructures



Clusters

Pillar II

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources,
 Agriculture & Environment
- Joint Research Centre



- European Innovation Council
- European Innovation Ecosystems
- European Institute of Innovation& Technology

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence
 Reforming & Enhancing the European R&I system







Implementing Horizon Europe











KEY ELEMENTS

- three key strategic orientations for Horizon Europe R&I activities in 2025-2027;
- 32 expected impacts distributed across clusters;
- 9 new co-programmed and co-funded European Partnerships;
- EU Missions; and gives an overview on the achievements of the first years;
- New European Bauhaus Facility













- The key strategic orientations mirror the political priorities of the European Union and outline the way research and innovation can address them through Horizon Europe.
- Open strategic autonomy and securing Europe's leading role in developing and deploying critical technologies are overarching principles that apply across all three key strategic orientations.









- Horizon Europe R&I activities must support Europe to become the world's first climate-neutral continent by 2050 and to tackle biodiversity loss and pollution.
- At least 35% of Horizon Europe's resources are committed









- Research to support the digital transition is key to Europe's competitiveness and open strategic autonomy, and to setting human-centred standards. It is also key to achieving the green transition.
- In 2021-2027, it is agreed to invest at least EUR 13 billion from Horizon Europe in core digital technologies.









- Europe's social rights and democratic values and principles need a strong foundation so they can be promoted globally. Horizon Europe research activities will help provide this foundation.
- This includes research on civil security, on a fair and environmentally friendly economic model, on health and wellbeing and on democratic participation.







INTERNATIONAL COOPERATION

The EU is committed to preserve openness in international cooperation, while safeguarding the Union's strategic interests based on reciprocity and respect of fundamental values and principles. International cooperation takes various approaches, including further association agreements with eligible third countries, international mobility and cooperation in frontier research and EU participation and leadership in multilateral alliances.

















NTERNATIONAL COOPERATION

- 1. Further association agreements with eligible third (i.e. non-EU) countries to provide entities of these countries, as far as possible, full access to the calls and actions (within the scope of association)
- 2. Collaborative research and innovation initiatives, including targeted initiatives and projects with partners from key non-EU countries and regions in strategic areas of mutual benefit and strategic interest under all clusters, as well as the EU Missions and the European Partnerships.
- 3. International mobility and cooperation in frontier research and support to brain circulation and the internationalisation of EU innovative companies, through activities in Pillars I and III.
- 4. EU participation and leadership in multilateral alliances, to gain access to and share research and observation data on global challenges such as cybersecurity, climate change, sustainable food and nutrition security, biodiversity loss, environmental degradation, transition to a circular global economy, global health issues as well as ocean governance and polar research.









- 5. Policy dialogues with non-EU countries and regions to reinforce and facilitate international cooperation at a strategic level, by agreeing on fundamental values and principles for international cooperation in R&I including issues such as academic freedom, research ethics and integrity, gender equality and diversity, open science and research excellence.
- 6. Policy dialogues with Associated Countries in the EU's neighbourhood will help these countries to align with European Research Area objectives and actions, which, for accession countries is an important step towards their alignment with the EU acquis on science, research and innovation.
- 7. Using science diplomacy action to tackle geopolitical challenges in a fragmented multipolar world, making European diplomacy more strategic, effective and resilient, and extending the EU's global outreach and impact.





Nishant Shandilya
Regional Coordinator
EURAXESS Australia and New Zealand
nishant.shandilya@euraxess.net

Thank you!





Additional Slides





Green Transition

Digital Transition

A more Resilient, Competitive, Inclusive, & Democratic Europe

Health Health Culture, Creativity & Inclusive Society 7. Reinvigorating overance and demands of the Environment Resources, Agriculture & Environment 1. Staying healthy in a rapidly changing society 2. Living and working in a health-promoting environment 3. Tackling diseases and reducing diseases burden 4. Ensuring equal access to importance and high-quality healthcare alts healthcare and sustainability 10. Boosting inclusive growth and reducing wolf incovering sand digital solutions for a healthy society 6. Maintaining an innovative, sustainable, and competitive EU health industry 1. Staying healthy in a rapidly changing society 2. Strengthening social and economic resilience and sustainability 3. Tackling of the energy and transition of infrastructures and sustainability 3. Tackling orime and effectively in raw malerials, and competitive EU health industry 1. Staying healthy in a rapidly changing society 2. Strengthening social and economic resilience and sustainability 3. Tackling orime and economic resilience and sustainability and making the online environment more secure 1. Staying healthy in a rapidly changing society 2. Strengthening social and environment and content in climate energy and digital solutions for a fair transition to a client entire and digital clean and sustainabile transition of a fair transition of a fair transition to a client entire and digital value chains in climate energy and resilient society and resilient s	, vi	D. C.			
8. Inclusive Society 8. Inclusive Society 9. Inclusive Society 1. Staying healthy in a rapidly changing society 2. Living and working in a health-promoting environment as a health-promoting environment in a hea	CLUSTER 1 CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5	CLUSTER 6
rapidly changing society 2. Living and working in a health-promoting a recitive sectors and reducing value chains a fair transition to a climate neutral and digitised industrial and more retrieval and resilients coicety. 22. Facilitating the clean and assistanishle transition of the energy and transport semicals and energy supplied promoting and energy supplied promoting and digitised industrial and digitise dimustrial and digitise industrial and material promoting and inclustry and promoting and energy and transport and transport semicals and energy supplied and energy supplied			- · · · · · · · · · · · · · · · · · · ·	, 3,	Resources, Agriculture
and reciliance	rapidly changing society Living and working in a health-promoting environment Tackling diseases and reducing disease burden Ensuring equal access to innovative, sustainable, and high-quality healthcare Developing and using new tools, technologies and digital solutions for a healthy society Maintaining an innovative, sustainable, and competitive EU democratic governance Realising the full potential of cultural heritage, arts, and cultural and creative sectors 9. Strengthening social and economic resilience and sustainability 10. Boosting inclusive growth and reducing vulnerabilities effectively	natural, accidental and human-made disasters 12. Facilitating legitimate movement of passengers and goods into the EU, while preventing illicit acts 13. Tackling crime and terrorism more effectively and increasing the resilience of infrastructures 14. Increasing cybersecurity and making the online environment	leadership in climate- neutral, circular and digitised industrial and digital value chains 16. Achieving technological leadership for Europe's open strategic autonomy in raw materials, chemicals and innovative materials 17. Developing an agile and secure single market and infrastructure for data- services and trustworthy artificial intelligence services 18. Achieving open strategic autonomy in digital and emerging enabling technologies 19. Achieving open strategic autonomy in global space-based infrastructures, services, applications, and data 20. Digital and industrial technologies driving	a fair transition to a climate-neutral and resilient society 22. Facilitating the clean and sustainable transition of the energy and transport sectors towards climate neutrality through crosscutting solutions 23. Ensuring more efficient, sustainable, secure, and competitive renewable and decarbonised energy supply 24. Using energy in buildings and industry in an efficient, affordable and sustainable way 25. Achieving sustainable, inclusive, and competitive transport modes 26. Developing multimodal systems and services for climate-neutral, smart, inclusive, and safe	of and adaptation to climate change in areas and sectors covered by Cluster 6 28. Putting biodiversity on a path to recovery, and protecting and restoring ecosystems and their services 29. Achieving healthy soils and forests, as well as clean air, fresh and marine water, whilst ensuring water resilience and the transition to a clean, competitive and circular economy and sustainable bioeconomy 30. Ensuring healthy food and nutrition security by making agriculture, fisheries, aquaculture and food systems sustainable, resilient, inclusive and within planetary boundaries 31. Sustainably developing rural, urban and coastal areas 32. Developing innovative governance models and tools enabling sustainable security of the securi

32 Expected Impacts Distributed across Clusters





LIST OF NEW PARTNERSHIPS

With the second strategic plan, the following partnerships are launched:

- Brain Health (co-funded)
- Forests and Forestry for a Sustainable Future (co-funded)
- Innovative Materials for EU (co-programmed)
- Raw Materials for the Green and Digital Transition (co-funded)
- Resilient Cultural Heritage (co-funded)

- Social Transformations and Resilience (co-funded)
- Solar Photovoltaics (co-programmed)
- Textiles of the Future (co-programmed)
- Virtual Worlds (co-programmed)









MISSIONS

- EU Missions are flagships of Horizon Europe. Their aim is to channel efforts across programmes to support well-defined, urgent and bold global challenges with engagement and support of policymakers, stakeholders and the wider public.
- In 2021, five EU Missions were launched: Adaptation to Climate Change; Cancer; Restore our Ocean and Waters; Climate-Neutral and Smart Cities; and a Soil Deal for Europe. In 2025-2027, more work will be done to ensure that missions successfully shift from their initial phase to deployment and impact.











