

EU Research policy

Horizon Europe

- MENDELU
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- and Wood
- Technology

Outline

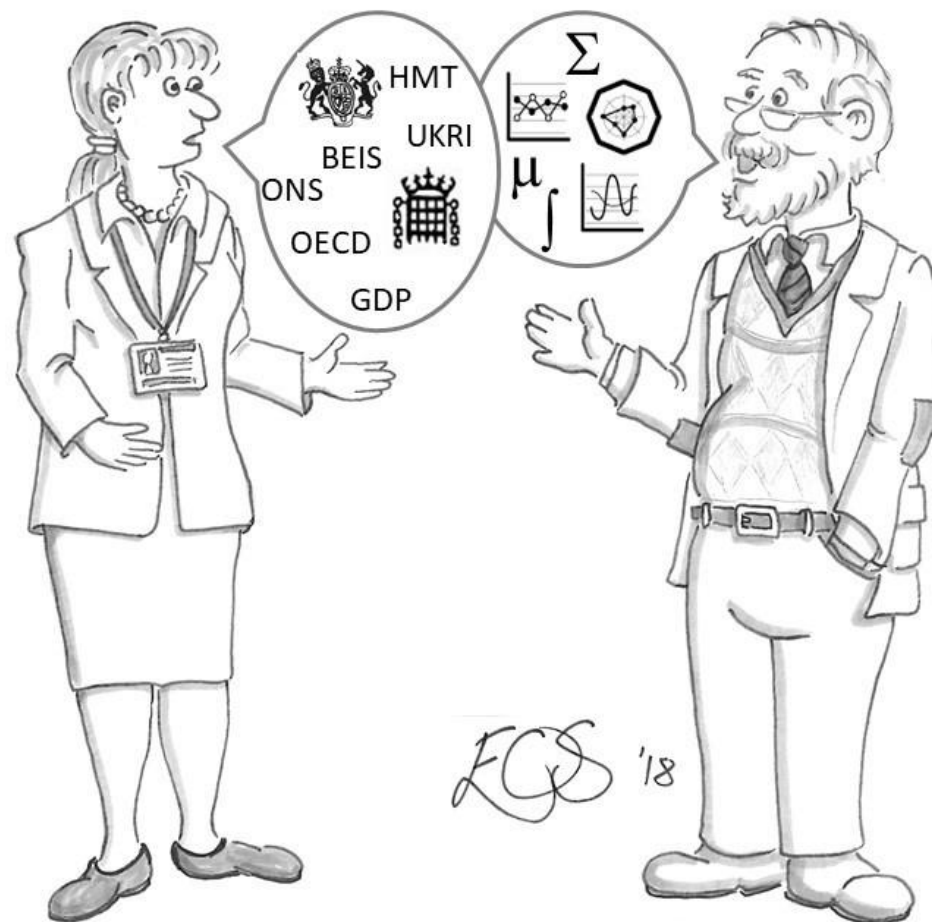
- Policy context
- Horizon Europe
 - Pillar 1 Excellent Science
 - Pillar 2 Global Challenges & European Industrial Competitiveness
 - R&I Missions
 - European Partnerships
 - Pillar 3 Innovative Europe
 - Widening Participation & Strengthening the ERA
- Additional Information
 - Funding & Tenders Portal
 - Impact
 - Horizontal topics

Horizon Europe

- Tackle climate change
- Help to achieve the UN's Sustainable Development Goals
- Boost the EU's competitiveness and growth
- Facilitate collaboration
- Strengthen the impact of research and innovation in developing, supporting and implementing EU policies
- Support creating and better dispersing of excellent knowledge and technologies
- Create jobs, engages the EU's talent pool
- Boost economic growth, promotes industrial competitiveness and optimises investment impact
- Strengthen European Research Area

Policy context

Understand the context



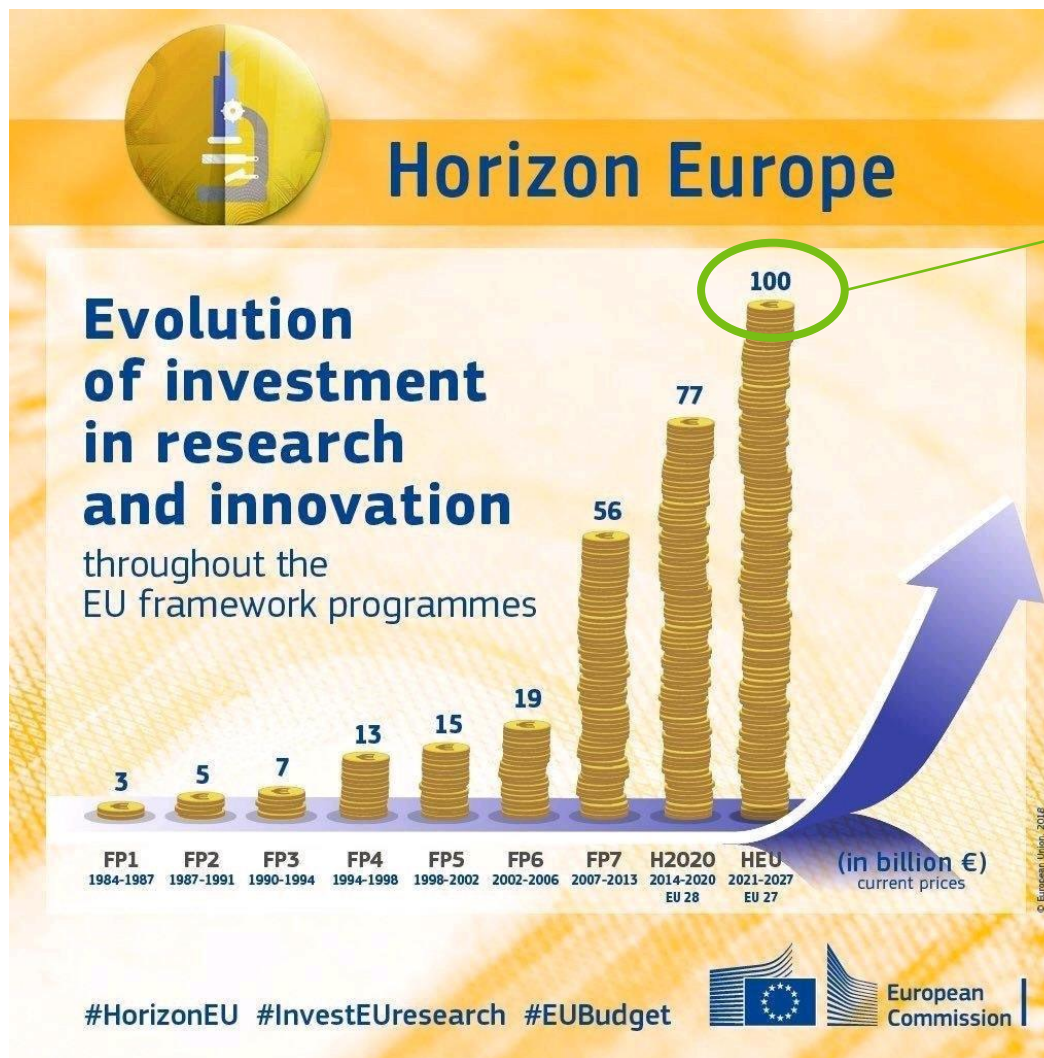
FGS '18

When policy officials meet academics.

Grant Writer's handbook. (n.d.). Retrieved March 29, 2022, from <https://www.ifm.eng.cam.ac.uk/research/grant-writers-handbook/>

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From FP1 to Horizon Europe



95.1 billion EUR
Horizon Europe
1.38 billion EUR
Euratom

Future of Europe (Sibiu priorities) 2019	Main cluster in Horizon Europe		Von der Leyen political guidelines valid for 2019-2024
Protective Europe	3 Civil Security for Society	Feeds into	Protecting our way of life
Competitive Europe	4 Digital, Industry and Space	Is split among	Europe fit for the Digital Age European Green Deal Economy that works for people
Fair Europe	1 Health 2 Culture, creativity and inclusive society	Feeds largely into	Economy that works for people New push for European Democracy
Sustainable Europe	5 Climate, Energy and Mobility 6 Food, Bioeconomy Natural Resources, Agriculture and Environment	Feeds into	European Green Deal
Influential Europe	International	Corresponds to	Stronger Europe in the world

Political / Broader context (EU & other)

- Global Policies
 - Sustainable Development Goals United Nations
- EU Policies
 - 6 EC priorities for 2019-24
 - European Green Deal
 - Circular Economy Action Plan
 - EU Biodiversity Strategy for 2030
 - EU Water Framework Directive
 - EU Forest Strategy for 2030
 - EU Bioeconomy Strategy
 - Farm to Fork strategy
 - ...
- Regional / National Strategies and Road Maps
- Research and Innovation Strategies (RIS)
- Political guidelines

A new ERA for Research and Innovation

- System integrating scientific resources
- Accelerate transition towards climate neutrality and digital leadership
- Support recovery from the societal and economic impact of the coronavirus crisis
- Strengthen resilience against future crises
- Adopted in 2020 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:628:FIN>

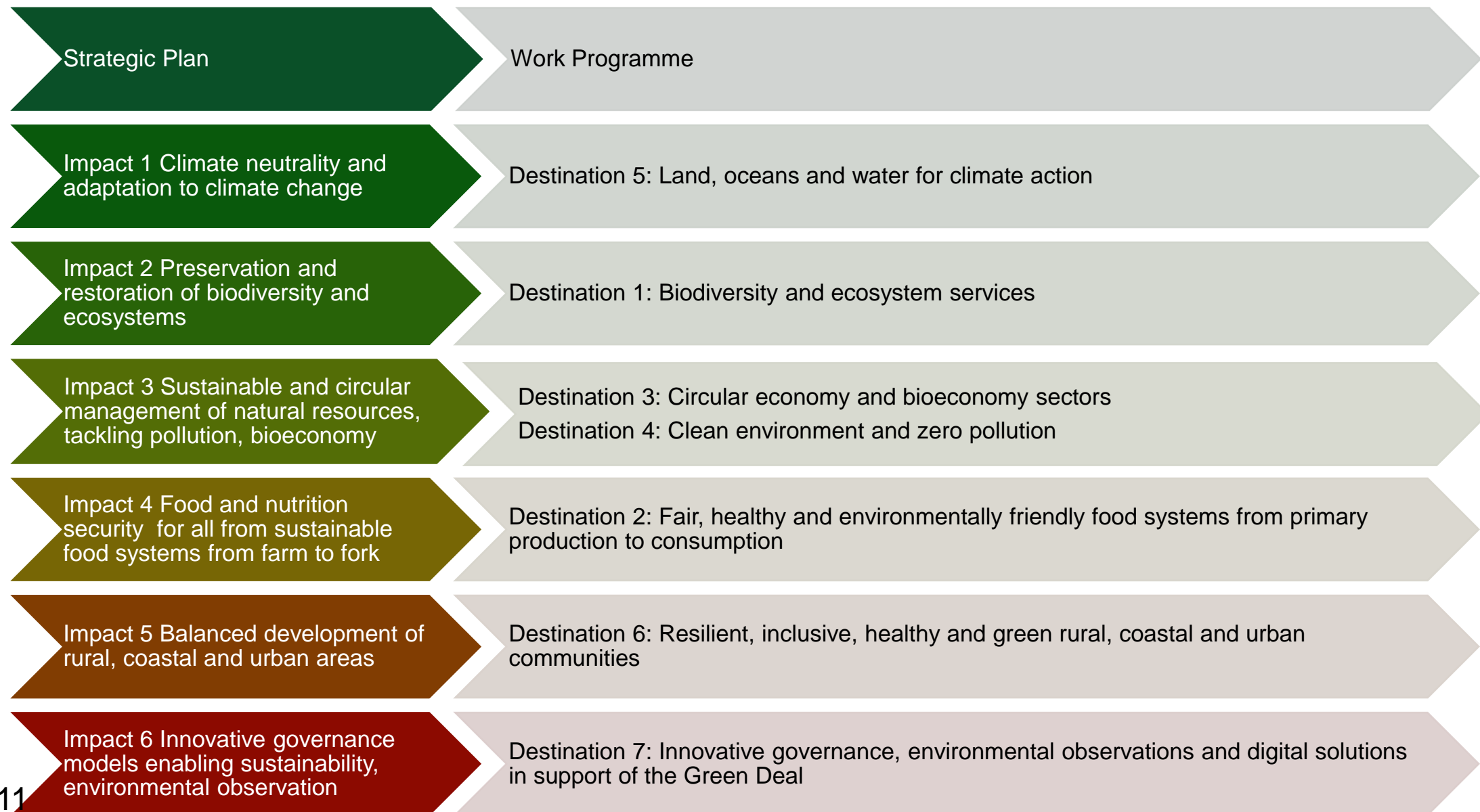


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HEU Strategic plan 2021 - 2024

- 4 strategic orientations
 - Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains;
 - Restoring Europe's ecosystems and biodiversity, and managing sustainably natural resources;
 - Making Europe the first digitally enabled circular, climate-neutral and sustainable economy;
 - Creating a more resilient, inclusive and democratic European society.
- 15 impact areas
- 8 horizontal topics
 - gender, ethics, dissemination and exploitation, social sciences and humanities integration, open science practices, key enabling technologies, social innovation, EU taxonomy

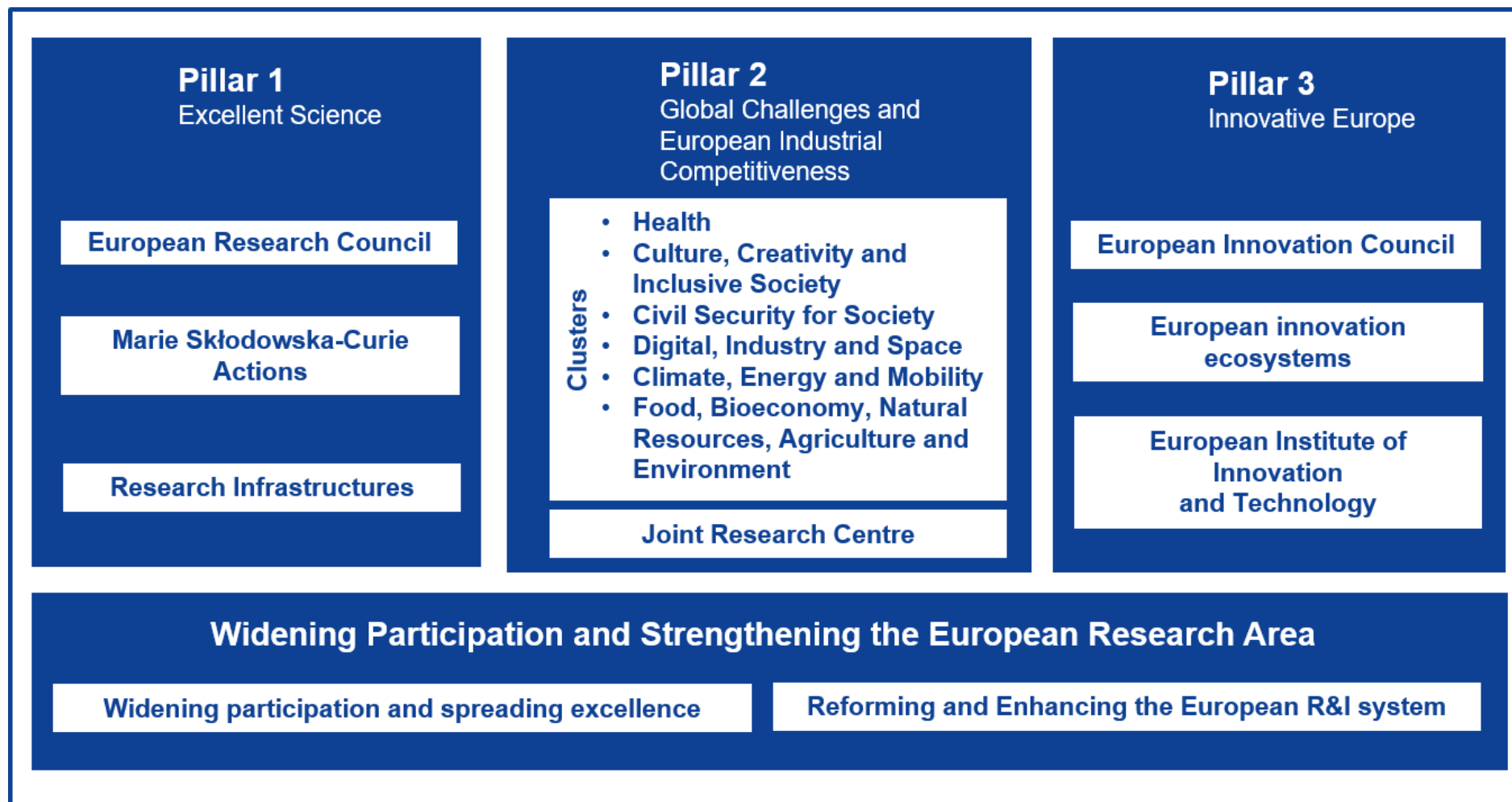
Cluster 6 (Food, Bioeconomy, Natural Resources, Agriculture and Environment)



Horizon Europe Structure & Calls

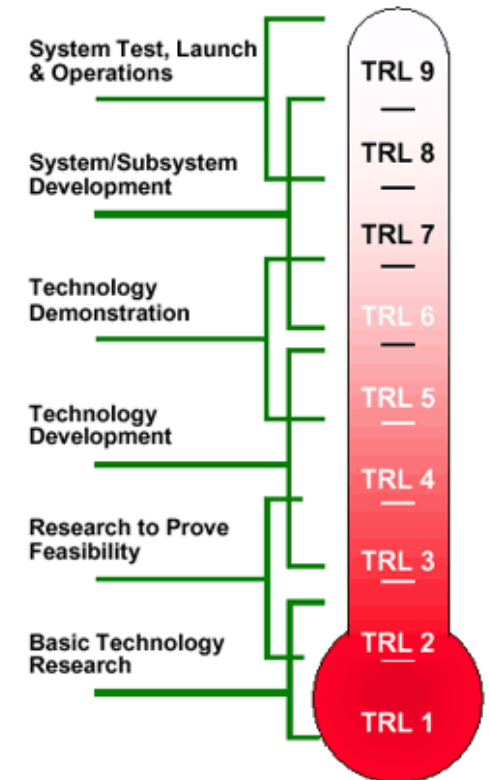


Horizon Europe structure



Technology Readiness Level (TRL)

- Method for estimating the maturity of technologies, developed at NASA
- TRL Calculators
 - <https://www.dau.edu/cop/stm/lists/tools/allitems.aspx>
- TRL 1 — basic principles observed
- TRL 2 — technology concept formulated
- TRL 3 — experimental proof of concept
- TRL 4 — technology validated in lab
- TRL 5 — technology validated in relevant environment
- TRL 6 — technology demonstrated in relevant environment
- TRL 7 — system prototype demonstration in operational environment
- TRL 8 — system complete and qualified
- TRL 9 — actual system proven in operational environment.



Pillar 1 Excellent Science

- reinforcing and extending the excellence of the EU science base

European Research Council (ERC)	Marie Skłodowska- Curie Actions (MSCA)	Research Infrastructures
Frontier research by the best researchers and their teams	Equipping researches with new knowledge and skills through mobility and training	Integrated and inter-connected world-class research infrastructures



European Research Council

Established by the European Commission



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European Research Council - ERC

- Starting Grant (StG)
 - 2-7 years of experience since completion of PhD
 - Talented early-career scientist
 - Potential to be a research leader
 - 1.5 mil. EUR / 5 years
- Consolidator Grant (CoG)
 - 7-12 years of experience since completion of PhD
 - Consolidate research independence by establishing excellent research team
 - 2 mil. EUR / 5 years
- Advance Grant (AdG)
 - Significant research achievements in the last 10 years
 - Leading principal investigator
 - Ground-breaking, high-risk project
 - 2.5 mil. EUR / 5 years
- Synergy Grant (SyG)
 - Research problem so ambitious that can not be dealt with by one PIs alone
 - 10 mil. EUR / 6 years
- Proof of Concept (PoC)
 - Commercial or societal potential of ERC funded research

Upcoming ERC indicative deadlines

- <https://erc.europa.eu/homepage>
- Calls are usually open for about 3 months

	Indicative deadlines
Starting Grant (StG)	October 2023
Consolidator Grant (CoG)	February 2024
Advance Grant (AdG)	May 2024
Synergy Grant (SyG)	November 2023
Proof of Concept (PoC)	January 2023 April 2023 September 2023

Marie Skłodowska- Curie Actions (MSCA)

- **5 broad lines of activity:**
 - Mobility of researchers
 - Training of researchers
 - Strengthening human capital across the ERA
 - Facilitating synergies
 - Promoting public outreach
- **Synergies**
 - Other parts of Horizon Europe, Structural Funds, Education policies
- **Science Festivals**
 - Outreach events with EU-added value
- **Doctoral Training Networks**
 - To train creative, entrepreneurial, innovative & resilient doctoral candidates
- **Postdoctoral Fellowships**
 - To enhance the creative & innovative potential of researchers holding a PhD
- **Staff Exchanges**
 - To promote innovative international, inter-sectoral and interdisciplinary collaboration in research and innovation

MSCA call dates in 2023 & 2024

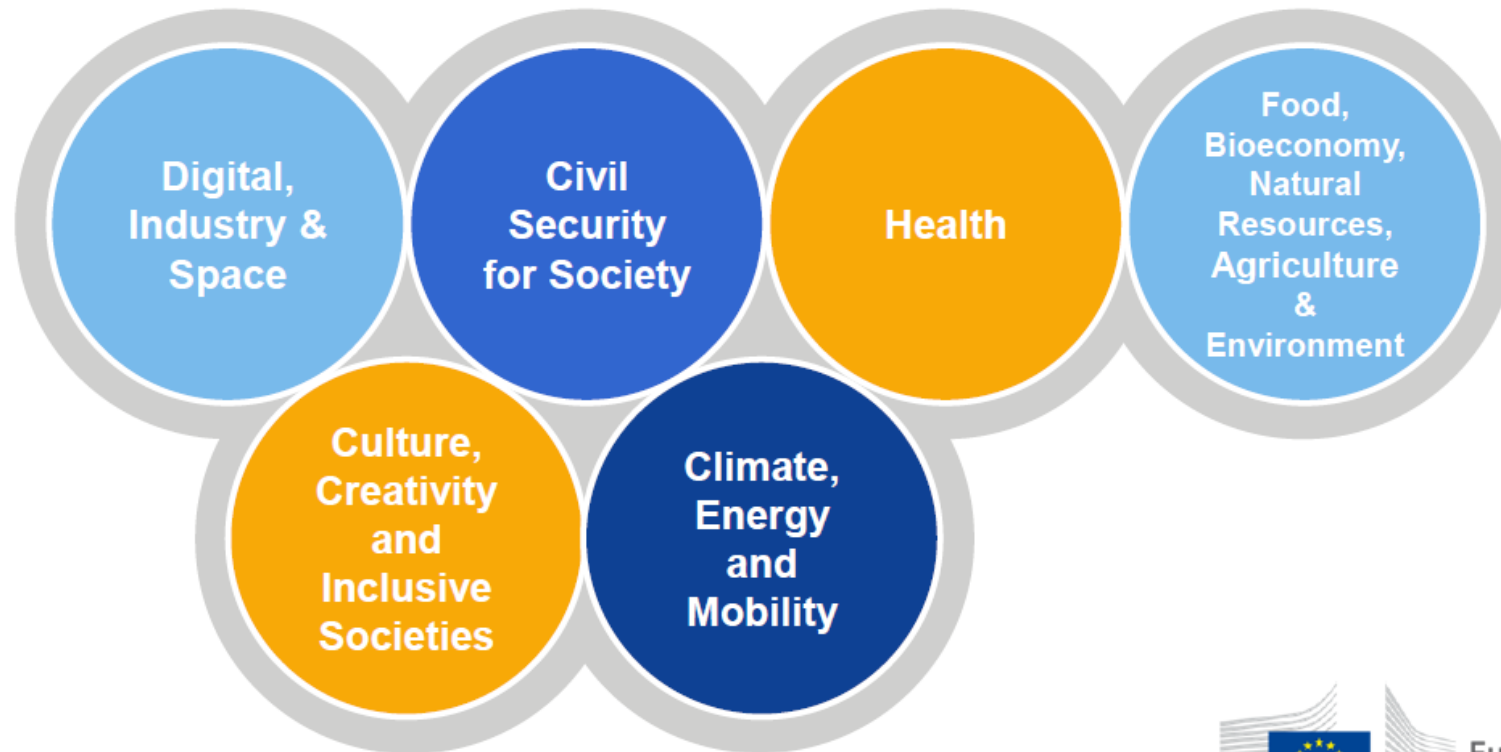
Call	Type of Action	Budget (EUR mil.)	Opening	Deadline
HORIZON-MSCA-2023-DN-01	Doctoral Networks Doctoral Networks - Industrial Doctorates Doctoral Networks - Joint Doctorates	434.80	30/05/2023	28/11/2023
HORIZON-MSCA-2024-DN-01	Doctoral Networks Doctoral Networks - Industrial Doctorates Doctoral Networks - Joint Doctorates	451.15	29/05/2024	27/11/2024
HORIZON-MSCA-2023-PF-01	Postdoctoral Fellowships - European Fellowships Postdoctoral Fellowships - Global Fellowships	221.40 39.07	12/04/2023	13/09/2023
HORIZON-MSCA-2024-PF-01	Postdoctoral Fellowships - European Fellowships Postdoctoral Fellowships - Global Fellowships	230.14 40.61	10/04/2024	11/09/2024
HORIZON-MSCA-2023-SE-01	Staff Exchange	78.50	05/10/2023	28/02/2024
HORIZON-MSCA-2024-SE-01	Staff Exchange	81.23	10/10/2024	05/03/2025

Research Infrastructures

- Developing, consolidating and optimising European Research Infrastructures landscape, maintaining global leadership
- Enabling an operational, open and FAIR EOSC ecosystem
- Research Infrastructure services to support health research, accelerate the green and digital transformation, and advance frontier knowledge
- Next generation of scientific instrumentation, tools and methods and advanced digital solutions Network connectivity in Research and Education - Enabling collaboration without boundaries

Pillar 2 - Global Challenges & European Industrial Competitiveness

- Boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals



May 2019 | Version 25



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Type of the Action / Type of the Project

- RIA - Research and Innovation Actions
 - New knowledge, technology, product or service, basic & applied research, technology development, testing & validation on a small-scale prototype in a laboratory.
- IA – Innovation Action
 - New, altered or improved products, processes or services, prototyping, demonstrating, piloting, large-scale product validation & market replication.
- CSA – Coordination & Support Actions
 - Standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises

Cluster	Areas of Intervention	
Health	<ul style="list-style-type: none"> • Health throughout the life course; • Environmental and social health determinants; • Non-communicable and rare diseases; 	<ul style="list-style-type: none"> • Infectious diseases, including poverty-related and neglected diseases; • Tools, technologies and digital solutions for health and care, including personalized medicine; • Health care systems
Culture, creativity and inclusive society	<ul style="list-style-type: none"> • Democracy and governance; • Culture, cultural heritage and creativity 	<ul style="list-style-type: none"> • Social and economic transformation
Civil Security for Society	<ul style="list-style-type: none"> • Disaster-resilient societies; • Protection and security; 	<ul style="list-style-type: none"> • Cybersecurity
Digital, Industry, Space	<ul style="list-style-type: none"> • Manufacturing technologies; • Key digital technologies, including quantum technologies; • Emerging enabling technologies; • Advanced materials; 	<ul style="list-style-type: none"> • Artificial intelligence and robotics; • Next generation internet; • Advanced computing and Big Data; • Circular industries; • Low carbon and clean industries; • Space, including earth observation.
Climate, Energy and Mobility	<ul style="list-style-type: none"> • Climate science and solutions; • Energy supply; Energy systems and grids; • Buildings and industrial facilities in energy transition; • Communities and cities; 	<ul style="list-style-type: none"> • Industrial competitiveness in transport; • Clean, safe and accessible transport and mobility; • Smart mobility; • Energy storage.
Food, Bioeconomy, Natural Resources, Agriculture and Environment	<ul style="list-style-type: none"> • Environmental observation; • Biodiversity and natural resources; • Agriculture, forestry and rural areas; • Seas, oceans and inland waters; 	<ul style="list-style-type: none"> • Food systems • Bio-based innovations in the EU bioeconomy; • Circular systems.

Work Programme Cluster 6

- Separate calls for each destination
- Both one and two stage evaluation procedure
- 2023 - 2024
 - 82 out of 176 topics specific requirements for multi actor approach
 - 56, mainly CSAs, topics lump sum funding
 - 52 international cooperation encouraged
 - 25 topics blind evaluation pilot 1st stage of 2 stages calls
- <https://www.horizontevropa.cz/en/he-programme-structure/global-challenges-competitiveness/cluster-6-food-bioeconomics-natural-resources-agriculture-environment/documents>

Cluster 6

- **Destination 1: Biodiversity and ecosystem services**
 - impacts of chemical / light and noise pollution on biodiversity; assessment of changes affecting terrestrial and freshwater ecosystems; conservation status of EU protected species and habitats; reducing bycatch of protected species; biodiversity and nature based solutions in higher education; biodiversity, economics and finance; biodiversity in urban areas; reinforcing science policy support with IPBES and IPCC; crop wild relatives for sust. agriculture; integrative forest management; legume crops; zoonotic diseases
- **Destination 2: Fair, healthy and environmentally friendly food systems from primary production to consumption**
 - African swine fever vaccine; alternatives to reduce the use of pesticides; artificial intelligence to fight illegal fish discards; eradication of micronutrient deficiencies; new detection methods of GMOs; cultured meat and seafood; prevention and reduction of food waste; resilient European food systems; microbiomes in food processing, packaging and shelf life; EU African Union cooperation in food and agriculture

Cluster 6

- **Destination 3: Circular economy and bioeconomy sectors**
 - circular model households; market uptake of circular water related projects; land based bioprospecting and production of bioactive compounds and functional materials; bio based solutions in humanitarian aid; low toxicity/zero pollution construction bio based materials; business models in bioeconomy; aquatic organisms for blue biotechnology; small scale forest management for wood/non wood products; tailor made forest services; Circular Cities and Regions Initiative systemic solutions; bio based textiles; non plant biomass feedstock for industrial applications
- **Destination 4: Clean environment and zero pollution**
 - solutions in agriculture for water availability and quality; emerging pollutants; pollution in the Arctic; improved sustainability of industrial bio based processes; biosensors and diagnostic tools for environmental services; prevention/reduction of plastic packaging pollution from the food system; optimisation of manure use; bio based solutions as alternatives for chemicals, materials, products

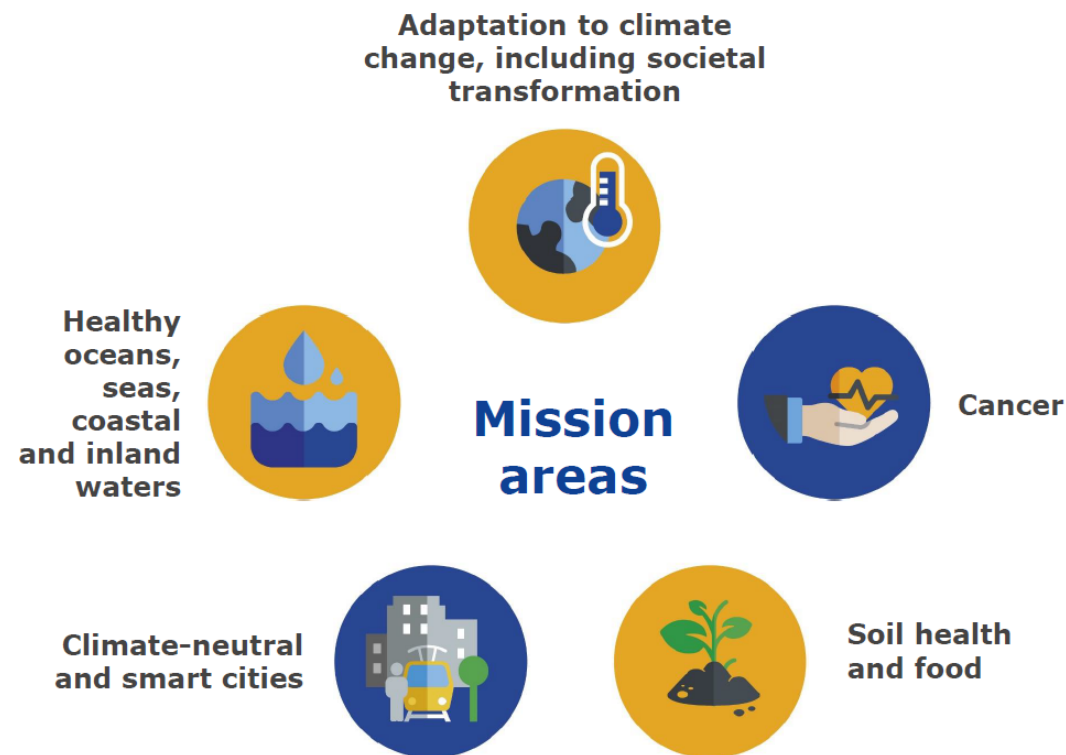
Cluster 6

- **Destination 5: Land, oceans and water for climate action**
 - alternative water resources supply systems and technologies; demonstration network on climate smart farming; pilot network of climate positive organic farms; analysing fossil energy dependence in agriculture; renewable energy at farm level; Essential Ocean Variables in support of global assessments
- **Destination 6: Resilient, inclusive, healthy and green rural, coastal and urban communities**
 - social inclusion in rural areas; integrated territorial development in rural areas; benchmarking of rural and territorial policies; system of geographical indications; assessing urban farming impacts; sustainability food labelling
- **Destination 7: Innovative governance, environmental observations and digital solutions in support of the Green Deal**
 - analytical capacity and tools to support EU agrifood policies; pan European academic network for food system science; bio based business models for local communities; assessment of land use and biomass demands; BIOEAST networks development of national bioeconomy action programmes; EuroGEO initiative coordination; observation gaps in the land sea interface; citizen engagement in envi protection

R&I Missions

R&I Missions

- A mission is a portfolio of actions across disciplines intended to achieve a bold and inspirational and measurable goal within a set timeframe, with impact for society and policy making as well as relevance for a significant part of the European population and wide range of European citizens.
- Horizon Europe defines mission characteristics and elements of governance, and 5 missions areas.



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Healthy Oceans, Seas, Coastal & Inland Waters

- **Mission: Mission Starfish 2030 : Restore our ocean and waters**
- Inspired by the shape of the starfish, the Mission has 5 overarching objectives for 2030:
 - Filling the knowledge and emotional gap,
 - Regenerating marine and freshwater ecosystems,
 - Zero pollution,
 - Decarbonising our ocean, and waters
 - Revamping governance.
- https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/restore-our-ocean-and-waters_en
- Call Open on 17 January 2023
- Call Deadline on 20 September 2023

Soil Health & Food

- **Mission: A Soil Deal for Europe**
- Specific objectives
 - Reduce land degradation
 - Conserve and increase soil organic carbon stocks
 - No net soil sealing and increased re-use of urban soils
 - Reduce soil pollution and enhance restoration
 - Prevent erosion
 - Improve soil structure
 - Reduce EU global footprint on soils
 - Increase soil literacy in European society
- https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/soil-health-and-food_en
- Call Open on 17 January 2023
- Call Deadline on 20 September 2023

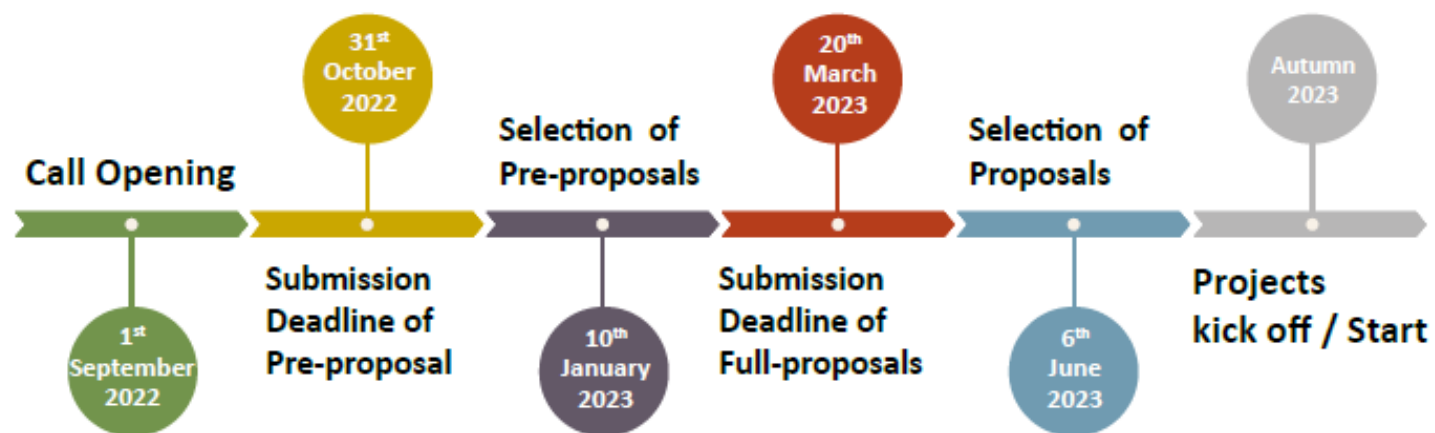
European Partnerships

European Partnerships

- The aim of European partnerships with EU and associated countries, the private sector, foundations and other stakeholders is to deliver on global challenges and modernise industry.
- **European Biodiversity Partnership (Biodiversa+)**
 - to promote and support transnational biodiversity monitoring, by building a transnational (pan-European) network of harmonised monitoring schemes on common priorities for Biodiversa+ members
 - one of the actions included in the EU Biodiversity Strategy for 2030 to 'make the bridge between science, policy and practice, and make nature-based solutions a reality on the ground'
 - <https://www.biodiversa.eu/>
 - Call expected in September 2023
 - Under programme: "Better knowledge to develop, deploy and assess nature-based solutions" (BiodivNBS)
 - 6 co-funded Calls for research projects during this programming period

European Partnerships

- **Water challenges for a changing world (Water4All)**
 - to safeguard sustainable access to water
 - ensuring protection against water-borne pollution
 - to deliver sound knowledge, tools and evidence basis on water for policy- & decision-making
 - increase citizens' awareness and engagement for an inclusive water governance
 - <http://www.waterjpi.eu/>
 - Next call expected in Autumn 2023



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Calls under the Partnerships - How does it work?

- Funding organisations/TA CR develop and launch a specific Call under the Partnership
- Applicants develop a research project, form a “project-consortium” and submit the project (“pre-proposal”) into the Call.
- Eligibility - compliance with the rules at 2 levels:
 - a) International-Call level sets prerequisites such as: composition of the project consortium (e.g. at least 3 project-partners from at least 3 countries); eligible topics...
 - b) National-Funding-Organisation level sets prerequisites such as: funding rate (e.g. 85 %); maximum amount of funding (e.g. 170 000 EUR per project); eligible applicants (e.g. Research organisations and enterprises), each funding organisation funds only its national applicants (within the international project consortium)
- Qualitative project-evaluation (conducted by international experts)
 - a) Fit to the scope of the call
 - b) Novelty of the research
 - c) Impact

European Partnerships

- **Circular Bio-based Europe Joint Undertaking (CBE JU)**
 - Strategic participation and integration of feedstock producers and suppliers towards large-scale valorisation of sustainable biomass
 - Unlock sustainable and circular bio-based feedstock for the industry
 - Ensure environmental sustainability of feedstock
 - Improve environ. sustainability of production processes and value chains
 - Expand circularity in bio-based value chains
 - Increase innovative bio-based outputs and products
 - Improve the market uptake of bio-based products
 - Attract investment on the bio-based sector
 - Increase resilience and capacity in the bio-based sector
 - Improve participation of regions and countries with high unexploited potential
- Funding priorities for 2023
- <https://www.cbe.europa.eu/news/cbe-ju-sets-funding-priorities-2023>
- Call Open April 2023

eic European
INNOVATION
Council

Pillar 3 Innovative Europe

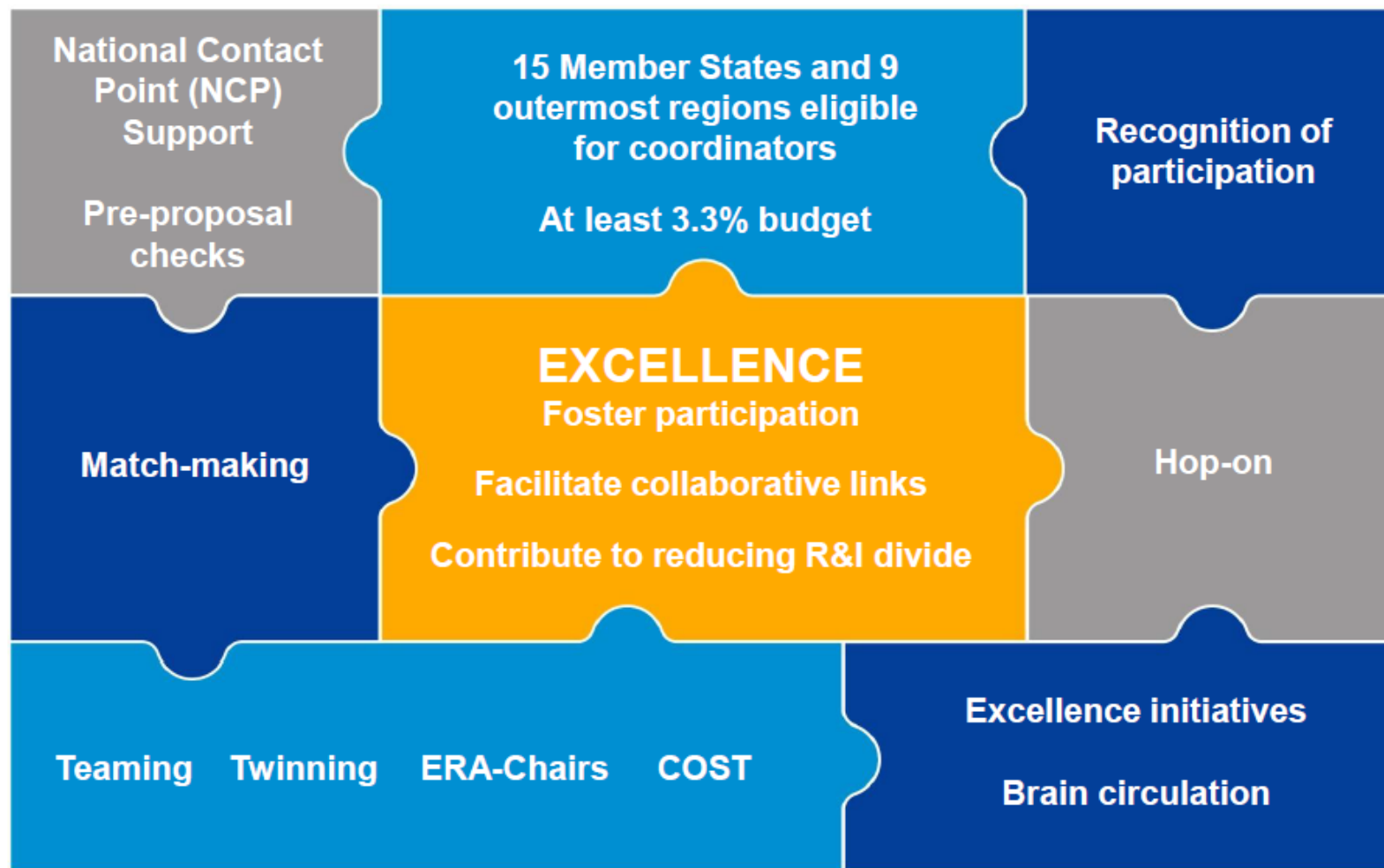
- stimulating market-creating breakthroughs and ecosystems conducive to innovation

European Innovation Council	European innovation ecosystems	European Institute of Innovation and Technology (EIT)
Support to innovations with breakthrough and market creating potential	Connecting with regional and national innovation actors	Bringing key actors (research, education and business) together around a common goal for nurturing innovation

- EIC
 - Pathfinder:** grants (from early technology to pre- commercial)
 - Accelerator:** grants only & blended finance (from pre-commercial to market & scale-up)

Widening Participation & Strengthening the ERA

Widening participation/spreading excellence



Widening

	Consortium structure	Target group and scale of operation	Policy objectives
Teaming	Main beneficiary + 1 or 2 strategic advanced partners	Single centre of excellence to be modernised or created, relevant at national scale	Develop light houses and role models to stimulate reforms of national R&I system, increase level of excellence of national R&I system, mobilise new investments
Twinning	Main beneficiary and focused network of partnering organisations	Individual institutions and small network of advanced partnering institutions	Develop excellence in a chosen R&I domain for the main beneficiary with the help of twinning partners, increase visibility of main beneficiary and upskill its staff - Topic 02-01: TWINNING Bottom-Up - Topic 02-02: TWINNING Green Deal
European Excellence Initiative (EEI)	Main beneficiary and focused network of partnering organisations	Individual institutions and small network of advanced partnering institutions	Raise excellence in science and in value creation through deeper and geographically inclusive cooperation in alliances of HEIs

Widening

	Consortium structure	Target group and scale of operation	Policy objectives
ERA Chairs	Mono-beneficiary host organisation with optional single partner organisation	Excellent individuals and their teams, institutional scale	Excellent scientists and their teams to become game changers at institutional level, develop new research strands and raise level of excellence

Widening calls deadlines 2023 - 2024

DESTINATION 1 (ACCESS)		DESTINATION 2 (TALENTS)	
HORIZON-WIDERA-2023-ACCESS-01 TEAMING FOR EXCELLENCE	12/04/2023 (1st stage) 07/03/2024 (2nd stage)	HORIZON-WIDERA-2023-TALENTS-01 ERA CHAIRS	07/03/2024
HORIZON-WIDERA-2023-ACCESS-02 TWINNING	28/09/2023	HORIZON-WIDERA-2023-TALENTS-02 ERA FELLOWSHIPS (MSCA)	13/09/2023
HORIZON-WIDERA-2023-ACCESS-03 EUROPEAN EXCELENCE INITIATIVE	12/04/2023	HORIZON-WIDERA-2024-TALENTS-03 ERA FELLOWSHIPS (MSCA)	11/09/2024
HORIZON-WIDERA-2023-ACCESS-04 PATHWAYS TO SYNERGIES	28/09/2023	HORIZON-WIDERA-2024-TALENTS-04 ERA TALENTS	26/09/2024
HORIZON-WIDERA-2023-ACCESS-05 DISSEMINATION AND EXPLOITATION SUPPORT FACILITY	28/09/2023		
HORIZON-WIDERA-2023-ACCESS-06 HOP-ON FACILITY	28/09/2023 26/09/2024		
HORIZON-WIDERA-2023-ACCESS-07 EXCELLENCE HUB	07/03/2024		

Call are usually open for 4 to 5 months

Links

- https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme/european-partnerships-horizon-europe_en
- https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en#missions-in-horizon-europe
- https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en#proposal

Additional Information

Funding & Tenders Portal

EU Programmes					
Asylum, Migration and Integration Fund (AMIF)	Border Management and Visa Instrument (BMVI)	Citizens, Equality, Rights and Values Programme (CERV)	Creative Europe (CREA)	Digital Europe Programme (DIGITAL)	Europe Direct (ED)
European Solidarity Corps (ESC)	Erasmus+ Programme (EPLUS)	European Social Fund + (ESF)	Innovation Fund (INNOVFUND)	Internal Security Fund (ISF)	Horizon Europe (HORIZON)
Single Market Programme (SMP)	Social Prerogative and Specific Competencies Lines (SOCPL)	EU External Action (RELEX)	Justice Programme (JUST)	Programme for the Environment and Climate Action (LIFE)	Promotion of Agricultural Products (AGRIP)
Union Civil Protection Mechanism (UCPM)					

- Entry point for participants and experts in funding programmes and tenders managed by the EC and other EU bodies
 - <https://ec.europa.eu/info/funding-tenders/opportunities/portals/screen/home>

Key Impact Pathways

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

**Scientific
Impact**



4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

**Societal
Impact**



7. Generating innovation-based growth
8. Creating more and better jobs
9. Leveraging investments in R&I

**Economic
Impact**



Key elements of the impact section (1/2)

SPECIFIC NEEDS

What are the specific needs that triggered this project?

Insert here text for your proposal

EXPECTED RESULTS

What do you expect to generate by the end of the project?

Insert here text for your proposal

D & E & C MEASURES

What dissemination, exploitation and communication measures will you apply to the results?

Insert here text for your proposal

Key elements of the impact section (2/2)

EU Grants: Application form (HE CSA): V1.2 – 25.05.2021

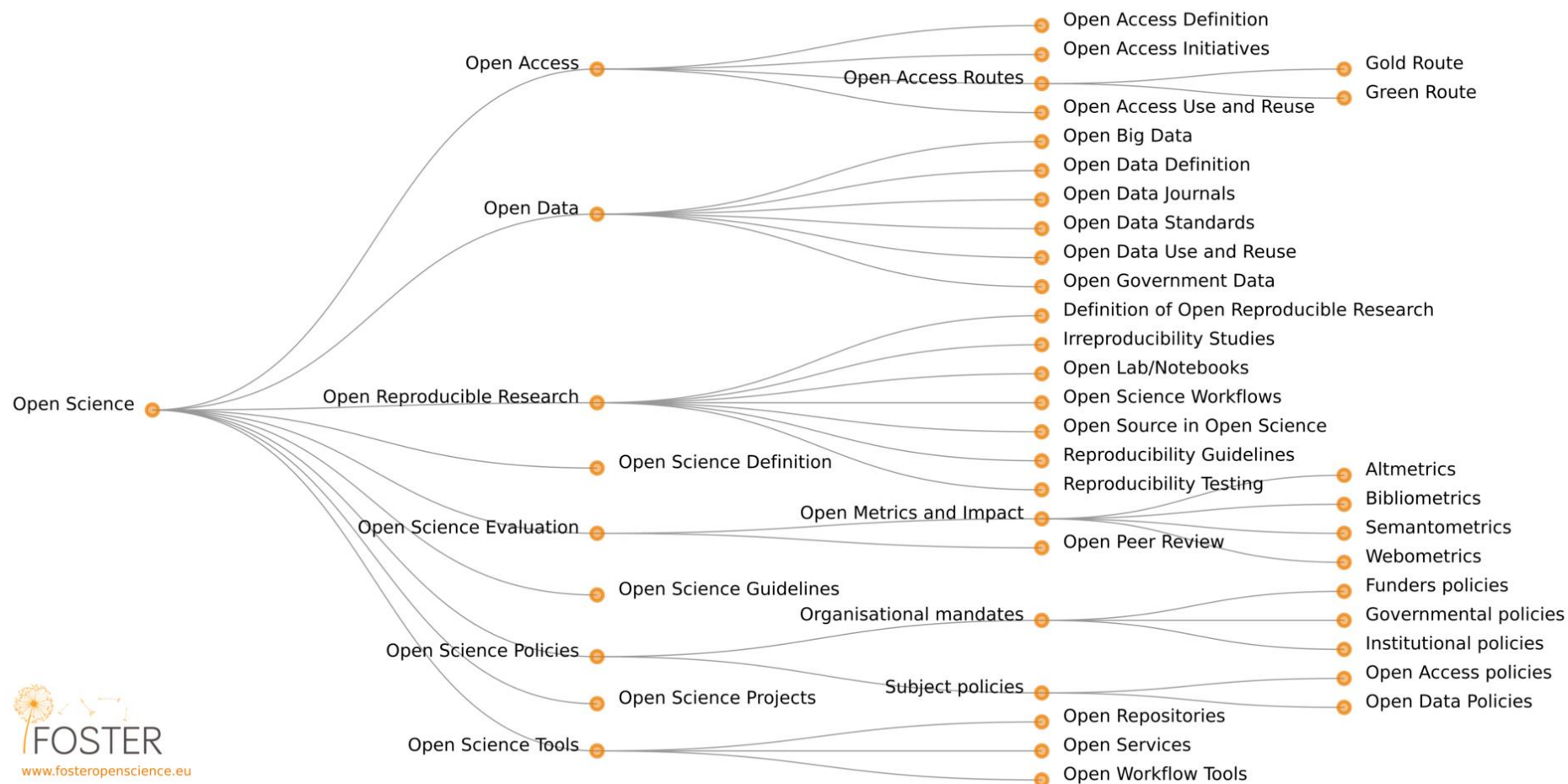
TARGET GROUPS	OUTCOMES	IMPACTS
<p><i>Who will use or further up-take the results of the project? Who will benefit from the results of the project?</i></p> <p>Insert here text for your proposal</p>	<p><i>What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?</i></p> <p>Insert here text for your proposal</p>	<p><i>What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?</i></p> <p>Insert here text for your proposal</p>

Responsible Research and Innovation (RRI)

- Science policy Framework focused on socially responsible research practices
- RRI includes:
 - Open access/science
 - Ethics
 - Gender equality
 - Societal engagement
 - Science education
- Process central to RRI: diversity & inclusiveness, anticipation & reflexivity, openness & transparency, and responsiveness & adaptation
- <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

Open Science

Open Science Taxonomy



Ethics in Horizon Europe

- Human Embryonic Stem Cells (hESC) and
- Human Embryos (hE)
- Human participants
- Human cells / tissues
- Personal data
- Animals
- Non-EU countries
- Environment & Health and Safety
- Artificial Intelligence
- Other ethics issues
- Crosscutting issue: potential misuse of results



Dr Frankenstein was disappointed with the letter from the Ethics Committee.

Grant Writer's handbook. (n.d.). Retrieved March 29, 2022, from <https://www.ifm.eng.cam.ac.uk/research/grant-writers-handbook/>

Ethics & Security

4 - Ethics & security

Ethics Issues Table

1. Human Embryonic Stem Cells and Human Embryos		Page
Does this activity involve Human Embryonic Stem Cells (hESCs)?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Does this activity involve the use of human embryos?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
2. Humans		Page
Does this activity involve human participants?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Does this activity involve interventions (physical also including imaging technology, behavioural treatments, etc.) on the study participants?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Does this activity involve conducting a clinical study as defined by the Clinical Trial Regulation (EU 536/2014) ? (using pharmaceuticals, biologicals, radiopharmaceuticals, or advanced therapy medicinal products)	<input type="radio"/> Yes <input checked="" type="radio"/> No	
3. Human Cells / Tissues (not covered by section 1)		Page
Does this activity involve the use of human cells or tissues?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
4. Personal Data		Page
Does this activity involve processing of personal data?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Does this activity involve further processing of previously collected personal data (including use of preexisting data sets or sources, merging existing data sets)?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Is it planned to export personal data from the EU to non-EU countries? Specify the type of personal data and countries involved	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Is it planned to import personal data from non-EU countries into the EU or from a non-EU country to another non-EU country? Specify the type of personal data and countries involved	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Does this activity involve the processing of personal data related to criminal convictions or offences?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
5. Animals		Page
Does this activity involve animals?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
6. Non-EU Countries		Page
Will some of the activities be carried out in non-EU countries?	<input checked="" type="radio"/> Yes <input type="radio"/> No	1-30

The majority of the research-related activities will be conducted in the Republic of Serbia to be in line with call conditions "at least 70% of the budget for research activities must be allocated to the coordinator from the above stated eligible countries". The research-related activities are conducted within WP1 and WP3.

Nagoya Protocol

- **Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity**
- Supplementary agreement to the United Nations Convention on Biological Diversity
- In force since 12 October 2014
- Protocol applies only to genetic resources accessed after the ratification date, it is not retrospective
- Ensure that owners or guardians of genetic resources receive a “fair share” of any benefits that arise from research conducted with those resources
- Applies to any organismal research or collection storing organismal life
- It covers disciplines indirectly linked to biosciences i. e. earth, climate and archaeological sciences
- It does not apply to genetic resources covered by other agreements (i. e. International Treaty on Plant Genetic Resources for Food and Agriculture, framework for pandemic preparedness of the WHO)
- 91 signatories
- USA, China, Canada and Russia are not signatories to the Protocol
- <https://absch.cbd.int/en/countries>

Research integrity

- Guideline for Promoting Research Integrity in Research Performing Organisations
 - https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/guideline-for-promoting-research-integrity-in-research-performing-organisations_horizon_en.pdf
- Research Integrity Promotion Plan (RIPP):
 - Research Integrity Training
 - Dealing with Breaches of Research Integrity

Gender equality in HEU

- Crosscutting principle
- Eliminate gender inequality and intersecting socio-economic inequalities
- Addressing unconscious bias and systemic structural barriers
- Integration of the gender dimension into research and innovation content (i.e. sex and gender analysis)

- Gender Equality Strategy 2020-2025
- https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en#gender-equality-strategy-2020-2025

Gender Equality Plan - GEP

- Relevant for research organisations and higher education institutions
- GEP
 - Impact assessment / audits of procedures and practices to identify gender bias
 - Identify and implement innovative strategies to correct any bias
 - Setting targets and monitoring progress via indicators



In terms of the content, it is **recommended** that a GEP addresses the following **5 thematic areas**, using concrete measures and targets:

1. **Work-life balance** and **organisational culture**.
2. Gender balance in **leadership** and **decision-making**.
3. Gender equality in **recruitment** and **career progression**.
4. Integration of the gender dimension into **research** and **teaching content**.
5. Measures against **gender-based violence**, including sexual harassment.



- MENDELU
- Faculty of Forestry and Wood
- Technology

State-of-the-art

- Literature review
- Existing and past project review
- <https://cordis.europa.eu/projects/en>



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An updated Curriculum Vitae with a list of publications is required to demonstrate competence in specific areas of expertise.

Further information

- National Contact Points at Technology Centre Prague
 - <https://www.horizontevropa.cz/en>
- European Commission
 - https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en
- European Research Executive Agency
 - https://rea.ec.europa.eu/index_en