

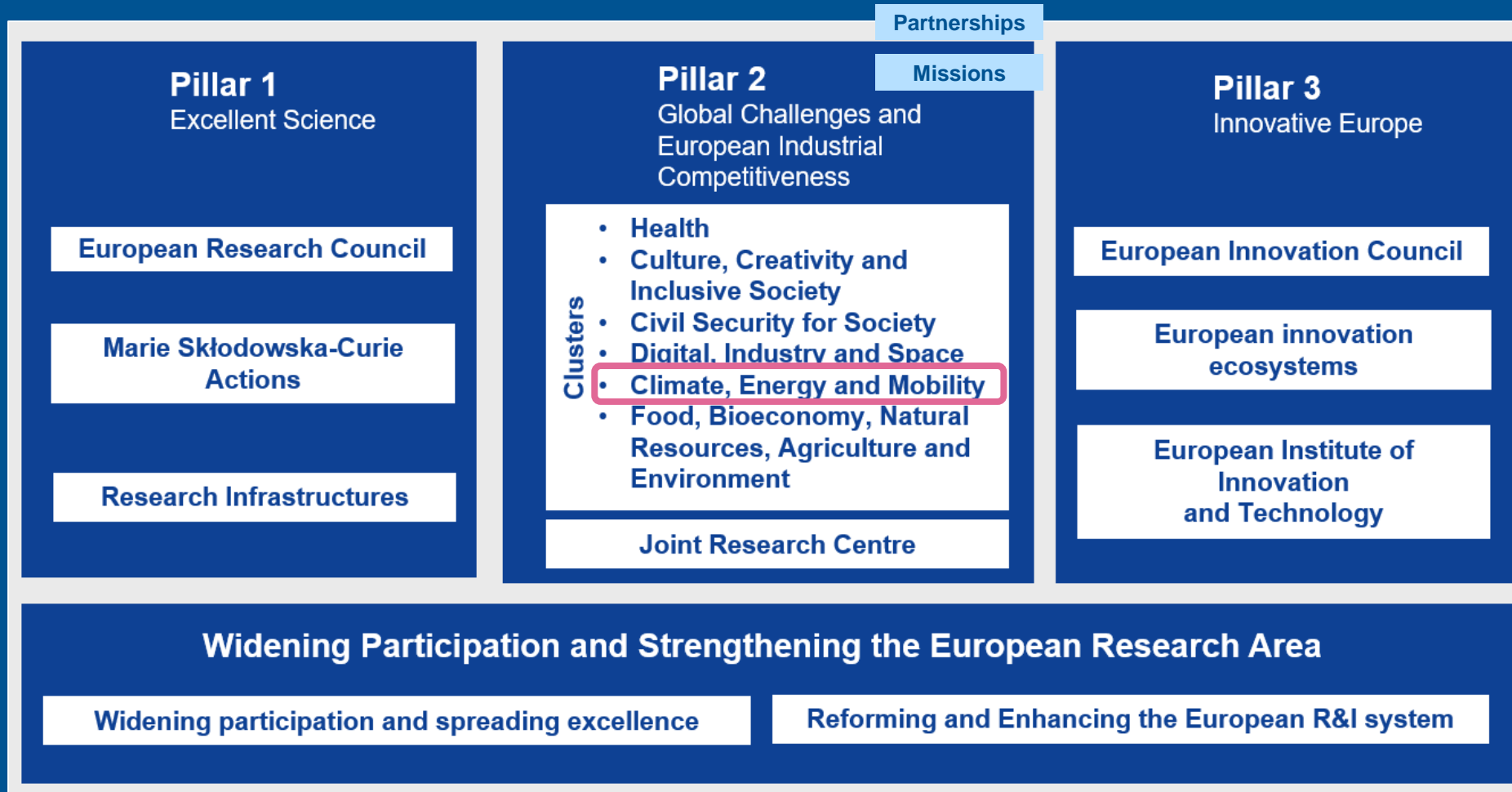
Cluster 5

Climate Energy Mobility

The Horizon framework programme is a **POLITICAL INSTRUMENT** where research and innovation are needed to achieve political priorities



Horizon Europe



5. Climate, Energy and Mobility



Aims

- climate neutrality in Europe by 2050
- deep reduction of greenhouse gas emissions
- zero pollution
- becoming a globally leading actor for sustainable technologies and services



Cluster 5 – Destinations

Accelerating green and digital transformation of economy, industry and society achieving climate neutrality in Europe by 2050



Destination 1
Climate sciences and responses



Destination 2
Cross-sectoral solutions for the climate transition



Destination 3
Sustainable, secure and competitive energy supply



Destination 4
Efficient, sustainable and inclusive energy use



Destination 5
Clean and competitive solutions for all transport modes



Destination 6
Safe Resilient Transport and Smart Mobility services for passengers and goods

Partnerships under Cluster 5

Institutionalised

- Transforming Europe's rail system
- Integrated Air Traffic Management
- Clean Aviation
- Clean Hydrogen

Co-funded

- Driving urban transitions to a sustainable future (DUT)
- Clean Energy Transition (CETP)

Cluster 5 Work Programme

Co-programmed

- Built4People | People-centric sustainable built environment
- Towards zero-emission road transport (2ZERO)
- Batteries: Towards a competitive European industrial battery value chain for stationary applications and e-mobility
- Zero-emission waterborne transport
- Connected, Cooperative and Automated Mobility (CCAM)

Mission areas

Missions are not about R&I - they are about delivering a public good. They are used to agree on a European level what we want to change and deliver it in society.

1



**Adaptation to
Climate Change,
including Societal
Transformation**

2



Cancer

3



**Healthy Oceans,
Seas, Coastal and
Inland Waters**

4



**Climate-Neutral and
Smart Cities**

5



**Soil Health and
Food**

Adaption to Climate Change and Climate Neutral and Smart Cities

A Climate Resilient Europe -

Targets by 2030:

- Prepare Europe to deal with climate disruptions
- Accelerate the transition to a healthy and prosperous future within safe planetary boundaries
- Scale up solutions for resilience that will trigger transformations in society

100 Climate-Neutral Cities by 2030

- Support, promote and showcase 100 European cities in their systemic transformation towards climate neutrality by 2030
- Turn these cities into innovation hubs for all cities
- Lead on the European Green Deal to make Europe the first climate-neutral continent by 2050

Work programme

- Destinations
- Call areas
- Topics
 - Expected Outcomes
 - Scope
- Other Actions

Navigering

Sök i dokument

Rubriker Sidor Resultat

Introduction

- Destination 1 - Climate sciences and responses for the transformation to...
 - Call - Climate sciences and responses
 - Conditions for the Call
 - HORIZON-CL5-2021-D1-01-01: Improved understanding of green...**
 - HORIZON-CL5-2021-D1-01-02: Modelling the role of the circular e...
 - HORIZON-CL5-2021-D1-01-03: Maximising the impact and synerg...
 - HORIZON-CL5-2021-D1-01-04: Enhanced integrated assessment i...
 - HORIZON-CL5-2021-D1-01-05: Better understanding of the interac...
 - HORIZON-CL5-2021-D1-01-06: Supporting and standardising clim...
 - HORIZON-CL5-2021-D1-01-07: Improved economic methods for...
 - HORIZON-CL5-2021-D1-01-08: Restoration of natural wetlands, pe...
 - HORIZON-CL5-2021-D1-01-09: The contribution of forest manage...
 - Call - Climate sciences and responses
 - Conditions for the Call
 - HORIZON-CL5-2022-D1-01-01-two-stage: Carbon Dioxide Remov...
 - HORIZON-CL5-2022-D1-01-02-two-stage: Socio-economic risks o...
 - HORIZON-CL5-2022-D1-01-03-two-stage: Social science for land...
 - Call - Climate sciences and responses
 - Conditions for the Call
 - HORIZON-CL5-2022-D1-02-01: Verification and reconciliation of es...
 - HORIZON-CL5-2022-D1-02-02: Development of high-resolution E...
 - HORIZON-CL5-2022-D1-02-03: Improvement of Integrated Assess...

HORIZON-CL5-2021-D1-01-01: Improved understanding of greenhouse gas fluxes and radiative forcers, including carbon dioxide removal technologies

Specific conditions	
<i>Expected EU contribution per project</i>	The EU estimates that an EU contribution of around EUR 8.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 24.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Procedure</i>	The procedure is described in General Annex F. The following exceptions apply: To ensure a balanced portfolio covering all three areas, grants will be awarded to applications not only in order of ranking but at least also to one project that is the highest ranked within each area, provided that the applications attain all thresholds.

Expected Outcome: Project results are expected to contribute to all of the following expected outcomes:

- Improved knowledge in the addressed areas, also through increasing the use of high quality data, leading to a better understanding of the processes driving climate change.
- Contribute to improved projections of climate change (including in relation to climate change-related extreme events).
- Improve our understanding of how innovative mitigation actions can help stabilise global temperature.
- Improved understanding from these actions should be fed into improvements in Earth system models, climate services and other forms of downstream use.

Scope: This topic aims at filling fundamental gaps in our understanding of Earth system, focussing on greenhouse gas (GHG) fluxes and Earth system feedbacks, the behaviour of radiative forcers (including their pre-cursors), and efforts to stabilise global temperature through deployment of carbon dioxide (CO₂) removal approaches.

Beneficiaries are encouraged to take advantage of the relevant national and/or European research infrastructures (e.g. ICOS, ACTRIS etc.).

Actions should improve scientific understanding in only one of the following areas:

a) Greenhouse gas fluxes and Earth system feedbacks

Actions should target a better understanding of key processes related to the life cycles of GHGs, other climate forcers and associated feedbacks affecting the Earth's climate over different time horizons, including the effect of climate variability from inter-annual to multi-decadal and longer time scales. Actions should focus on elements of the climate system, such as terrestrial ecosystems, hydrological cycles, ocean circulation changes, atmosphere-ocean gas exchanges, coastal zones or the biogeochemical cycles, which have an important influence on climate change and its impacts but are not sufficiently understood by the latest science.

NCP?



National EU-node



NCP

National contact points

- ✓ Answers questions on Horizon Europe
- ✓ Helps to find matching calls and topics
- ✓ Legal and financial advice
- ✓ Spreads information
- ✓ Strategic advice

Information from SE system to EC
via NCP networks, experts and PC

Questions?

Contact



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[Vinnova Horizon Europe contact
page - all NCP:s](#)

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Thank you!