



Arctic opportunities, including
topics from EU Missions -
Climate-Ocean-Polar-Ecosystems

Horizon Europe's Work Program
2023-2024

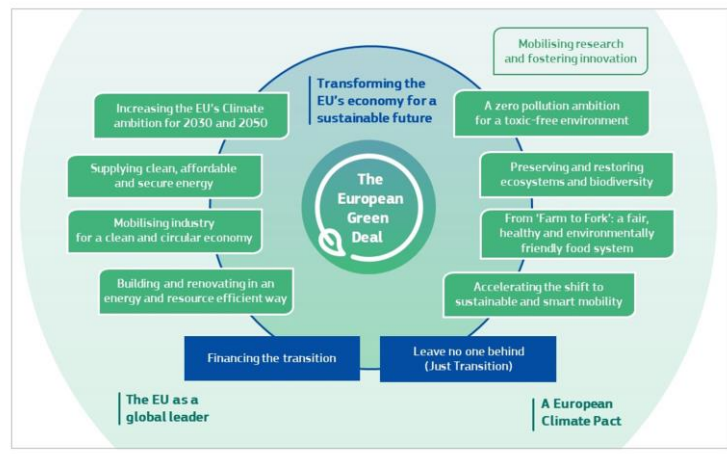
Ms. Ingunn Borlaug Lid
National Contact Points (NCP Climate, Energy and Mobility) for Horizon
Europe, Norway

The Research Council of Norway

A key role for research and innovation



Horizon Europe



The EU Framework Programme for Research and Innovation

HORIZON 2020

A circular graphic of the Sustainable Development Goals (SDGs) wheel, with the text "SUSTAINABLE DEVELOPMENT GOALS" in the center. The wheel consists of 17 colored segments, each containing an icon representing a goal.

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IMPETUS focuses on increasing our resilience: Turn climate commitments into tangible, urgent actions to protect communities and the planet <https://climate-impetus.eu/>

Our teams are analysing solutions, boosting knowledge, and creating packages of adaptation measures that other communities can use as a pathway towards a climate-neutral and sustainable future.

Norske partnere:

UiT og Troms- og Finnmark fylkeskommune



“

Climate change is the biggest challenge of our time. The IMPETUS project triggers investment, knowledge and research to turn our climate ambitions into action.

Karin Eriksen
Troms and Finnmark County Councilor for Industry and the Environment

 **IMPETUS**

 @climateimpetus

 'climate impetus'





Horizon Europe (2021-2027)

- **Strategic Plan for 4 years**
- Calls across disciplines and sectors
- Open Science policy
- International collaboration
- The European Innovation Council (EIC)
- Missions and Partnerships
- Gender equality plan (GEP)







Horizon Europe

Total budget: EUR 95,5 billion

Excellent Science

Global Challenges and European Industrial Competitiveness

Innovative Europe

European Research Council (ERC)

Clusters

1. Health
2. Culture, Creativity and Inclusive Societies
3. Civil Security for Society
4. Digital, Industry & Space
5. Climate, Energy and Mobility
6. Food, Bioeconomy, Natural Resources, Agriculture & Environment

European Innovation Council (EIC)

Marie Skłodowska-Curie Actions (MSCA)

Innovation ecosystems

Research Infrastructures

EU Joint Research Centre (JRC)

European Institute of Innovation and Technology (EIT)

Widening participation and strengthening the European research area

Widening participation and spreading excellence.
Reforming and enhancing the European R&I system.



Research Infrastructures

- HORIZON-INFRA-2024-EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to climate change
- HORIZON-INFRA-2023-TECH-01-01: New technologies and solutions for reducing the environmental and climate footprint of RIs
- HORIZON-INFRA-2023-SERV-01-01: Research infrastructure services to enable R&I addressing main challenges and EU priorities
 - For RI services for sustainable Arctic/polar regions
 - enabling/facilitating science for understanding and predicting key processes in polar regions in the context of climate change;
 - enhanced and further integrated RI capacities in polar regions in support of EU Arctic Policy, European Green Deal and international climate initiatives.



Cluster 5:

Destination 1 – Climate science

NB! WP2023-2024

- **Earth system science**
 - Further climate knowledge through advanced science and technologies for analysing Earth Observation and Earth System Model data
 - Climate-related tipping points
 - Climate impacts of a hydrogen economy
 - Improved knowledge in cloud-aerosol interaction
 - Enhanced quantification and understanding of natural and anthropogenic methane emissions and sinks
 - Inland ice, including snow cover, glaciers, ice sheets and permafrost, and their interaction with climate change
 - Paleoclimate science for a better understanding of the long and short-term evolution of the Earth system
- **Climate change mitigation, pathways to climate neutrality**
- **Climate change impacts and adaptation**
- **Social science, citizen science & behavioural science for climate action**
- **Climate-ecosystem interactions**
- **International cooperation**



European Missions



Adaptation to Climate Change

Support at least 150 European regions and communities to become climate resilient by 2030

Implementation Plan



Cluster 6 – Food, Bioeconomy, Natural Resources, Agriculture and Environment

Destinations

1 Biodiversity and ecosystem services

2 Fair, healthy and environmentally-friendly food systems from primary production to consumption

3 Circular economy and bioeconomy sectors

4 Clean environment and zero pollution

5 Land, oceans and water for climate action

6 Resilient, inclusive, healthy and green rural, coastal and urban communities

7 Innovative governance, environmental observations and digital solutions in support of the Green Deal

Other actions



The need for
**a transformative change
of the EU economy and
society**



Cluster 6:

Destination 4, 5 and 6

- HORIZON-CL6-2024-ZEROPOLLUTION: Tackling human and climate change induced pollution in the Arctic - building resilient socio-ecological systems
- HORIZON-CL6-2023-CLIMATE: Ocean and coastal waters carbon- and biodiversity-rich ecosystems and habitats in Europe and the Polar Regions
- HORIZON-CL6-2024-CLIMATE: Closing the research gaps on Essential Ocean Variables (EOVs) in support of global assessments
- HORIZON-CL6-2024-CLIMATE: Ocean models for seasonal to decadal and local to regional climate predictions
- HORIZON-CL6-2024-CLIMATE: EU-China international cooperation on improving monitoring for better integrated climate and biodiversity approaches, using environmental and Earth observation
- HORIZON-CL6-2024-COMMUNITIES: Participation and empowerment of Arctic coastal, local, and indigenous communities in environmental decision-making

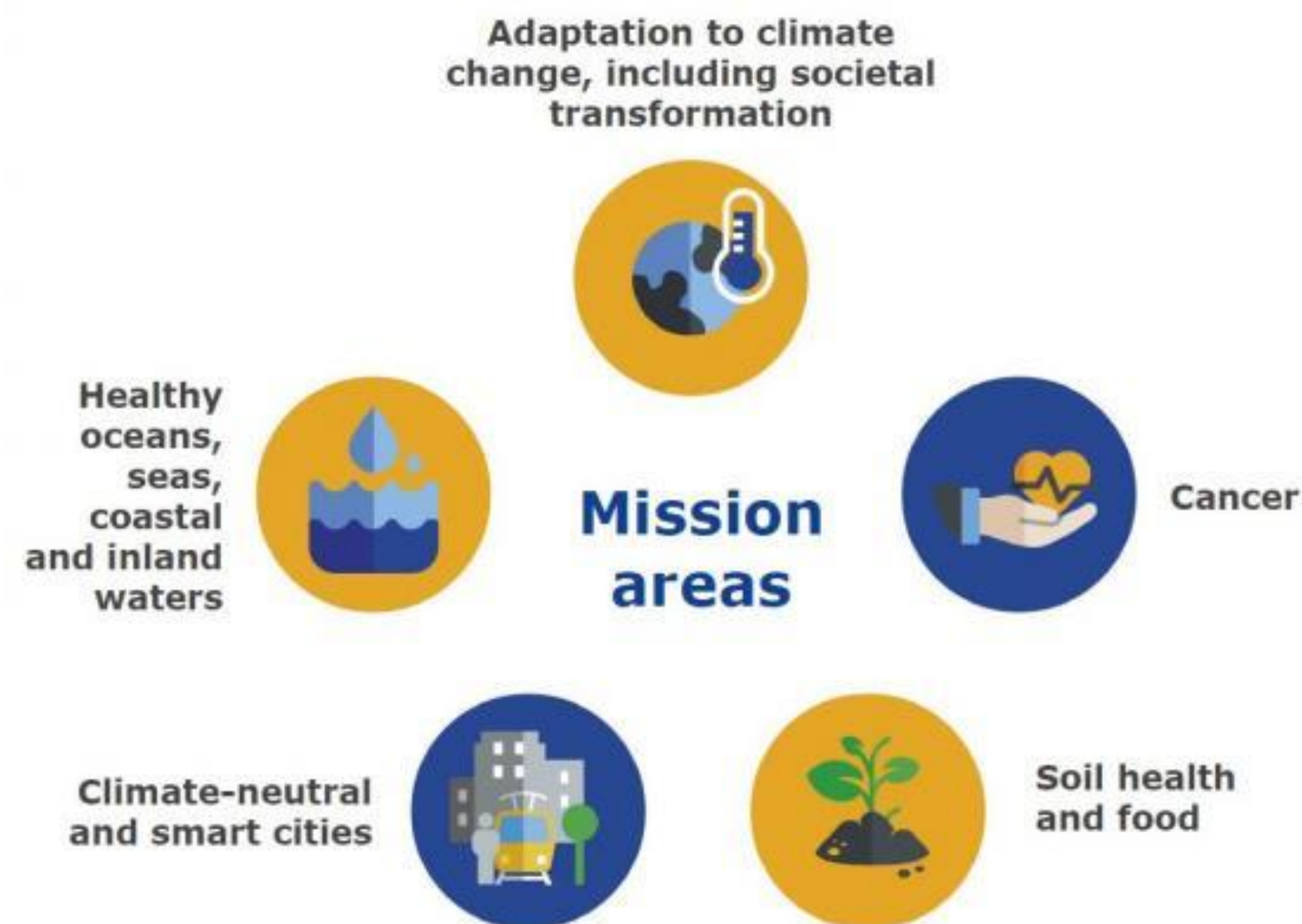
NB! WP2023-2024





EU Missions will:

- be bold, inspirational and widely relevant to society
- be clearly framed: targeted, measurable and time-bound
- establish impact-driven but realistic goals
- mobilise resources on EU, national and local levels
- link activities across different disciplines and different types of research and innovation
- make it easier for citizens to understand the value of investments in research and innovation





Mission: Adaptation to Climate Change

Call - Demonstration of climate resilience solutions in support of the implementation of the Adaptation to Climate Change Mission

- HORIZON-MISS-2023-CLIMA-01-01: Testing and demonstrating **transformative solutions** increasing climate resilience of the **agriculture and/or forestry sector**.
- HORIZON-MISS-2023-CLIMA-01-02: Testing and demonstrating **transformative solutions to protect critical infrastructure** from climate change, mainstreaming nature-based **solutions**.
- HORIZON-MISS-2023-CLIMA-01-03: Testing and demonstrating **transformative solutions** to build resilience towards **health risks** caused by the effects of climate change



RESIST looks at regions for resiliency against climate change through innovation, science and technology which aims at making the regions more sustainable.

The project will perform large-scale tests of innovations for climate adaptation in the 12 selected regions, with the goal of then transferring this knowledge and these innovative solutions between the regions.

Norske partnere:

**SINTEF AS (coordinator),
AugmentCity AS, Vesterålen regionråd,
Lofotr Næringsdrift AS and Andfjord
Salmon AS**

SINTEF Digital leads project on climate-change resiliency.

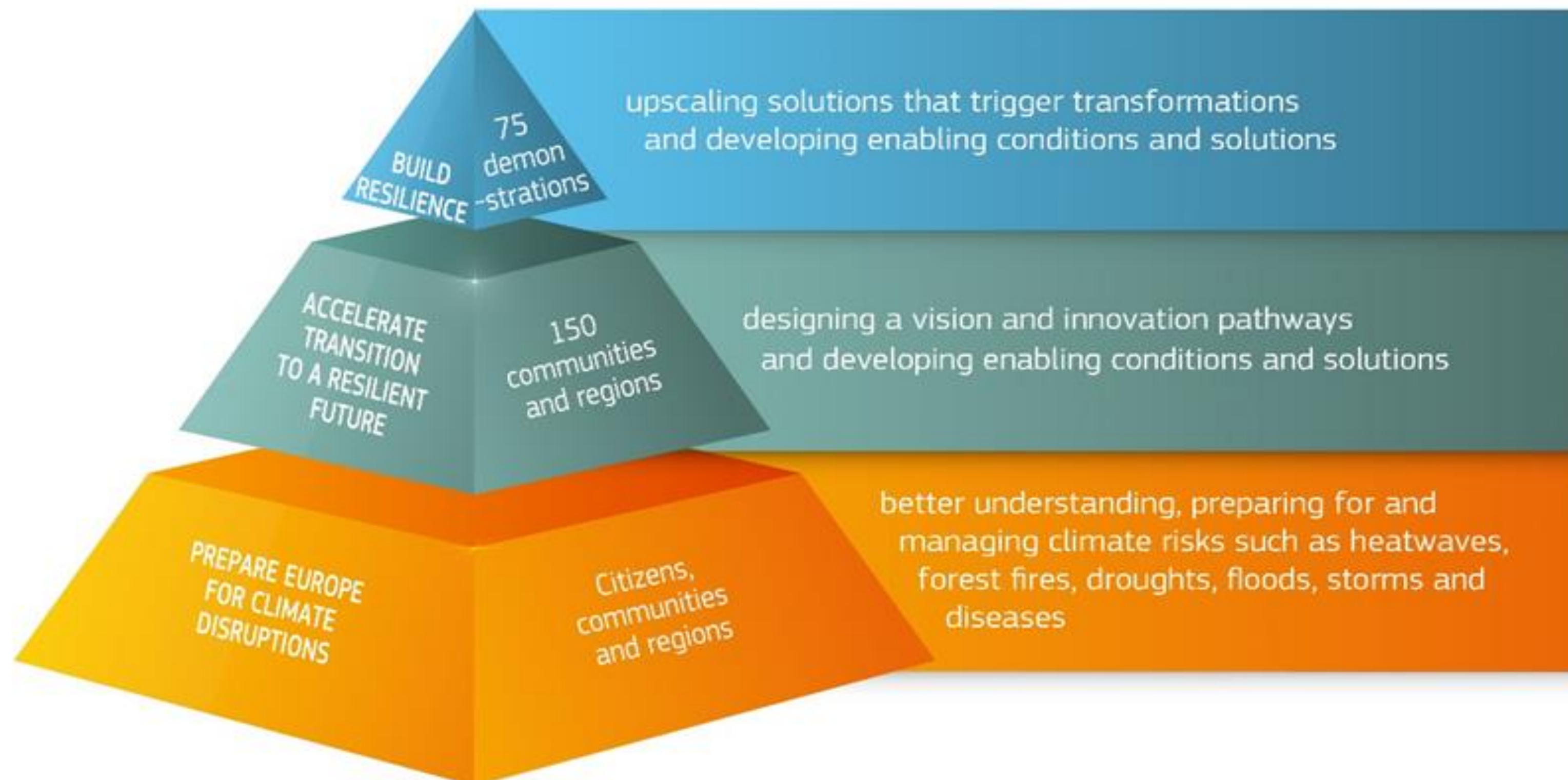


The project has a total budget of near 270 million NOK and is a collaboration between 56 partners from the EU, Norway and Ukraine over a five-year period.



Climate Change Adaptation Mission Objectives

Overall objective: to help at least 150 European regions and communities towards climate resilience by 2030





Mission: Restore our Ocean and Waters by 2030

- 01-01: European Blue Parks – Protection and restoration of marine habitats
- 01-02: Danube river basin lighthouse – Demonstration of effective and sustainable management of sediments in the Danube river-Black sea system
- 01-03: Atlantic and Arctic sea basin lighthouse – Addressing climate change and human activities threats to marine biodiversity
- 01-04: European natural lakes: demonstration of integrated approaches for protection and restoration of natural lake ecosystems and their biodiversity
- 01-05: Lighthouse in the Baltic and the North Sea basins - Lighthouse in the Baltic and the North Sea basins - Green and energy-efficient small-scale fishing fleets

1. **Protect and restore**
2. **Prevent and eliminate pollution**
3. **Make the sustainable blue economy carbon-neutral and circular**



Mission: Restore our Ocean and Waters by 2030

- 01-06: Cross-basin topic - Innovative nature-inclusive concepts to reconcile offshore renewables with ocean protection
- 01-07: Cross-basin topic - Analysis of the obstacles and opportunities for repurposing aged/unused offshore infrastructures
- 01-08: Integration of socio-ecological models into the Digital Twin Ocean
- 01-09: Roadmap towards the integration of inland waters into the Digital Twin Ocean
- 01-10: Choose your fish: a campaign for responsible consumption of products from the sea
- 01-11: Ocean & water and arts: the contribution of creative sectors to Mission Ocean and waters

The Mission will be implemented in two phases:

- 1. ‘Development and piloting’ phase (2022-2025)**
- 2. ‘Deployment and upscaling’ phase (2026-2030),**

European partnerships

- Biodiversa+
- Water4All
- Sustainable blue economy
- EU-PolarNet
- JPI Climate
- JPI Oceans



Keep in mind...

Be proactive, read draft calls, read relevant EU policy

What has already been funded and which organizations are involved?

Impact what is your projects contribution?

Actively search for partners at webinars, info-days, brokerage events

Start building a consortium as early as possible

Contact NCPs



Vedlagte vedlegg 13 til arbeidsprogrammet for 2021 -2022 gir informasjon om en rekke forhold, blant annet støttegraden, punkt G, som varierer mellom ulike prosjekttyper (omtalt under punkt B):

"The maximum Horizon Europe funding rates are as follows:

- **Research and innovation action (RIA): 100%**
- **Innovation action (IA): 70% (except for non-profit legal entities, where a rate of up to 100% applies)**
- **Coordination and support action (CSA): 100%**
- **Programme co-fund action: between 30% and 70%**
- **Innovation and marked deployment: 70% (except for non-profit legal entities, where a rate of up to 100 % applies)**
- **Training and mobility action: 100%**
- **Pre-commercial procurement action: 100%**
- **Public procurement of innovative solutions action: 50 %**
- **Other funding rates may be set out in the specific call conditions."**

Merk at det ikke er lov å ha profitt på EU-støtten. For ytterligere informasjon om støttegraden, ta kontakt med vår Legal and finansiell NCP Inga Elizabeth Bruskeland, ieb@forskningsradet.no