

Horizon Europe

Mission on Adaptation to Climate Change

Tóth Orsolya
2022. 03. 10.

Nemzeti Kutatási, Fejlesztési és
Innovációs Hivatal



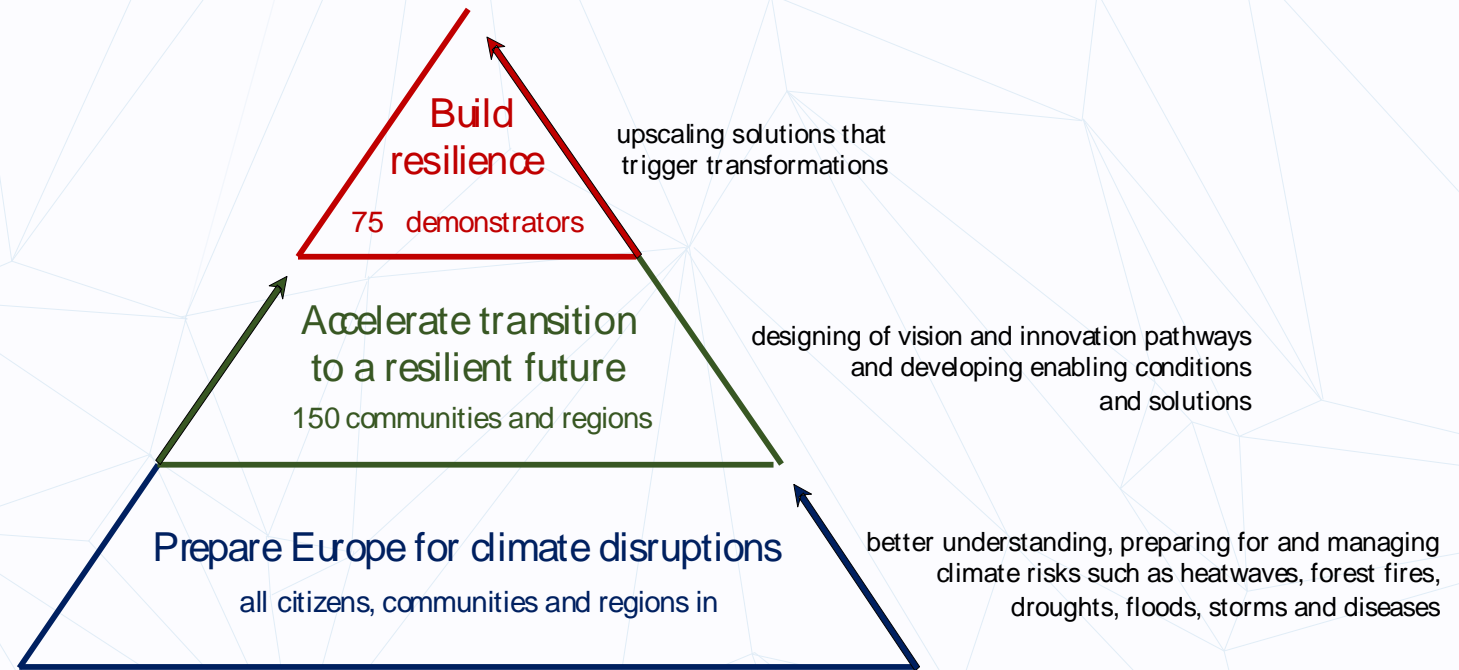
Vision

- **ACCELERATING THE TRANSITION TO A CLIMATE PREPARED AND RESILIENT EUROPE**

- Turning the urgent challenge of adapting to climate change into an opportunity to make Europe more resilient, climate prepared and fair



Objectives



Target:

By 2030, all local administrative units (LAU) and regions (NUTS) will have access to climate risk profiles and enhanced early warning systems for all relevant risks, and will have adopted comprehensive climate risk management plans



• Prepare Europe:

- The Mission will support citizens, communities and regions to:
- **foster a better understanding** of climate risk exposure, providing access to fast track climate risk assessments and strengthening existing early warning systems;
- **facilitate the adoption of climate risk management plans** and community-based emergency plans; and
- **ensure that community infrastructure is safe and essential services operable and accessible** under critical conditions

Target:

By 2030, 150 European communities and regions will have developed their own transformative vision; co-created adaptation pathways; co-designed and tested actionable solutions; and created favourable conditions for societal transformations.

- **Accelerate the transition:**

- The Mission will support citizens, communities and regions, to:
- **design vision and objectives**, and build consensus around transformative social change enshrined in a community resilience contract;
- **co-create adaptation pathways**, and define possible courses of policy and innovation actions to deliver on the vision, resulting in a portfolio brief for action;
- **co-design and test actionable solutions**, and share learning within and across the communities and regions; and
- **create favourable conditions for societal transformations**



Target:

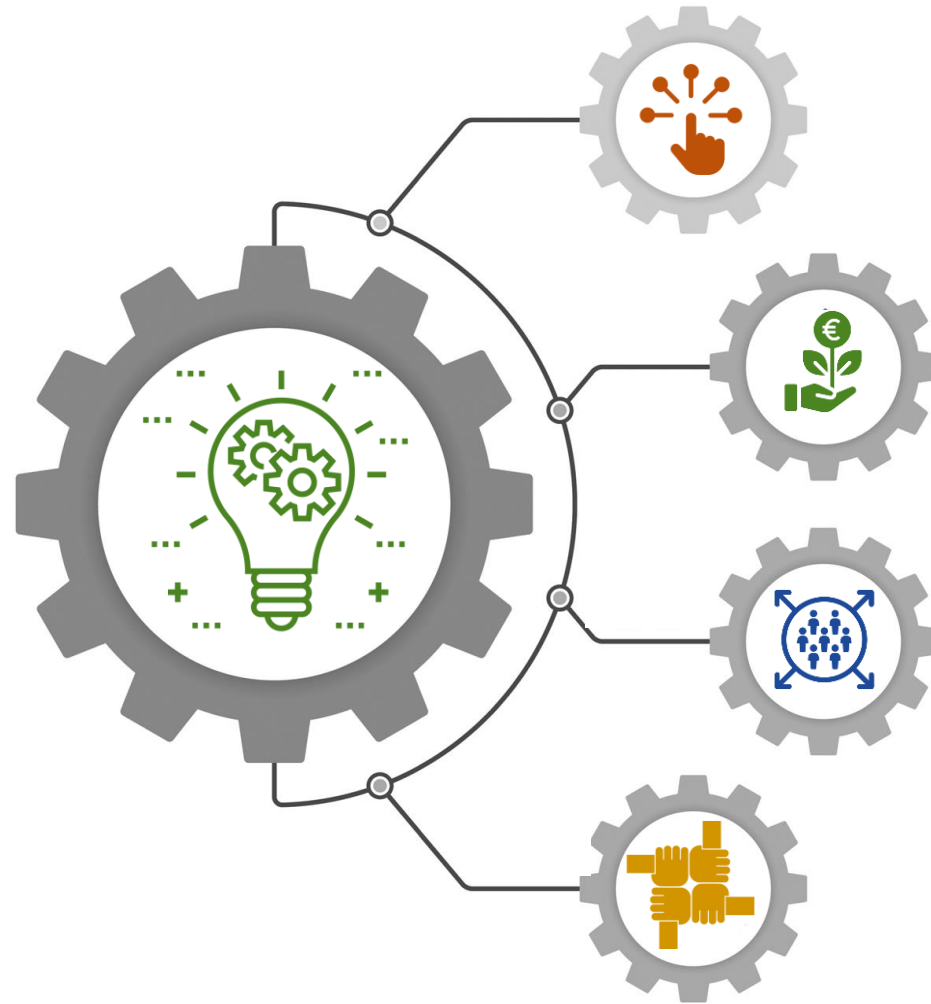
By 2030, 75 deep demonstrations have scaled-up actionable solutions that have triggered societal transformation, building deeper resilience

• Build deep resilience:

- Scaling up actionable solutions triggering societal transformations through 75 deep demonstrations of resilience, the Mission will
- **create impact at scale**, building of resilience in single regions and communities focusing on key community systems;
- **create cross-border value**, building of resilience and shared value creation across cross-border systems and services;
- **foster systemic and citizen-centred co-evaluation**, measuring progress made, assessing what has been accomplished and communicating the processes and outcomes



Enabling environment



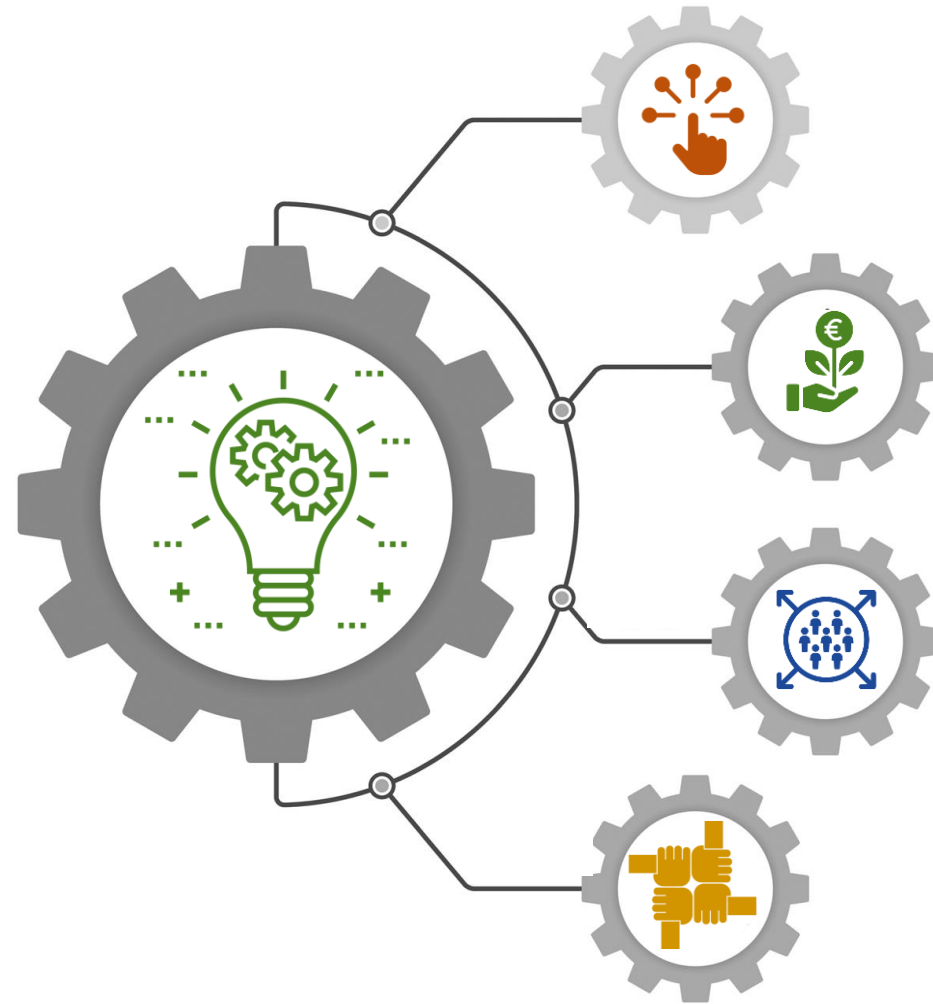
access to data,
knowledge, digital
services

local economies,
economic resources

inclusive and fair
transition

shared learning and
policy coherence

Key Community Systems



Community and
Social Infrastructure

Health and
Wellbeing

Nature, Biodiversity
and Ecosystem
Services

Water

Rural Landscapes
and Food Systems

Calls

- **Research and Innovation actions in support of the implementation of the Adaptation to Climate Change Mission**
- HORIZON-MISS-2021-CLIMA-02-01: Development of climate change risk assessments in European regions and communities based on a transparent and harmonised Climate Risk Assessment approach
- HORIZON-MISS-2021-CLIMA-02-02: Support to the regions in developing pathways towards climate resilience and corresponding innovation agendas
- HORIZON-MISS-2021-CLIMA-02-03: Towards asset level modelling of climate risks and adaptation
- HORIZON-MISS-2021-CLIMA-02-04: Large scale demonstrators of climate resilience creating cross-border value
- HORIZON-MISS-2021-CLIMA-02-05: Local engagement of citizens in the co-creation of societal transformational change for climate resilience

- **Deadline: 12 April, 2022**

Budget/project

- **Research and Innovation actions in support of the implementation of the Adaptation to Climate Change Mission**
- HORIZON-MISS-2021-CLIMA-02-01: 15 to 20 million EUR (number of projects to be funded: 1)
- HORIZON-MISS-2021-CLIMA-02-02: 25 to 30 million EUR (number of projects to be funded: 1)
- HORIZON-MISS-2021-CLIMA-02-03: 1.5 to 2.5 million EUR (number of projects to be funded: 2)
- HORIZON-MISS-2021-CLIMA-02-04: 15 to 25 million EUR (number of projects to be funded: 2)
- HORIZON-MISS-2021-CLIMA-02-05: 3 to 5 million EUR (number of projects to be funded: 1)

HORIZON-MISS-2021-CLIMA-02-01: Development of climate change risk assessments in European regions and communities based on a transparent and harmonised Climate Risk Assessment approach

- **Expected outcome:**
 - An operational, consistent and more advanced multi-risk assessment framework tool
 - Harmonised multi-hazard/ risk assessments at the regional scale
 - Enhanced adaptive capacity of European regions and communities
- Needs for further development of standards, implementation support and guidance for standards
- **Scope:**
 - 1st Action- Development and beta testing of the climate risk and vulnerability assessment framework tool
 - 2nd Action- Using the climate risk assessments framework tool in regions and communities, to conduct climate risks, vulnerabilities and impacts assessments as a basis for development or revision of local emergency and risk management plans

HORIZON-MISS-2021-CLIMA-02-02: Support to the regions in developing pathways towards climate resilience and corresponding innovation agendas

- **Expected outcome:**
 - The pathways to a climate resilient future and their corresponding innovation agendas that regions and communities will have developed as output of this project are used to shape relevant research and innovation strategies, and to mobilise research and innovation actions to develop, test and up-scale systemic solutions increasing local climate resilience as identified
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- **Scope:**
 - This action aims at providing the necessary knowledge, expertise, and services to support regions in the formulation of their climate resilient future and of their place-based transformative adaptation pathways, plans and innovation portfolios
 - The proposal should focus on building capacity of regions and communities to take leadership on their own transformative adaptation pathways.

HORIZON-MISS-2021-CLIMA-02-03: Towards asset level modelling of climate risks and adaptation

- **Expected outcome:**
- Beyond state of the art asset-level models for critical infrastructures will allow for a better assessment of adaptation options
- Public authorities will be enabled to compare different adaptation approaches on the basis of a model information system on critical infrastructure
- An analysis of gaps in European data regarding the assessment of direct and indirect economic consequences of damages to critical infrastructures
- **Scope:**
- preparing and planning for climate resilience and the need for a better understanding of climate change related risks
- Resolution and completeness of data for exposure assessments
- Data on construction costs, construction quality and characteristics (notably protection against extreme weather events) as well as on planned redundancies
- Data on the use of the infrastructures (for example how many trains, cars or households are served)

HORIZON-MISS-2021-CLIMA-02-04: Large scale demonstrators of climate resilience creating cross-border value

- **Expected outcome:**
- Systemic demonstration of a climate-resilient society, fully adapted to the unavoidable impacts of climate change by 2050
- Innovative climate resilience socio-technological solutions are scaled up and largely deployed through collaboration and twinning between front-runners and less experienced regions , vulnerable to similar climate risks and impacts
- Suitable solutions for just societal transformation and building climate resilience at the regional and local level are developed and adopted
- **Scope:**
- Proposals under this topic must deploy large-scale demonstrations of scientifically sound innovative solutions, combining technological and social innovation, with concrete measurable impacts leading to an increase of the resilience and adaptation capacity to climate change across the territory of the European Union and associated countries

HORIZON-MISS-2021-CLIMA-02-05: Local engagement of citizens in the co-creation of societal transformational change for climate resilience

- **Expected outcome:**
- Well established mechanisms to meaningfully involve and engage citizens and stakeholders in the transformation to climate resilience
- Innovative problem-oriented climate adaptation solutions are co-designed and co-created
- Empowerment of citizens in contributing to the Mission in their region and community, including by enabling them to collect and analyse relevant data
- An enhanced and increased toolbox of innovative mechanisms and approaches of engaging citizens and stakeholders
- Alliances of high impact, in order to increase the likelihood of long-term sustainability and social acceptability of citizen-led actions
- **Scope:**
- provide direct support to the regions and communities sharing relevant state-of-the-art knowledge, best practices and emerging innovations
- undertake research and test innovative solutions
- ensure synergies between the Mission and other relevant initiatives

Useful links



- <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon>
- https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/adaptation-climate-change-including-societal-transformation_en
- https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-12-missions_horizon-2021-2022_en.pdf

Thank you for your attention!

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