



This project is co-financed by the
European Union and the Republic of Turkey

Bu proje Avrupa Birliđi ve Türkiye Cumhuriyeti tarafından
finanse edilmektedir



TURKEYⁱⁿ
HORIZON 2020
COOPERATION. INNOVATION. COMPETITIVENESS

Technical Assistance for Turkey in Horizon 2020 Phase-II

EuropeAid/139098/IH/SER/TR

Horizon Europe Missions: Adaptation to Climate Change

Anastasios Karakostas



REPUBLIC OF TURKEY
MINISTRY OF INDUSTRY
AND TECHNOLOGY



COMPETITIVE
& COHESION
PROGRAMME



TÜBİTAK

How do you define adaptation?

- In human systems, adaptation is the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities.
- In natural systems, it is the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.



How do you define regions?

- For the scope of the Adaptation Mission, regions are considered to be the territories at NUTS 2 level following the definition of Regions in the Nomenclature of Territorial Units for Statistics (NUTS) classification.
- However, also other regions (NUTS 1, NUTS 3 or geographical regions across countries) or local authorities within regions can participate in the mission.
- A participating region must be represented by a legal entity.



How do you define communities?

- For practical implementation purposes, the concept of ‘communities’ has been added. It concerns groupings of people with social ties, shared values or interests, engaged in joint action.
- Communities can be of different size and are not always geographically confined. They can be smaller or larger entities than regions.
- To engage with the Adaptation Mission and to take part in its actions, the communities must be represented by an authority that has the mandate to commit funds and to implement an adaptation strategy locally.



How do you define climate resilience?

- Climate resilience is the ability to withstand the unavoidable climate impacts.
- To build resilience, one must adapt to already present effects of climate change and to prepare to withstand future climate risks.



Adaptation Strategy objectives

Mission contribution

1. Smarter adaptation

- Contributing to **climate data** through regions and communities
- Boosting JRC Data Risk Hub and Climate-ADAPT

2. More systemic adaptation

- Supporting regions in taking a **systemic approach**
- Fostering **collaboration** between regions and cross-border demonstration of solutions
- Promoting **nature-based solutions**

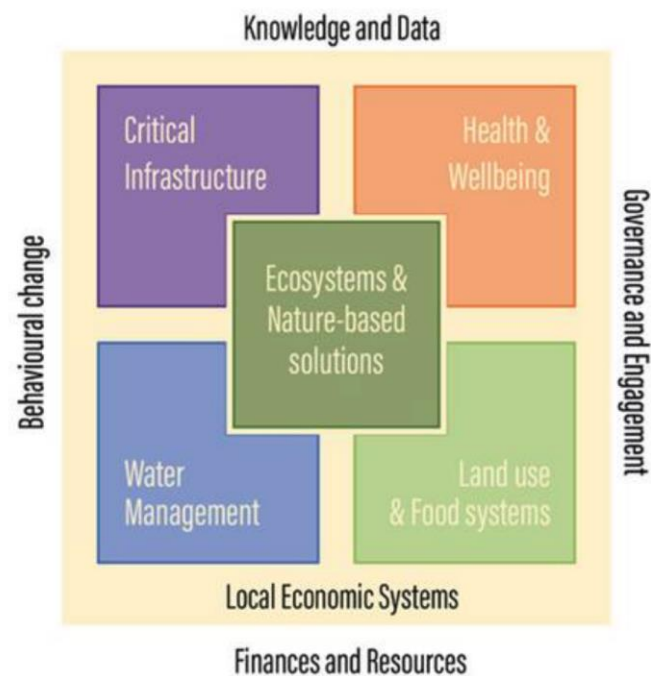
3. Faster adaptation

- Supporting **development, testing and scale-up of innovative solutions**
- Supporting **demonstrations of systemic transformations**
- Developing a common **framework for climate risk assessment** for regions and communities

4. Stepping up international action

Climate Change Adaptation Mission Objectives

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



Regions and communities

- help regions better understand, prepare for, and manage their climate risks and opportunities
- stimulate EU regions leading in climate adaptation to share their experience and guide all regions in finding solutions tailored to their own climatic situation and economy
- support innovative climate resilience solutions and help regions source additional investments.



Work Programme 2021 Amendment

Topic	Action description	Type of action	Budget In millions EUR
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	RIA	20 with 60% cascading funds
HORIZON-MISS-2021-CLIMA-02-02	Support to the regions in developing pathways towards climate resilience and corresponding innovation agendas	RIA	30 With 70% cascading funds
HORIZON-MISS-2021-CLIMA-02-03	Towards asset level modelling of climate risks and adaptation	RIA	5
HORIZON-MISS-2021-CLIMA-02-04	Large scale demonstrators of climate resilience creating cross-border value	IA	50
HORIZON-MISS-2021-CLIMA-02-05	Local engagement of citizens in the co-creation of societal transformational change for climate resilience	RIA	5





EUROPEAN UNION

HORIZON-MISS-2021-CLIMA-02-01

- Scope:
The proposal should address two distinctive actions, in the indicated sequence:
- **1st Action: Development and beta testing of the climate risk and vulnerability assessment framework**
- Should be multi-risk and multi-sector, to enhance regions' adaptive capacity in the face of all the climate risks each region will face
- Should provide a common approach for all regions to assess their climate risks and its components (hazard, exposure, vulnerability)
- Should build on available data and services, provide a benchmark and comparison of already available frameworks and identify gaps to be filled
- Should focus on local and regional scale/resolution
- Budget for this first action should approximately be 20% of the total requested EU contribution



HORIZON-MISS-2021-CLIMA-02-01

- **2nd Action: Using the framework, conduct climate risks, vulnerabilities and impacts assessments in regions and communities, as a basis for development of revision of local emergency and risk management plans**
- Should provide direct financial support in the form of grants to at least 50 regions and communities in conducting their multi-hazard/risk assessments
- Should provide access to local and regional authorities to development of their risk profiles
- Should start no later than 12 months after the project kick-off
- Priority should be given to regions and locations with high vulnerability, limited resources and /or low adaptative capacity – process to select them should be included in the proposal – it should ensure variety of locations are represented reflecting the diversity in climatic risks
- Should include an open support line to all interested regions beyond those selected
- Should account for maintenance, update, improved design of the framework developed under the first action
- Should be made open source, public, free and open licensed (including for future actions under the Mission)



HORIZON-MISS-2021-CLIMA-02-02

- Support to the regions in developing pathways towards climate resilience and corresponding innovation agendas
- Type of action: Research and Innovation Action
Budget available: 30 millions EUR
Expected EU contribution per project: 25 to 30 millions EUR
- Number of projects expected to be funded: 1
- Additional conditions:
 - - reach out to at least 100 diverse regions and/or communities
 - - min. 70% of requested EU contribution as financial support to third parties - max. 300,000 EUR granted to each third party



HORIZON-MISS-2021-CLIMA-02-02

- Scope:
- Support regional and local authorities in formulating their vision of a climate resilient future and the transformative adaptation pathways, plans and innovation portfolios to reach it.
- In addition to the consortium support, direct support and capability building should be provided to the regions through grants to third parties to be used for engaging a local/regional and /or national partner organization (process for selection should be part of the proposal).
- The pathways should:
 - build on the assessment of future climate change risks;
 - reflect the 10 areas of innovation and transformation as outlined in the Mission Implementation Plan
 - take account of the priorities identified in the programmes and relevant smart specialisation strategies established under Cohesion Policy and other programmes under shared management



HORIZON-MISS-2021-CLIMA-02-02

- The process to develop the pathways should be inclusive and participatory;
- The process to develop the pathways should be accessible to as many regions and communities as possible, while direct support should be provided to at least 100;
- Priority should be given to regions and locations with high vulnerability, limited resources and /or low adaptative capacity – process to select them should be included in the proposal – it should ensure variety of locations are represented reflecting the diversity in climatic risks;
- Selection of regions and communities should start as soon as possible: the first set of them should be fully engaged within 15 months after the start of the project and a total of 100 are expected to be on-boarded in the first 3 years;
- It is expected that each region and community will develop its transformation pathway within 18-24 months from having be on-boarded;
- The overall project duration is expected to be 5 years in order to assure on-boarding and support of 100 regions and communities



HORIZON-MISS-2021-CLIMA-02-03

- Towards asset level modelling of climate risks and adaptation
- Type of action: Research and Innovation Actions
Budget available: 5 millions EUR
Expected EU contribution per project: 1.5 to 2.5 millions EUR

Number of projects expected to be funded: 2



HORIZON-MISS-2021-CLIMA-02-03

- Scope:
- This topic addresses the provision of asset-level information to public authorities on critical infrastructure.
- Should consider the effect of multiple hazards (including complex, cascading and compound disasters)
- Should develop improved assessment models, including improved model coupling
- Should consider several critical infrastructures across several regions and how their functioning might be impeded by climate change induced risks
- Should include reconstruction costs, the costs of not providing the intended services as well as knock-on effects on other systems
- Should give due regards to the technical guidance on the climate proofing of infrastructure in the period 2021-2027



HORIZON-MISS-2021-CLIMA-02-04

- Large scale demonstrators of climate resilience creating cross-border value
- Type of action: Innovation Actions
Budget available: 50 millions EUR
Expected EU contribution per project: 15 to 25 millions EUR
Number of projects expected to be funded: 2-3
- Additional conditions:
 - demonstration in min 3 regions
 - clear written commitment from the regions in which the action will be implemented
 - letter(s) of intent annexed to the proposal and signed by the corresponding authority(ies)



HORIZON-MISS-2021-CLIMA-02-04

- Scope:
- Large-scale demonstrations of scientifically sound innovative solutions with concrete measurable impacts leading to an increase of the resilience and adaptation capacity to climate change.
- Scientific development and innovation should address specific needs at regional and local scale, fostering inter-regional collaborative actions to demonstrate and scale up effective solutions.
- No thematic focus is pre-defined, therefore the proposal should define the most relevant climate vulnerabilities and risks to be addressed in the regions involved.
- Collaboration between regions front-runners and most experienced in climate resilience building with regions less experienced and vulnerable to similar climate should be envisioned:
 - At least demonstration in 3 regions, located in different EU Member States or Horizon Europe associated countries.
 - At least one of the demonstration should take place in a less developed region (as defined under the Cohesion policy).



HORIZON-MISS-2021-CLIMA-02-04

- Horizon Europe to generate substantial additional investments from national and European public funding programmes and from private sources.
- A clear written commitment from the participating regions in which the action proposed will be implemented in case the project will be selected for funding:
 - expressed by a letter of intent signed by the corresponding authority;
 - stating the willingness of the Regional authority to seek (when possible) complementary funding from other national and European funds for investments aiming at increasing resilience and adaptation to climate change.
- A scalability plan should be developed including the diffusion of innovative solutions, and a process for commitments (including funding and governance) in adopting large-scale resilience building (i.e. guarantees for the non-reversibility, sustainability and continuity of the actions after the end of the project).
- Project duration is expected to be 4-5 years, with visible results in situ by the end of the project.
- Commitment to sustain longer term results and follow up beyond the end of the project duration



HORIZON-MISS-2021-CLIMA-02-05

- Local engagement of citizens in the co-creation of societal transformational change for climate resilience
- Type of action: Research and Innovation Action
Budget available: 5 millions EUR
Expected EU contribution per project: 3 to 5 millions EUR
- Number of projects expected to be funded: 1



HORIZON-MISS-2021-CLIMA-02-05

- Scope:
- To support regions and communities participating in the Mission and beyond in strengthening the engagement of citizens (and other local stakeholders) in the co-creation of societal transformational change for climate resilience
- The proposals should:
 - provide direct support and guidance on how best to engage citizens and stakeholders;
 - undertake research and test innovative solutions using the activities ongoing in the regions and communities as case studies to better understand their success factors and to explore and experiment with new innovative ways of engaging citizens and stakeholders in transformative processes, and to feed this information back to all regions and communities;
 - Ensure synergies between the Mission and other relevant initiatives in engaging citizens and stakeholders at local, national, and European level and to share relevant knowledge and experience made in the Mission more broadly.



Teşekkür ederim!

Thank you!



REPUBLIC OF TURKEY
MINISTRY OF INDUSTRY
AND TECHNOLOGY



COMPETITIVE
AND INNOVATIVE
PROGRAMME



TÜBİTAK