



MINISTÈRE
DE L'ENSEIGNEMENT
SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'INNOVATION

*Liberté
Égalité
Fraternité*



Mission Adaptation au changement climatique et aux transformations sociétales

Webinaire du 12 janvier 2022 – présentation des appels 2021

Merci de couper vos micros et caméras



Les missions: késako?

Objectifs

- Répondre à certains défis sociétaux complexes
 - Générer des solutions et initiatives dans une logique de transversalité et de co-conception
 - Provoquer des changements systémiques ayant un fort impact sur la société et allant au-delà des instruments existants.
- ➡ Nouveau rôle de la recherche et de l'innovation (R&I) dans le cadre du programme Horizon Europe, en adoptant une approche globale et en redéfinissant la relation avec les citoyens.

Adaptation au changement
climatique, y compris la
transformation de la société

Santé des
océans, des
mers et des
eaux côtières
et intérieures



5
domaines
de missions



Cancer



Villes neutres
pour le climat et
intelligentes



Santé des
sols et
alimentation



Contexte politique : la nouvelle stratégie Adaptation au changement climatique

Adoption le 24 février 2021

Vision : d'ici à 2050, l'UE sera une société résiliente au changement climatique, pleinement adaptée aux effets inévitables de ce changement.

Objectifs :

- Une adaptation plus intelligente - améliorer les connaissances et gérer l'incertitude.
- Adaptation plus systémique - soutenir l'élaboration des politiques à tous les niveaux et dans tous les secteurs.
- **Une adaptation plus rapide - accélérer l'adaptation dans tous les domaines.**
- Intensifier l'action internationale en faveur de la résilience climatique



Le plan de mission en œuvre ou *implementation plan (CE)*



Implementation Plan Mission Adaptation...

publié le 29/09/2021



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**Lancement officiel de toutes
les missions le 29/09/2021**

<https://www.horizon-europe.gouv.fr/lancement-de-la-mission-adaptation-au-changement-climatique-et-aux-transformations-sociales-27800>

Vision à long terme de la stratégie d'adaptation au changement climatique :

En 2050, l'Union européenne pourra s'adapter aux effets inévitables du changement climatique et devenir résiliente au changement climatique.

Vision de la mission Résilience climatique :

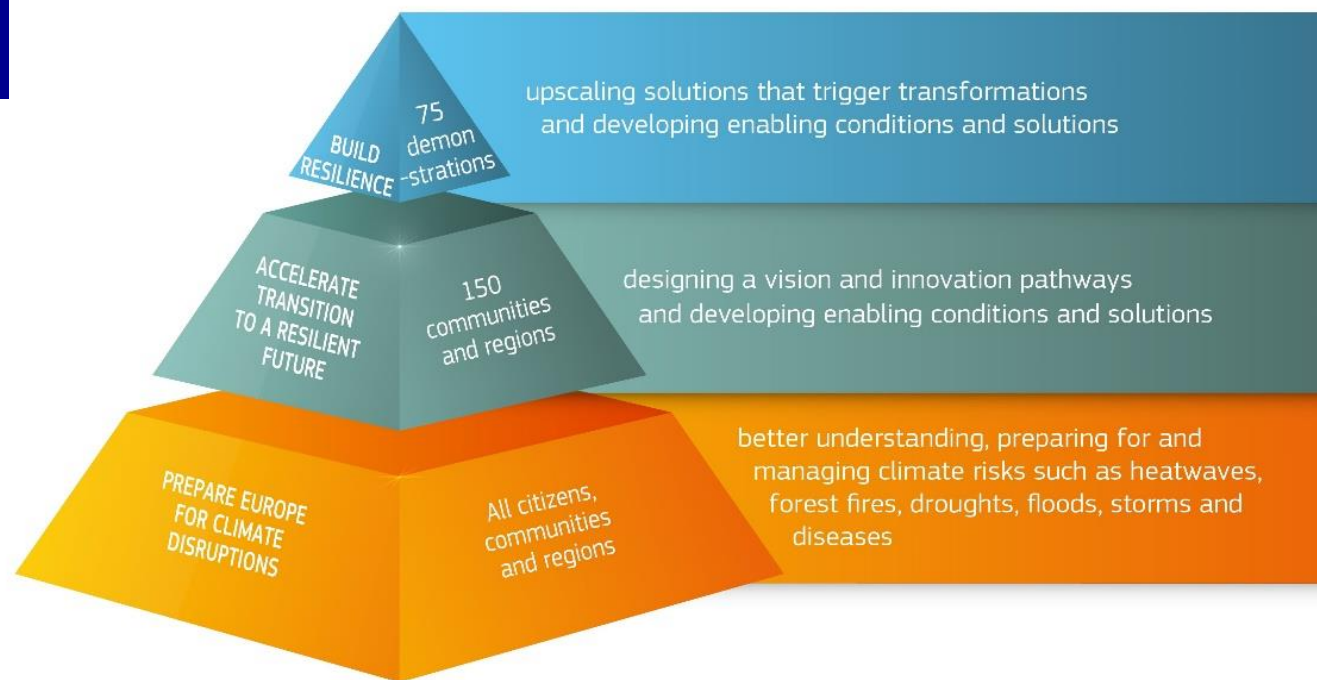
D'ici à 2030, accélérer les transformations intelligentes et systémiques vers la résilience climatique.

Objectif de la mission:

Aider au moins 150 régions et communautés européennes à devenir résilientes au climat d'ici à 2030.

Avec 3 objectifs cibles :

1. Préparer et planifier la résilience climatique
2. Accélérer les transformations vers la résilience climatique
3. Démontrer les transformations systémiques vers la résilience climatique



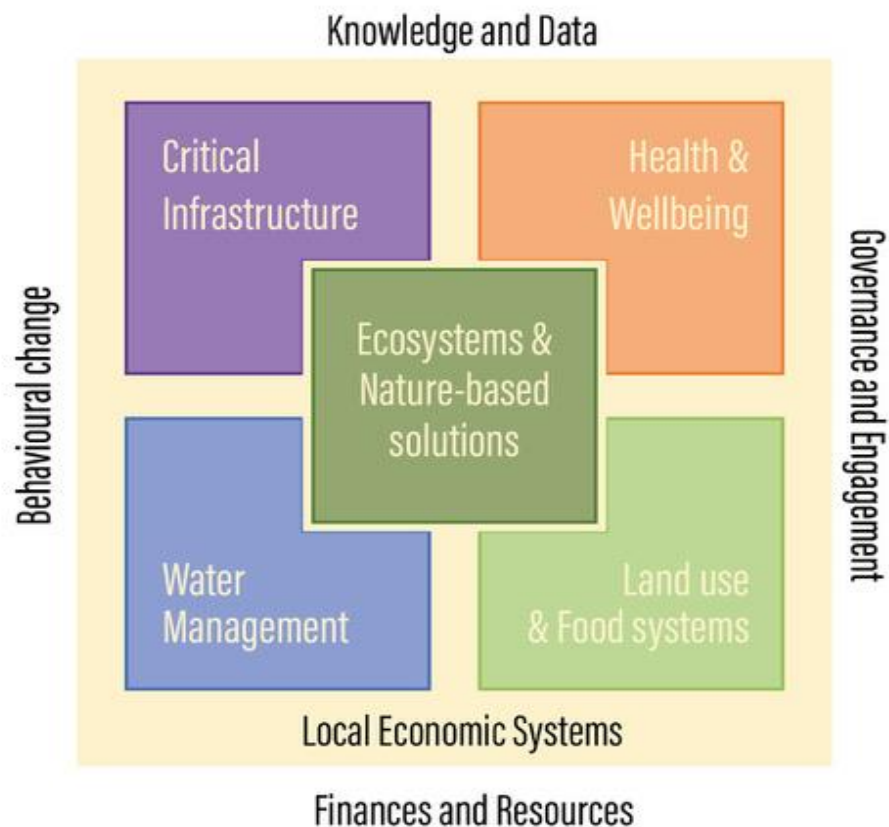
Objectif de la mission:

Aider au moins 150 régions et communautés européennes à devenir résilientes au climat d'ici à 2030.

Regions and Communities : définition from the Mission Implementation Plan Glossary
[climate_mission_implementation_plan_final_for_publication.pdf \(europa.eu\)](#)

- **Regions** are generally considered to be at NUTS 2 level ;
- **Communities** are “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.

Implementation plan: Introduction



Systemes communautaires-clés/innovation areas

Une approche locale prenant en compte les différents niveaux de vulnérabilité et de préparation au changement climatique, le niveau d'ambition et les besoins en matière d'innovation de chaque région.

Une approche systémique, réunissant plusieurs domaines d'innovation pour améliorer la résilience des systèmes-clés en développant les conditions propices à la transformation.

Une approche inclusive réunissant tous les acteurs concernés comme les administrations, le secteur privé et la société civile, en particulier les citoyens.

OBJECTIF 1 : Préparer et planifier la résilience climatique

2 topics ouverts le 11/01/2022

Portée : toutes les régions et communautés

ÉTAPE 1 : Meilleure compréhension de l'exposition aux risques climatiques

- Aider les régions à accéder à la richesse des connaissances sur les impacts et les risques du changement climatique (**Climate ADAPT**; risk data hub; observatoire européen du climat)
- Développer et soutenir l'utilisation d'un **cadre européen d'évaluation des risques climatiques**
- Fournir des connaissances, notamment pour développer, innover et favoriser l'adoption de services numériques sur le climat et la résilience.

OBJECTIF 2 : Accélérer les transformations vers la résilience climatique

Portée : D'ici à 2030, au moins 150 régions et communautés auront accéléré leur transformation vers la résilience climatique.

ÉTAPE 2 : Mobiliser le soutien (*financier*) et l'engagement (*des parties prenantes et citoyens*)

- Etablir des structures de **gouvernance** locale afin de piloter la transformation

ÉTAPE 3 : Formuler une vision et des voies de transformation vers la résilience climatique - **1 topic ouvert le 11/01/2022**

- Formuler des visions d'un avenir résilient au changement climatique et les **moyens** d'y parvenir

ÉTAPE 4 : Orchestrer les innovations et tester les solutions transformatrices

- Promouvoir l'expérimentation, l'innovation et l'essai de solutions transformatrices

OBJECTIF 3 : Démontrer des transformations systémiques vers la résilience climatique

Portée : D'ici 2030, au moins 75 démonstrations de transformations systémiques au niveau régional et interrégional

ÉTAPE 5 : Créer un impact à grande échelle

- Stimuler le déploiement à grande échelle de solutions éprouvées pour la résilience climatique et la transformation des systèmes d'approvisionnement et des conditions favorables, afin d'atteindre les objectifs de la vision d'un avenir résilient au changement climatique.

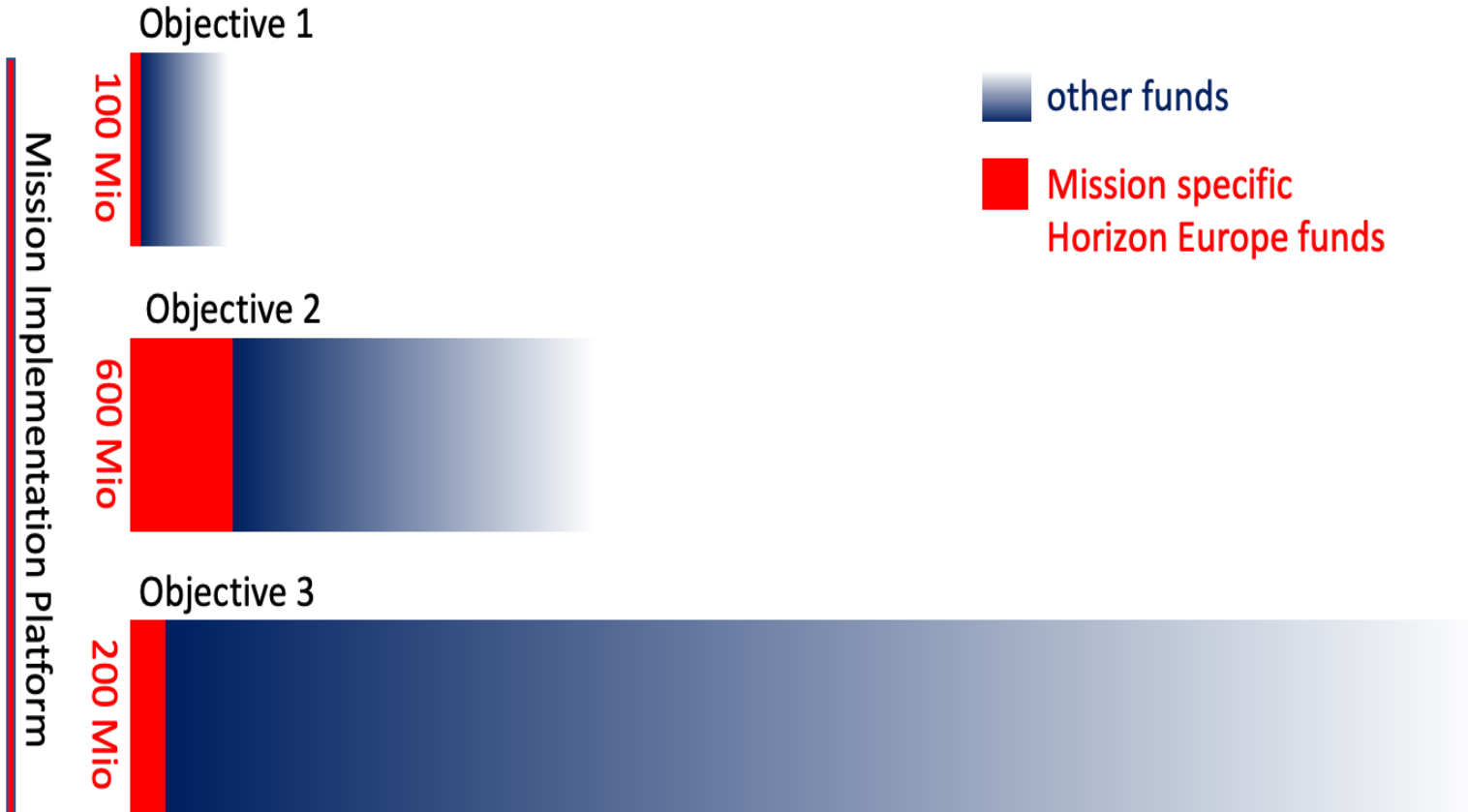
ÉTAPE 6 : Création de valeur transfrontalière - 1 topic ouvert le 11/01/2022

- Encourager les projets de démonstration sans frontières de la résilience climatique dans un certain nombre de régions européennes.

Plate-forme mise en œuvre de la mission (Mission Implementation Platform/MIP) :

- **Soutien coordonné au fonctionnement général et aux activités de la mission** "Adaptation au CC", en tant que service pour la CE et en tant que facilitateur et fournisseur de services horizontaux pour tous les acteurs impliqués et les régions ;
- **Plate-forme de dialogue structurée**, réunissant tous les acteurs concernés et **garantissant que les actions antérieures au lancement de la Mission seront intégrées** dans le plan de travail de la Mission ;
- Assistance en matière **de suivi et d'évaluation**, y compris la mise en place **d'outils de suivi et d'indicateurs** de performance clés pour la mission ;
- Assistance à la Commission avec la **communication globale** sur la Mission, en aidant à identifier et créer des synergies et ajouter de la valeur aux activités de communication, de diffusion et d'exploitation des projets individuels du portefeuille de la Mission, et stimuler les impacts scientifiques, sociétaux et économiques ;
- **Facilitation des échanges** avec les organismes équivalents mis en place pour les **autres Missions** pour exploiter les synergies;
- **Système de support** pour la Mission d'Adaptation Climatique qui **facilitera sa phase de construction** et qui fournira la base du système de support pour l'ensemble du déploiement de la Mission.

Le budget de la Mission



Assumptions:

- HE: ~1 billion Euro per Mission for R&I, facilitation and coordination
- other funds include:
 - other MFF funds (ERDF, ESF+, EAFRD, LIFE, ...)
 - national funds
 - private finances
- Leveraging ratio of HE : other funds = 1 : 10

Les topics en lien avec la Mission Adaptation :
WP Missions 2021-2022
WP Cluster 5 2021-2022

HORIZON-MISS-2021-NEB-01-01: Support the deployment of lighthouse demonstrators for the New European Bauhaus initiative in the context of Horizon Europe mission

« *This action will contribute to the Delivery of the New European Bauhaus (NEB) initiative by deploying mission-oriented pilot projects that will act as lighthouse demonstrators for future NEB initiative...* »

HORIZON-CL5-2022-D1-02-04: Supporting the formulation of adaptation strategies through improved climate predictions in Europe & beyond

“**Support to the implementation** of the new EU Adaptation Strategy and the Mission on adaptation to climate change.”

HORIZON-CL5-2022-D1-02-05: Let nature help do the job: Rewilding landscapes for carbon sequestration, climate adaptation and biodiversity support

“**Support the implementation** of the Mission on Adaptation to climate change”

WP Missions
CSA

Budget AAP : 25M€

Budget/projet : 3-5M€

Opening : 28/09/2021

Deadline : 25/01/2022

WP Cluster 5

RIA

Budget AAP : 20M€

Budget/projet : 10M€

Opening : 12/10/2021

Deadline : 10/02/2022

WP Cluster 5

RIA

Budget AAP : 17M€

Budget/projet : 8/9M€

Opening : 12/10/2021

Deadline : 10/02/2022

WP Missions 2021-2022 : les 5 appels 2021 ouverts depuis le 11/01/2022

Topic	Description	Type d'action	Budget (M€) global	Budget/projet (M€)	Nre de projets financés	Opening date	deadline
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	15 à 20	1	11/01/2022	12/04/2022
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	25 à 30	1	11/01/2022	12/04/2022
HORIZON-MISS-2021-CLIMA-02-03	Towards asset level modelling of climate risks and adaptation	RIA	5	1,5 à 2,5	2	11/01/2022	12/04/2022
HORIZON-MISS-2021-CLIMA-02-04	Large scale demonstrators of climate resilience creating cross-border value	IA	50	15 à 20	2	11/01/2022	12/04/2022
HORIZON-MISS-2021-CLIMA-02-05	Local engagement of citizens in the co-creation of societal transformational change for climate resilience	RIA	5	3 à 5	1	11/01/2022	12/04/2022

+ Other actions :

Public **Procurement** for Building the **Implementation Platform** for the Climate Adaptation Mission (10M€)

EEA support to the Mission in developing the monitoring and tracking system and visualisation of the progress in the resilience building, expanding **ClimateADAPT** (2,08M€)

Climate Adaptation **Stakeholders Forum** (0,30M€)

- 1st objective of the Mission: preparing and planning for climate resilience and the need for a better understanding of climate change related risks

Scope:

Step I- Development and beta testing of the climate risk and vulnerability assessment framework tool

- **Multi sector assessment** framework tool should be developed for broad application to **all European regions & communities**.
- Should be designed to be accessed by non-experts users and the relevant stakeholders with user-friendly features
- Make an efficient use of the currently available high-resolution data & services (Copernicus, Climate Change Service C3S...)
- Provide a benchmark & comparison of the already ongoing climate risk assessment framework & identify common grounds & gaps
- Framework should be based on the state of art **multi-sector risk** framework with its 3 components (hazard, exposure, vulnerability)...

Step II- 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

- Based on the developed framework
- Support at least 50 regions that haven't developed their multi-hazard risk assessments and profiles yet or need to upgrade and refine existing ones
- Use of **cascading grants (60% of the budget)** to provide catered support to local and regional administrations in their development of comprehensive risk management plans

- 1st objective of the Mission: preparing and planning for climate resilience and the need for a better understanding of climate change related risks

Scope:

- Information on assets is necessary. **Asset-level modelling** requires combining meteorological/hydrological hazard models with information on assets
- Consider the effect of **multiple hazards** and should develop improved assessment models, including improved **model coupling** (ex: coupling hazard, exposure and vulnerability, stemming from sources such as Copernicus...)
- Consider several **critical infrastructures** (for ex. electricity supply, ICT, transport systems) across several regions
- Demonstrate that the proposal goes beyond state of the art and should identify **data gaps** and discuss approaches to overcome the data gaps in the future :
 - a) resolution and completeness of data for exposure assessments
 - b) data on construction costs, construction quality and characteristics (notably protection against extreme weather events) as well as on planned redundancies
 - c) data on the use of the infrastructures (ex: how many trains, cars or households are served)

- 2nd objective of the Mission: aiming to mobilise at least 150 regions in testing the solutions most locally needed to build climate resilience

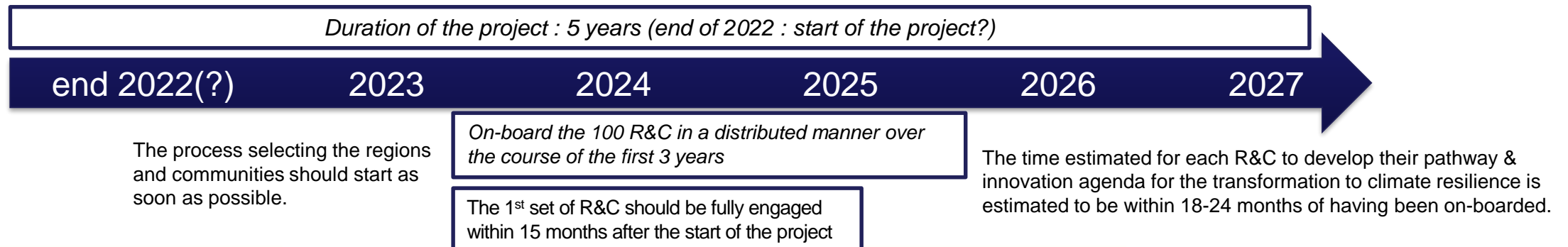
Scope:

- To support at least 100 regions and communities (R&C) in formulating their vision of a climate resilient future and the transformative adaptation **pathways, plans** and **innovation portfolios** to reach it. Direct and substantive support & capability building will be provided to the regions, including **through cascading funds** (70% of the action).
- Role of the consortium selected under this topic? Provide the **general framework** and **tailored support to select R&C** & facilitate the orchestration of activities across regions and communities.
- Proposal should :
 - focus on **building capacity** of regions and communities to take the leadership of their own transformative adaptation pathways
 - **give priority** to regions or locations with the high vulnerability, limited resources and/or low adaptive capacity
 - include **process and criteria how to identify** the R&C most in need of these services (criteria must ensure a variety of locations, in many countries, reflecting the diversity in climate risks in Europe...)
 - describe how the consortium would define & implement a **common impact framework** guiding the work with the R&C (impact creating by implementing which individual element & combinations of elements of portfolio of innovations and activities ; impact of working together on portfolio design...)
 - **structure & organise the selections** of R&C & their local partners organisations
 - **support the R&C** in the various steps of the various developing the pathways and innovation agendas
 - **orchestrate cross-regional exchanges** to learn from each other
 - **communicate** and share relevant information and lessons learned more broadly (through Climate Adaptation...)
 - collaborate with **on-going H2020 projects** (Green Deal call)
- Consortium should include partners with relevant operational & financial experience and viability

Scope:

Regional and local authorities will be in the lead of the process developing their respective pathways towards climate resilience and corresponding innovation agendas. Will be supported by consortium selected under this topic, by a local/regional, and/or national partner organisation with experience of working climate adaptation (max : 300k€/R&C)

- The development of regional pathways towards climate resilience should build on assessments of trends & projections of future climate risks.
- The pathways, plans and innovations should reflect **the 10 areas of innovation**.
- Take into account Recovery and resilience Plans, relevant regional smart specialisation strategies.
- The process developing pathways should **be inclusive, engaging** (relevant stakeholders, public adm., private sector, univ., civil society...).
- This processus should include : **deliberations** on the regions/communities' vision for climate resilience and **assessment of the community systems** ; the analysis, visualisation and deliberation of different possible features possibly including **different solutions and innovations**, that are robust, cost-effective ; the elaboration of a set of **designed innovative adaptation solutions**...
- Attention should be paid to possible synergies with other funds : LIFE ; ERDF ; ESF ; BEI ; HE ; national or regional programmes....)



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

- 3rd objective of the Mission: aiming to deliver at least 75 deep demonstrations of systemic transformations to climate resilience

Scope:

- Proposals under this topic must deploy **large-scale demonstrations of scientific sounded innovative solutions** 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.
- **Full openness bottom – up** principle, promoting the participation of the key actors in all EU Member States and associated countries. No top-down thematic focus is pre-defined to leave each proposal define the most relevant climate vulnerabilities and risks to be addressed.
- **Inter-regional collaborative actions** to demonstrate and scale up effective solutions are highly encouraged where **front-runner** regions (most experienced in climate resilience) would collaborate in addressing interregional challenges **with regions less experienced that are vulnerable to similar climate impacts**.
- Proposals should include at least demonstration in **3 regions** located in different EU MS or associated countries, with at least demonstration in a less developed region. For each of demonstration in front-runner regions, proposal should support **replication** of the successful demo in at least 2 more less experienced regions. Consortium may include other type of partners (private, public research organisations, enterprises...)

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

- The contribution from HE is intended to act as **seed finance** that boosts local adaptation and generate substantial additional investments from national and European public funding programmes and from private sources.
- A **clear written commitment** is required from the participating regions in which the action proposed will be implemented in case the project will be selected for funding. This should be **expressed by a letter of intent** signed by the corresponding authority. The letter should state 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. This will include in particular European Regional Development and Cohesion programmes and the Next generation EU.
- In agreement with the authorities responsible for the territories where the actions will be implemented the consortium should develop a **scalability plan** including the diffusion of innovative solutions, and a process for commitments (including funding and governance) in adopting large-scale resilience building. It should seek guarantees for the non-reversibility, sustainability and continuity of the actions after the end of the project.
- Proposals **should (when relevant) build upon existing knowledge and adaptation solutions** designed and developed from previous projects on climate adaptation funded by EU and National programmes.
- Proposals should be consistent with the EU actions taken to boost resilience over the past years and in particular the strategies or plans developed by EU Member states and associated countries.
- Projects should aim for **clear, discernible results in the short- to medium-term**, embedding them in a perspective of long-term systemic change.
- **Project duration : 4-5 years.** Projects should provide a detailed description of the results that will be in place by the end of the third year and the timeline to exploit the full results.
- Projects funded under this topic are strongly encouraged to participate **in networking and joint activities** with other funded project under other topics In Mission Climate Adaptation as well as in other relevant missions (exchange knowledge ; joint workshops ; best practices....)

➤ The 3 objectives of the mission

Scope:

To support R&C in the meaningful & effective engagement of citizens & stakeholders in all phases of the mission

Proposals should :

- Provide direct support to the R&C **sharing relevant state-of-art knowledge, best practices** and emerging innovations on **how best to engage citizens and stakeholders (C&S)** and providing **guidance** and support regarding the implementation of citizens and stakeholders engagement activities.
 - Cover a broad range of approaches, mechanisms in each step including the engagement of C&S: co-production of the assessment of climate impact and risks ; co-design, co-development and co-implementation of innovative solutions ; analysis of relevant data & monitoring of climate risks, co-evaluation...
- Undertake research & **test innovative solutions using the C&S engagement** activities ongoing in the R&C as case-studies.
 - Understand how best to employ the various approaches & mechanism to engage C&S. in cultural, social, political & envir. contexts and how participatory practices can be leverage points for more policy interventions... ; better understand the role & optimal use of C&S engagement in process of societal transformations ; test and experiment with innovative approaches (participatory platforms like Conference on the Future of Europe); identify and address the markets potentials & critical elements preventing a larger uptake of citizens observations (ex : H2020 project WeObserver)
- Ensure **synergies** between the Mission and other initiatives in engaging C&S at **local, national & european level** & share relevant knowledge & experience.
 - At European level initiatives such as the Conference on the Future of Europe, the Climate Pact, Education for Climate coalition, the New Bauhaus, ESF+, other missions, the European Green Deal...Build partnerships with and learn from existing participatory and deliberative processes carried out (convention citoyenne pour le climat...); liaison with on-going previous projects (GD 10.3.2) ; cooperate with key stakeholders to tackle disinformation...
- The consortium needs to build **strong relationships** between the local partners collaboration with national, local and regional authorities, social partners, managing authorities and intermediate bodies of Cohesion Policy, stakeholders of S3, Commission Representations, Europe Direct Information Centres, EIT Climate-KIC regional offices, Erasmus+ Offices, EU Covenant of Mayors Office, Global Covenant of Mayors. Possible participation of the **JRC**.

Service level agreement with EEA (European Environmental Agency) :

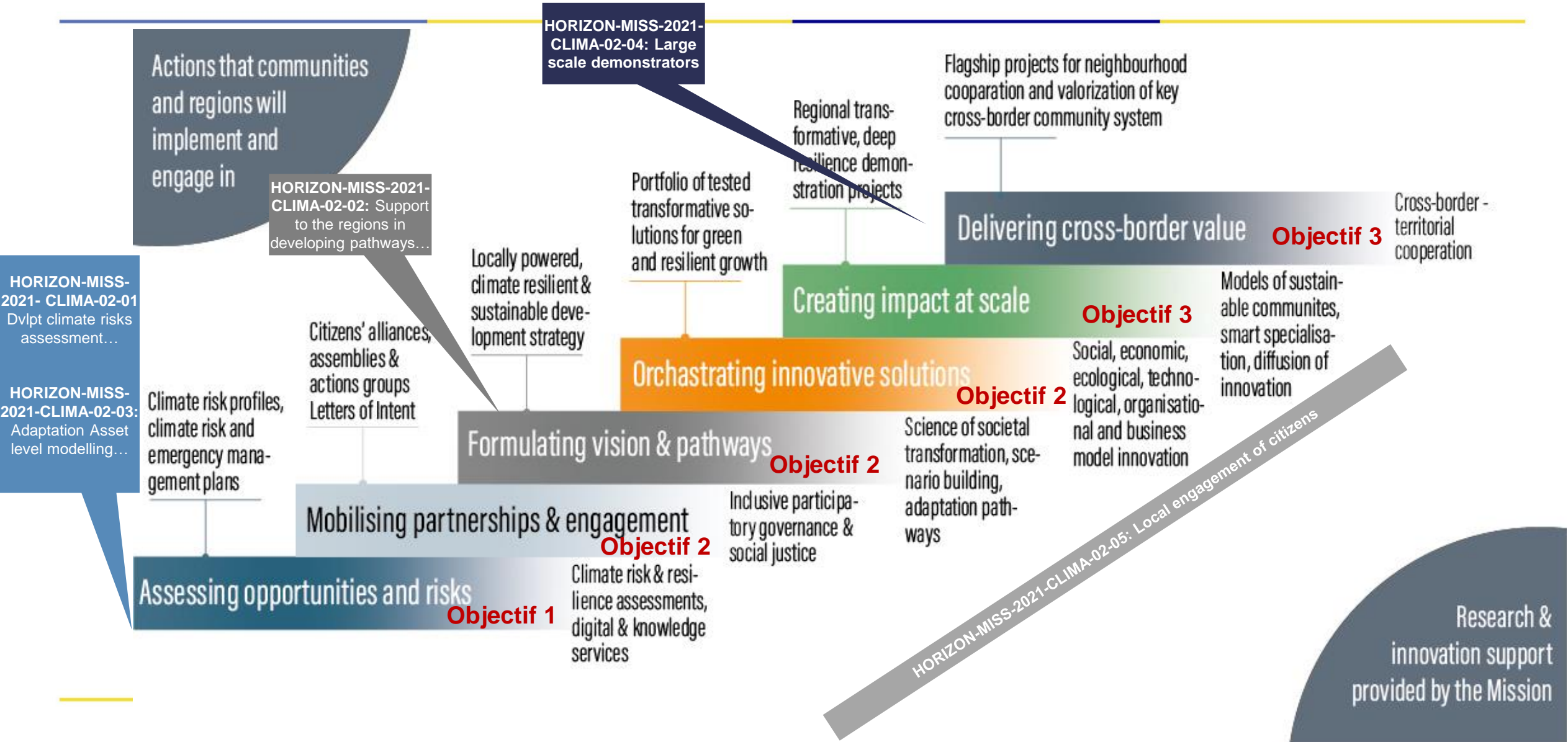
EEA support to the Mission in developing the monitoring and tracking system and visualisation of the progress in the resilience building, expanding Climate-ADAPT :

- To become a **key source of knowledge** on climate risks and transformative adaptation options for the regions.
- To serve as a policy support facility...
- To support the **monitoring and the evaluation** of achievement of the missions' objectives...

Procurement actions

- Building the Implementation **Platform for the Adaptation to Climate Change Mission**
- Climate Adaptation **Stakeholders Forum** : organisation of the first Mission Forum, which will allow for exchange of views on the direction of the Mission from a broad range of relevant actors

Implementation Plan : les objectifs de la mission Adaptation



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A noter :

- 18 et 19 janvier 2022 : infodays (appels 2021) pour toutes les missions organisés par la Commission européenne (19/01 matin= mission Adaptation)
- 21 mars 2022 : PFUE, Conférence de haut niveau sur l'engagement citoyen dans les Missions de l'Union européenne au CESE
- le 7 juin 2022 : 1^{er} Forum Missions organisé par la Commission européenne