

# MOBILISING FINANCE FOR CLIMATE RISK ASSESSMENT AND ADAPTATION

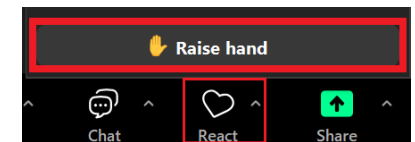
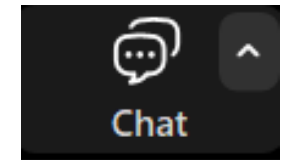
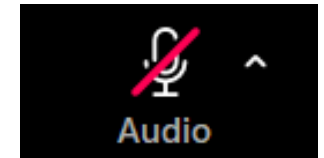
COMMUNITY  
OF PRACTICE

22 MAY 2025  
10:30-12:00 CEST  
WEBINAR



# HOUSEKEEPING

- Please note that the meeting is being **recorded**.
- Please, keep your **mic off**.
- Feel free to post your **questions in the chat** (bottom of the screen) or raise your hand to talk during the dedicated time for Q&A and discussion



# MEETING AGENDA

- ✓ 10:30-10:35 **Welcoming & introduction to the webinar**
- ✓ 10:35-10:40 **CLIMAAX: Funding and supporting local and regional risk assessments** by *Frederiek Sperna Weiland (Deltares)*
- ✓ 10:40-10:50 **P2R: Funding and supporting Regional Resilience Journeys** by Thomas Koetz (Climate KIC)
- ✓ 10:50-11:00 **Understanding Adaptation Finance: Process and Instruments** by *Kit England (Paul Watkiss Associates)* and *Konstantinos Dellis (Athens University of Economics and Business)*
- ✓ 11:00-11:15 **MIP4Adapt Adaptation funding database** by *Lesly Barriga (Fedarene)*
- ✓ 11:15-11:25 **Financing risk and risk reduction: Nature for insurance, insurance for Nature** by Jaroslav Mysiak (CMCC)
- ✓ 11:25-11:55 **Q&A and panel discussion**
- ✓ 11:55-12:00 **Closing remarks and announcement on the CoP future**

# **CLIMAAX AND P2R: FUNDING AND SUPPORTING REGIONAL ADAPTATION**



**Frederiek Sperna  
Weiland (Deltares)**



**Thomas Koetz  
(Climate KIC)**



# EU Mission on Adaptation

Support 150 European regions in becoming climate resilient

Project duration 2023 – 2026:

- Development of Climate Risk Assessment (CRA) Toolbox and Framework
- Cascading fund to enable > 60 climate risk assessments by EU regions

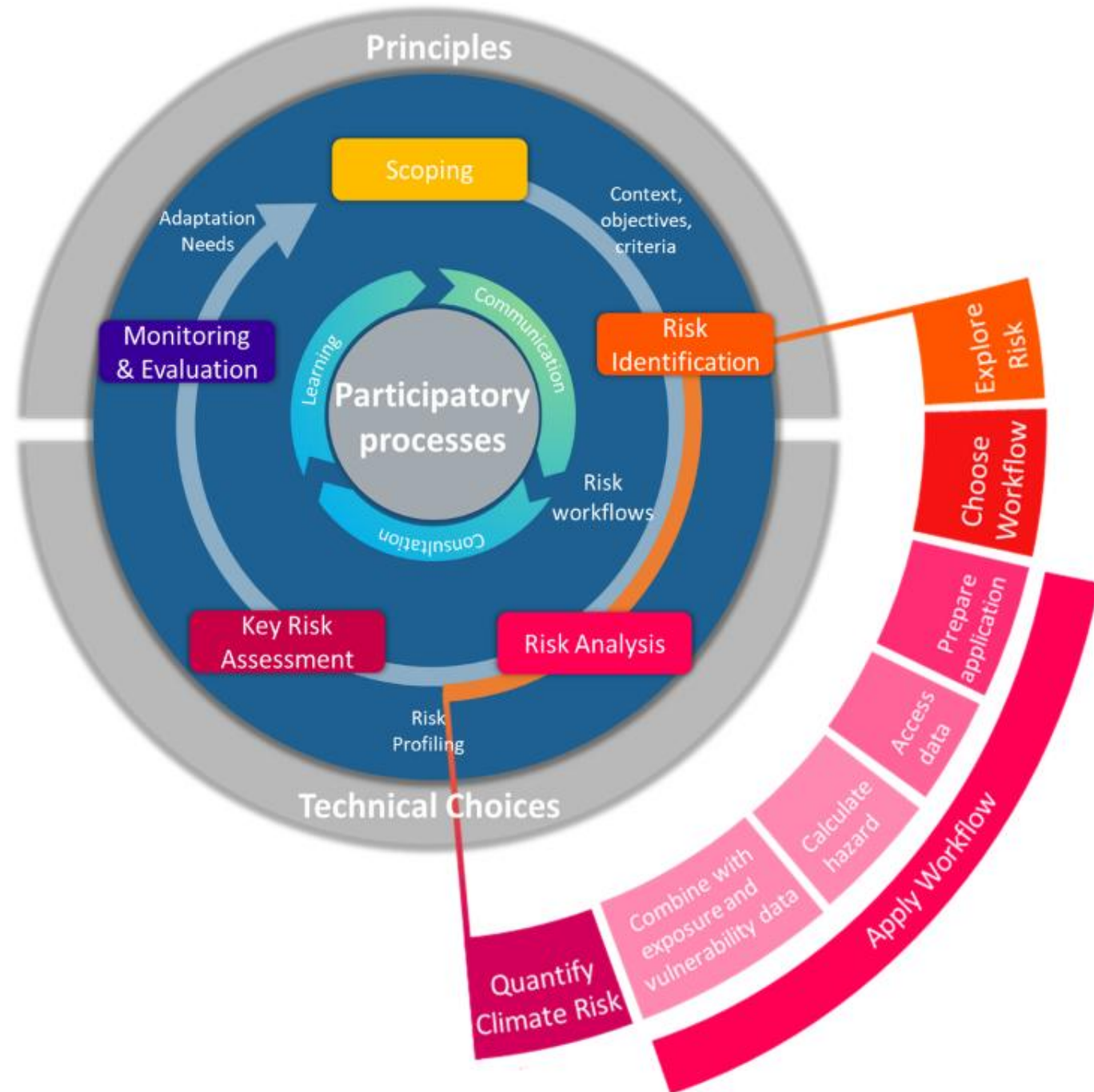


The CLIMAAX project is funded by the European Union under Grant agreement ID 101093864. This publication was funded by the European Union. Its contents are the sole responsibility of the author(s) and do not necessarily reflect the views of the European Union.



# CLIMAAX CRA Framework

- Operational steps of ***iterative*** climate risk assessment
- Participatory approach – need for ***local knowledge***
- Building upon EU RAST and others
- Framework steps connected to CLIMAAX CRA ***Toolbox***



#### About us

The CLIMAAX project

How to start

#### CRA steps

##### What is the CLIMAAX Framework?

Before you start

Scoping

Risk Exploration

Risk Analysis

Key Risk Assessment

Monitoring and Evaluation

Integration in Climate Risk  
Management

#### Risk workflows

How to use risk workflows

 RIVER & COASTAL FLOODS

 HEAVY RAINFALL

 HEATWAVES

 DROUGHTS

 FIRE

 SNOW

 WIND

#### Resources

Support

Guiding questions and answers

FAQ

Glossary

Dashboards and explorers

Software

Datasets

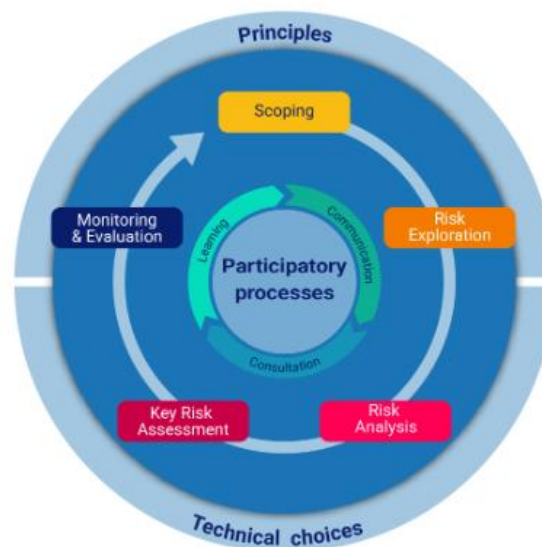


## What is the CLIMAAX Framework?

The CLIMAAX Framework is designed to empower regions to conduct inclusive and harmonised Climate Risk Assessments (CRAs). It translates the ambitions of the EU Mission on Adaptation towards transformational adaptation strategies that build resilience into practice by supporting the advancement and implementation of climate risk assessments.



The Framework proposes to adhere to key principles such as social justice and equity, puts participatory processes central to the process, and provides guidance on the selection of sound technical choices for conducting climate risk assessments. The Framework consists of a five-step process (see [Fig. 1](#)) which forms an iterative cycle. The goal of the CRA Framework is to inform Climate Risk Management (CRM) strategies.



<https://handbook.climaax.eu/>



Operational since Sept 2024

Regularly updated

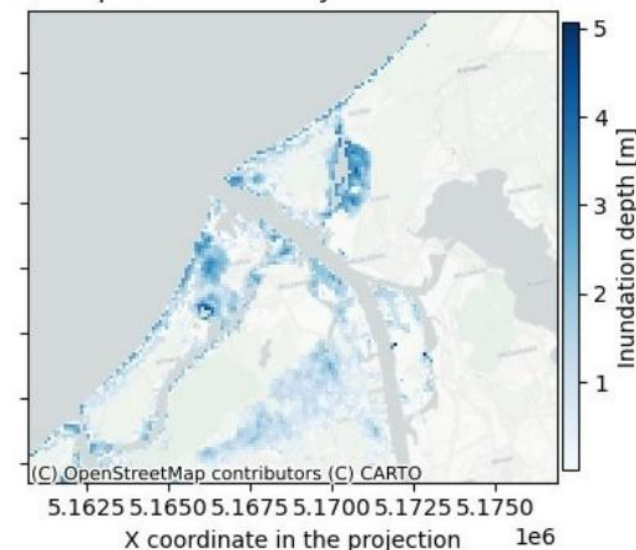
Tested by pilots

## Resources



```
fig, ax = plt.subplots(figsize=(7, 6))
bs=ds_local.where(ds_local > 0).plot(ax=ax, cmap='Blues', alpha=1, vmin=0, vmax=5, add_colorbar=False)
ctx.add_basemap(ax=ax, crs='EPSG:3035', source=ctx.providers.CartoDB.Positron, attribution_size=10)
plt.title(f'Example of a floodmap retrieved from JRC \n for the area of {areaname}', fontsize=12)
fig.colorbar(bs, ax=ax, orientation='vertical', label='Inundation depth [m]');
```

Flood depth for 1 in 100 years extreme event



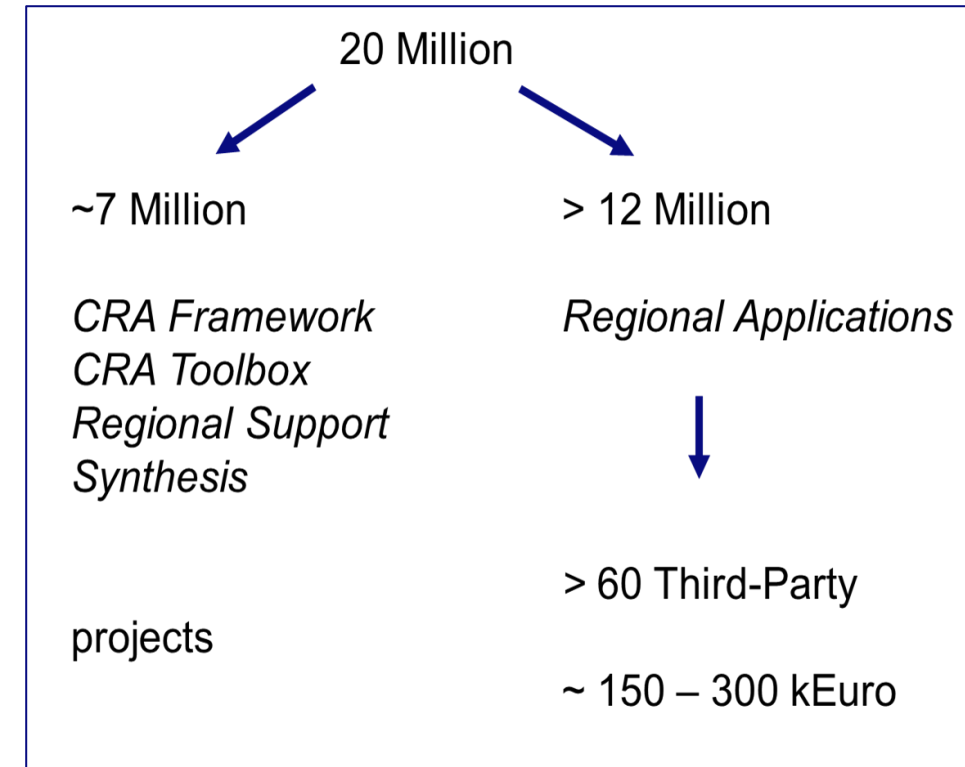


# Cascading funding

- 2 Open calls for Applications
  - First open call : 32 projects started October 2024
  - Second open call : 37 projects starting March 2025
- Applicants: regions or NGO's
- Possibility to sub-contract technical service

! Applicants are responsible for implementation

Payment based on successful deliverables





## SELECTED REGIONS



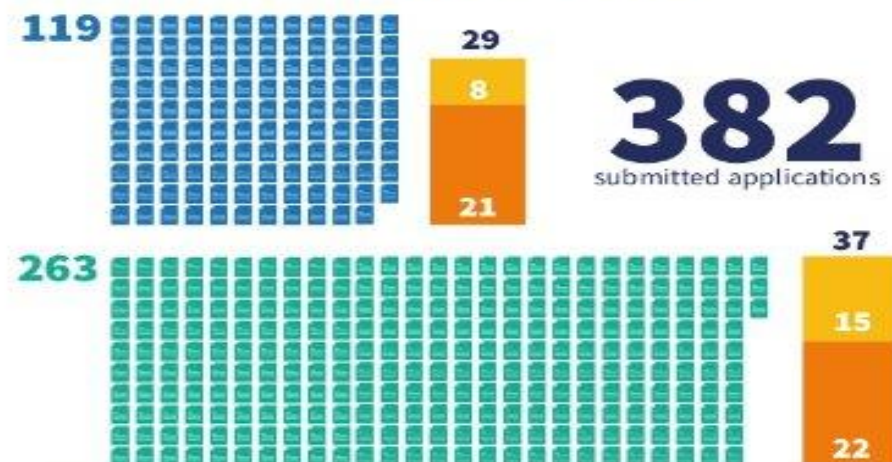
The first Open Call selected 32 regions from 13 countries (10 EU and 3 AC) whereas the second Open Call selected 37 regions from 19 countries (14 EU and 5 AC).

## FUNDING



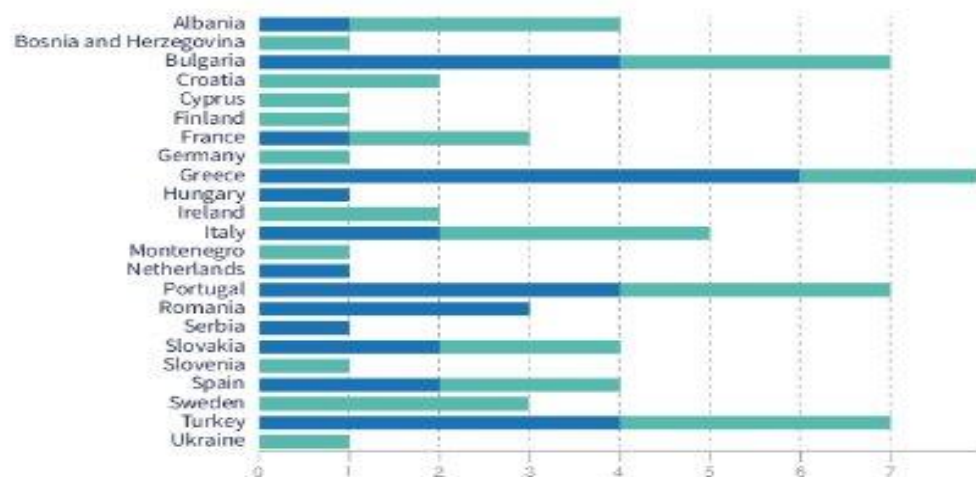
The 69 regions selected through the CLIMAAX Open Calls will receive more than EUR 12 million cumulated funding by the EU Mission on Adaptation to Climate Change.

## APPLICATIONS



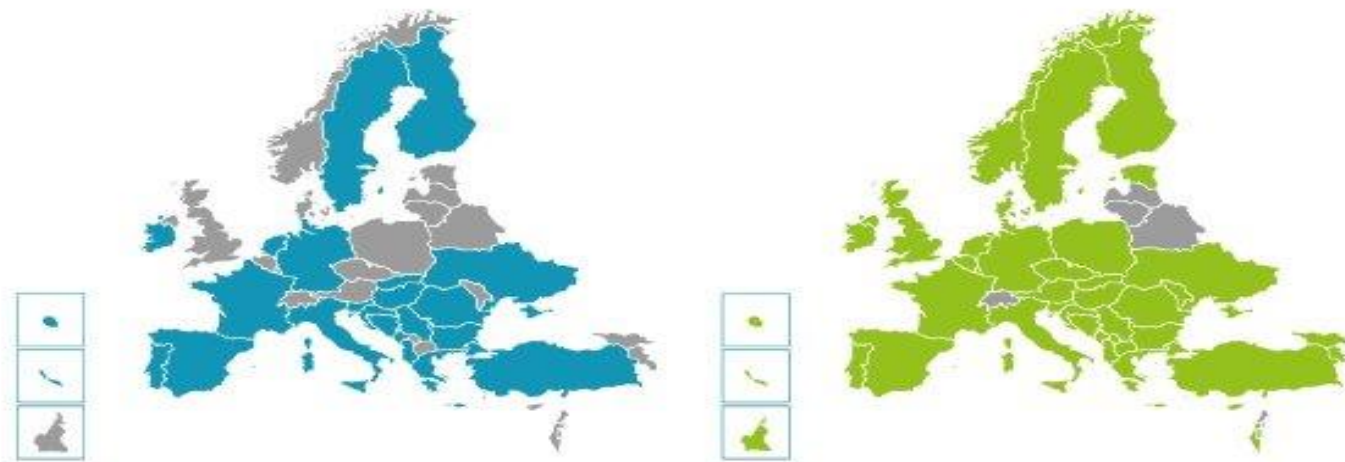
382 proposals, coming from 38 countries, were submitted through the two Open Calls. CLIMAAX consortium received applications from 23 member states of the European Union (EU) and 15 Associated Countries (AC).

## SELECTED REGIONS PER COUNTRY



Considering both Open Calls, Greece counts the largest number of selected proposals (8), followed by Bulgaria, Portugal, and Türkiye (7).

## TWO CALL IN A GLANCE



Country distribution of the 69 selected Regions (left) and the 382 applications (right) of both Open Calls.

# Contact info

<https://www.climaax.eu>

[info@climaax.eu](mailto:info@climaax.eu)

[handbook.climaax.eu](https://handbook.climaax.eu)







PATHWAYS2RESILIENCE

# Pathways2Resilience

Funding and supporting Regional Resilience Journeys  
& Second call for regions and communities



Funded by the European Union under grant agreement No 101093942. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or of CINEA. Neither the European Union nor the granting authority can be held responsible for them.

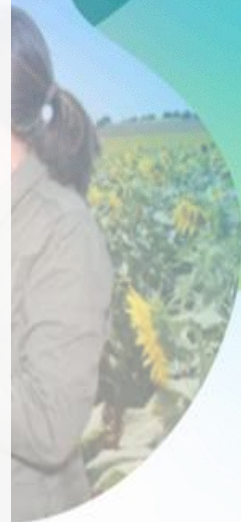




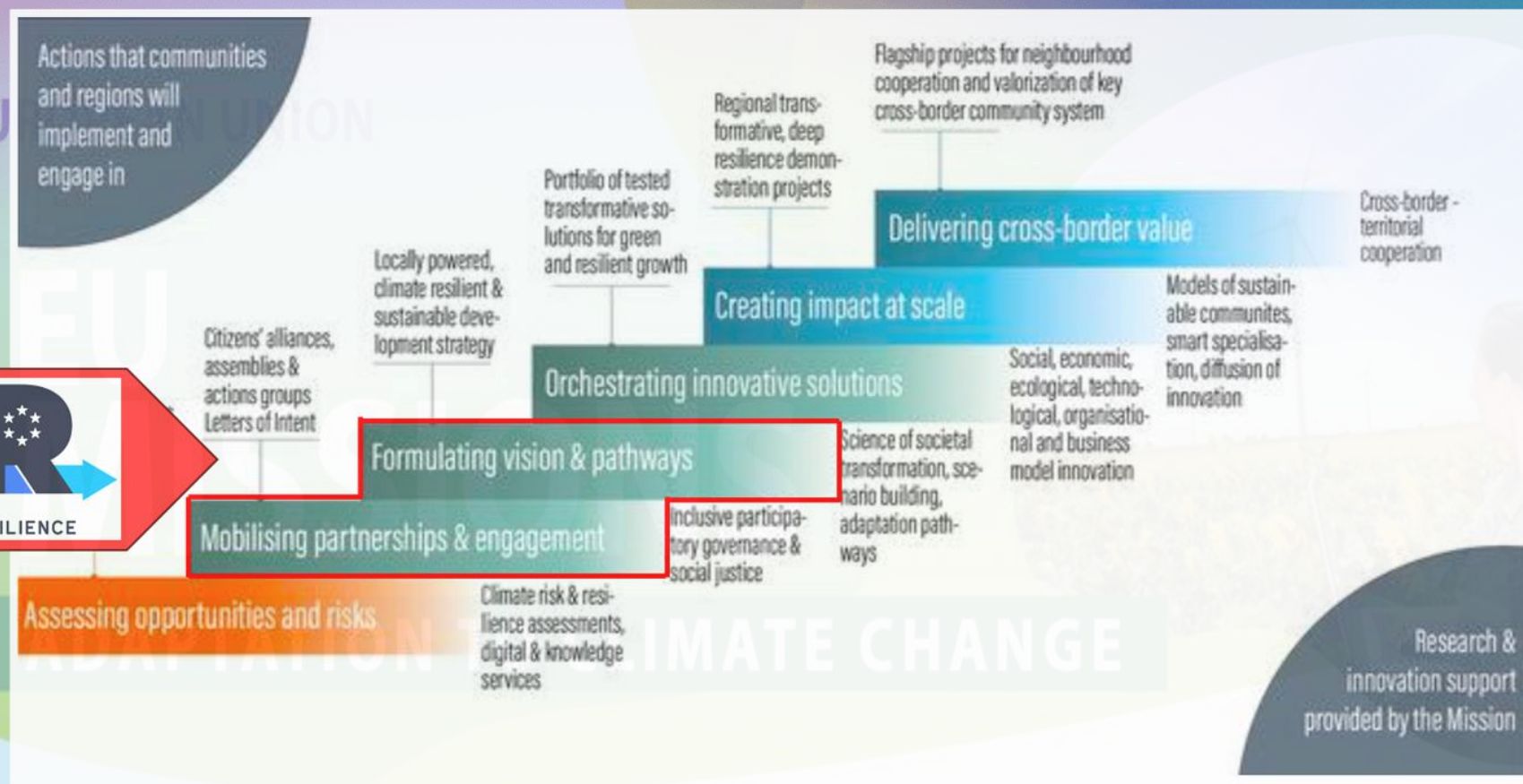
EUROPEAN UNION



Source: UCL, 2020. Image: Gettyimages. #25252525 / 2020. Source: Shutterstock.







Mission Intervention Logic

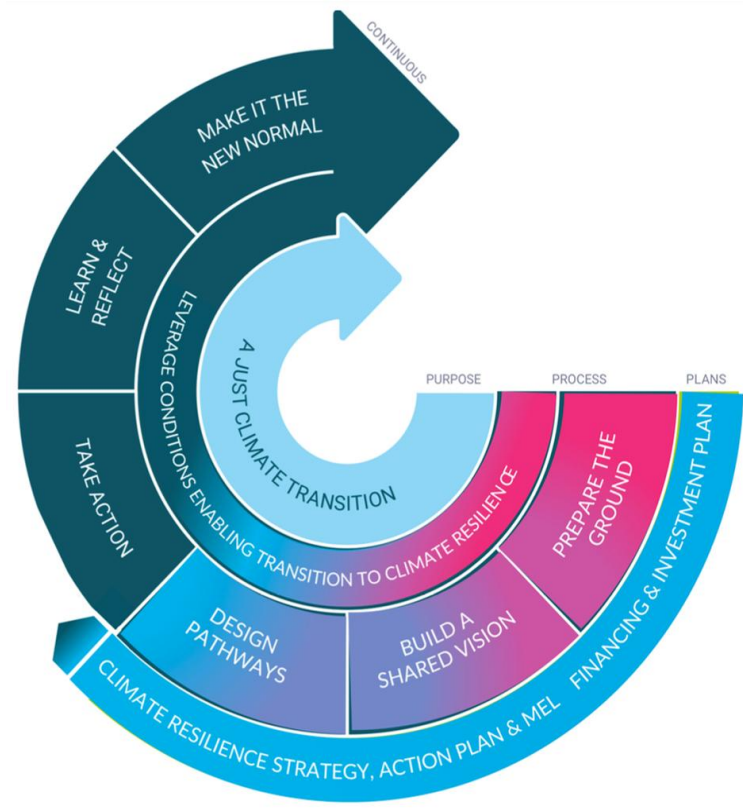
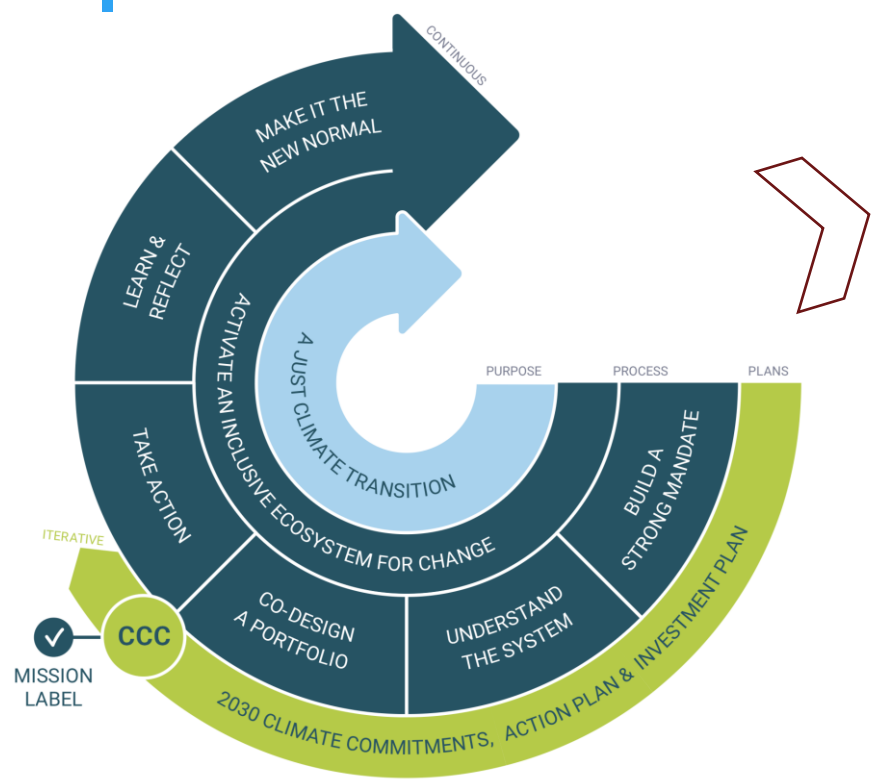


# P2R's Objectives & Key Results

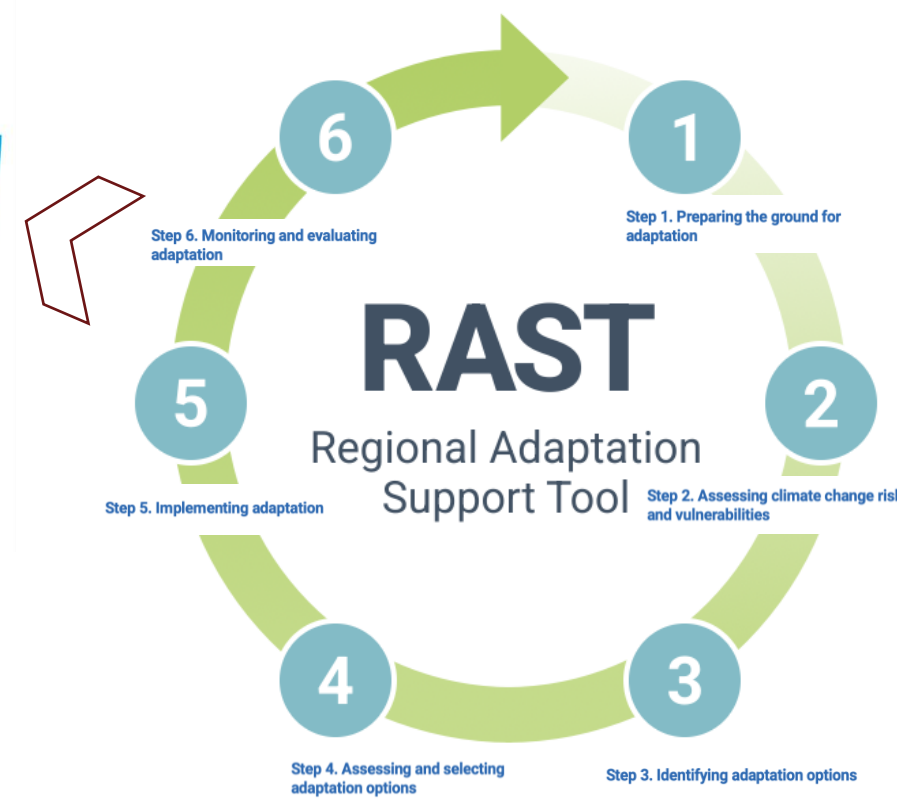
- Support 100 regions and communities in designing / improving their strategies on how to transition to climate resilience including
  - Description of **pathways** with different adaptation options to climate resilience
  - Formulation of a **portfolio** of innovation actions underpinning these pathways
  - Development of a **finance and investment plan**
- Enhancing the capacity and capabilities of the 100 regions and communities to continue to lead on their own transition to climate resilience
- Develop, test & validate a framework, support programme, and capacity building approach  
learning from the 100 regions and communities



# P2R's Regional Resilience Journey



Framework





# P2R's Regional Resilience Journey



## PHASE 1: PREPARE THE GROUND

### 1.1 A BASELINE

- 1.1.1 Gather evidence
- 1.2 Frame the problem

### 1.2 UNDERSTAND THE SYSTEM

- 1.2.1 Map relevant system(s)
- 1.2.2 Identify stakeholders

### 1.3 ASSESS CAPABILITIES

- 1.3.1 Assess climate risks
- 1.3.2 Assess capabilities

## PHASE 2: BUILD A SHARED VISION

### 2.1 ENSURE OWNERSHIP & COMMITMENT

- 2.1.1 Secure high-level support
- 2.1.2 Foster engagement

### 2.2 EXPLORE POSSIBILITIES FUTURES

- 2.2.1 Explore possible climate resilient futures

### 2.3 CO-CREATE SHARED VISION

- 2.3.1 Co-create shared vision for the transition to climate resilience

### 2.4 DEVELOP A THEORY OF CHANGE

- 2.4.1 Reflect on how change is supposed to happen

## PHASE 3: DESIGN PATHWAYS

### 3.1 IDENTIFY & ASSESS OPTIONS

- 3.1.1 Identify options for adaptation pathways
- 3.1.2 Assess the effectiveness of options for adaptation pathways

### 3.2 DESIGN PORTFOLIO OF INTERVENTIONS

- 3.2.1 Formulate pathways to climate resilience
- 3.2.2 Evaluate pathways to climate resilience
- 3.2.3 Develop a portfolio of innovation actions

### 3.3 PREPARING FOR IMPLEMENTATION

- 3.3.1 Develop action plan to implement your climate resilience strategy
- 3.3.2 Develop a monitoring, evaluation and learning plan

GOVERNANCE,  
ENGAGEMENT &  
COLLABORATION

FINANCES &  
RESOURCES

CAPABILITIES &  
SKILLS

BEHAVIOURAL  
CHANGE

EXPERIMENT,  
LEARN & REFLECT

LEVERAGE CONDITIONS ENABLING TRANSITION TO CLIMATE RESILIENCE

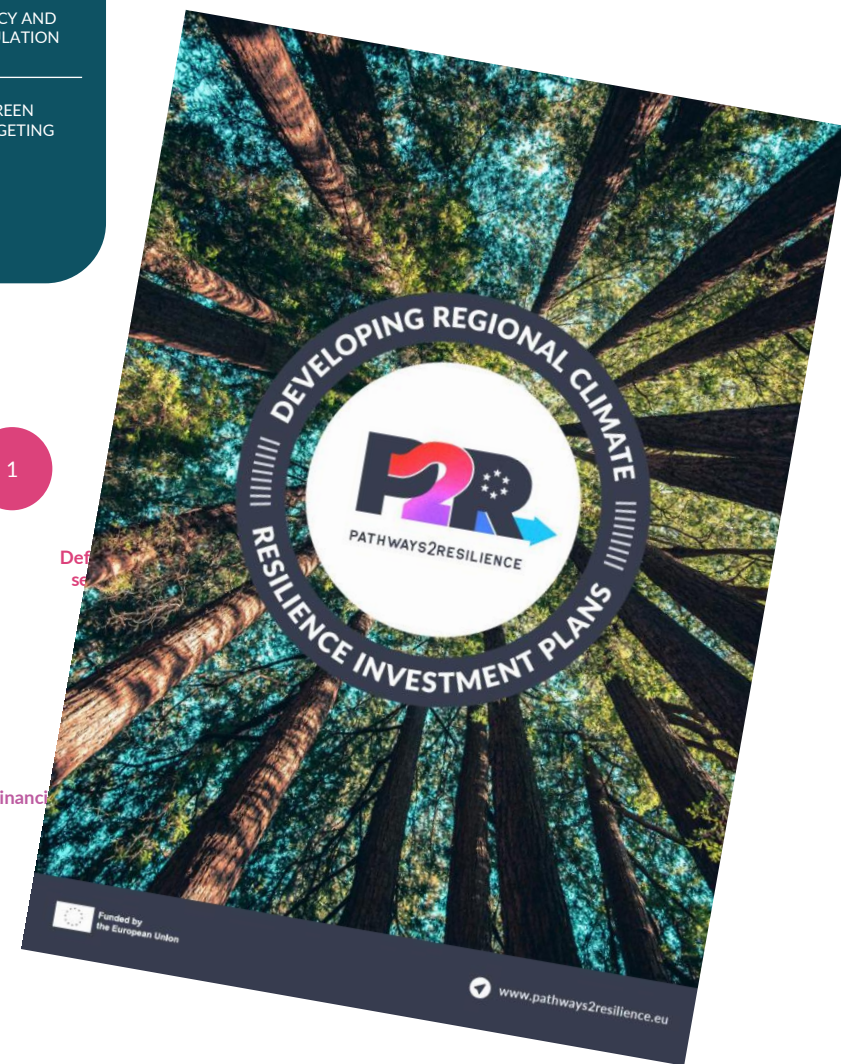
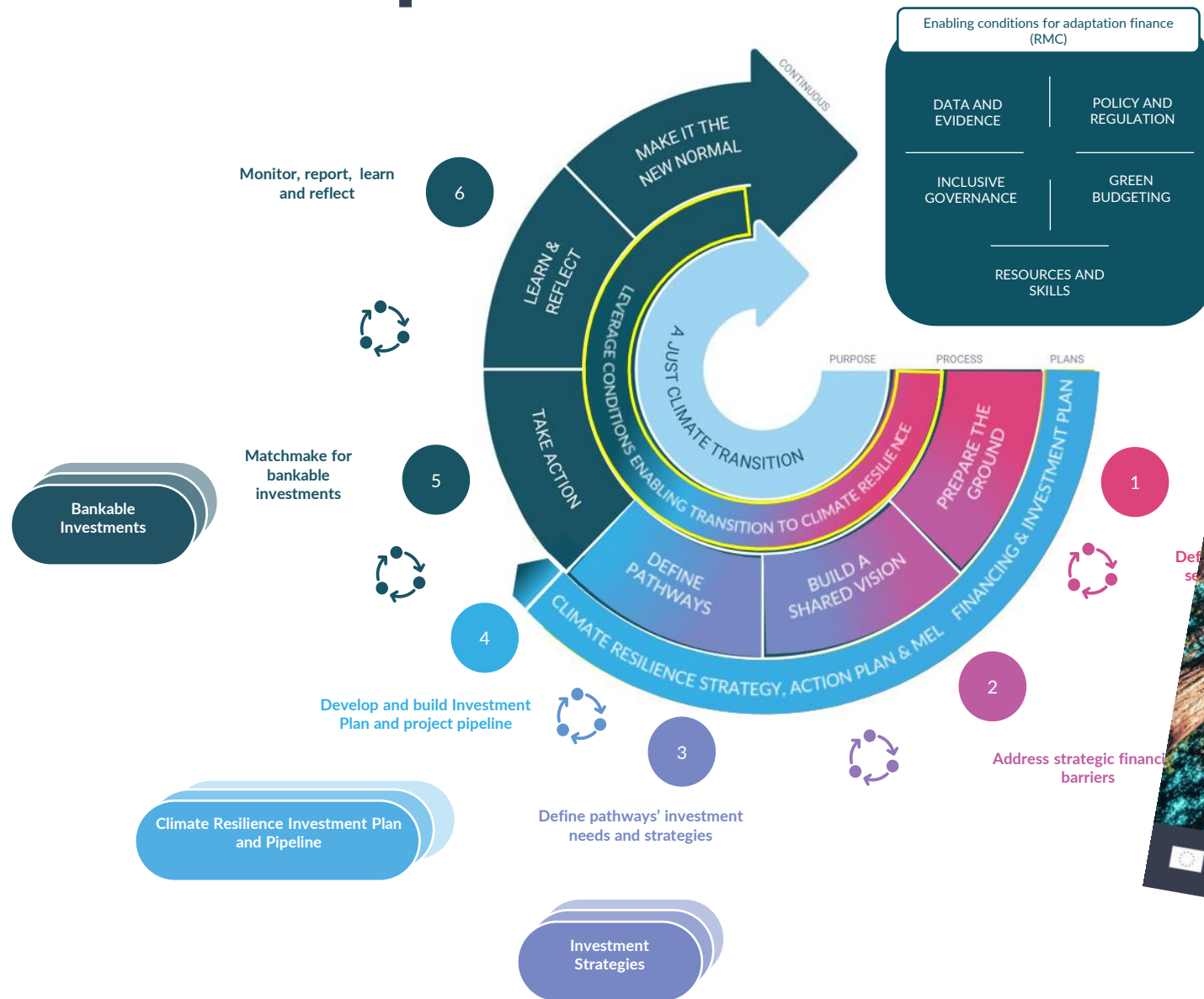
BASILINE ASSESSMENT

CLIMATE RESILIENCE  
STRATEGY

CLIMATE RESILIENCE  
ACTION PLAN

CLIMATE RESILIENCE  
INVESTMENT PLAN

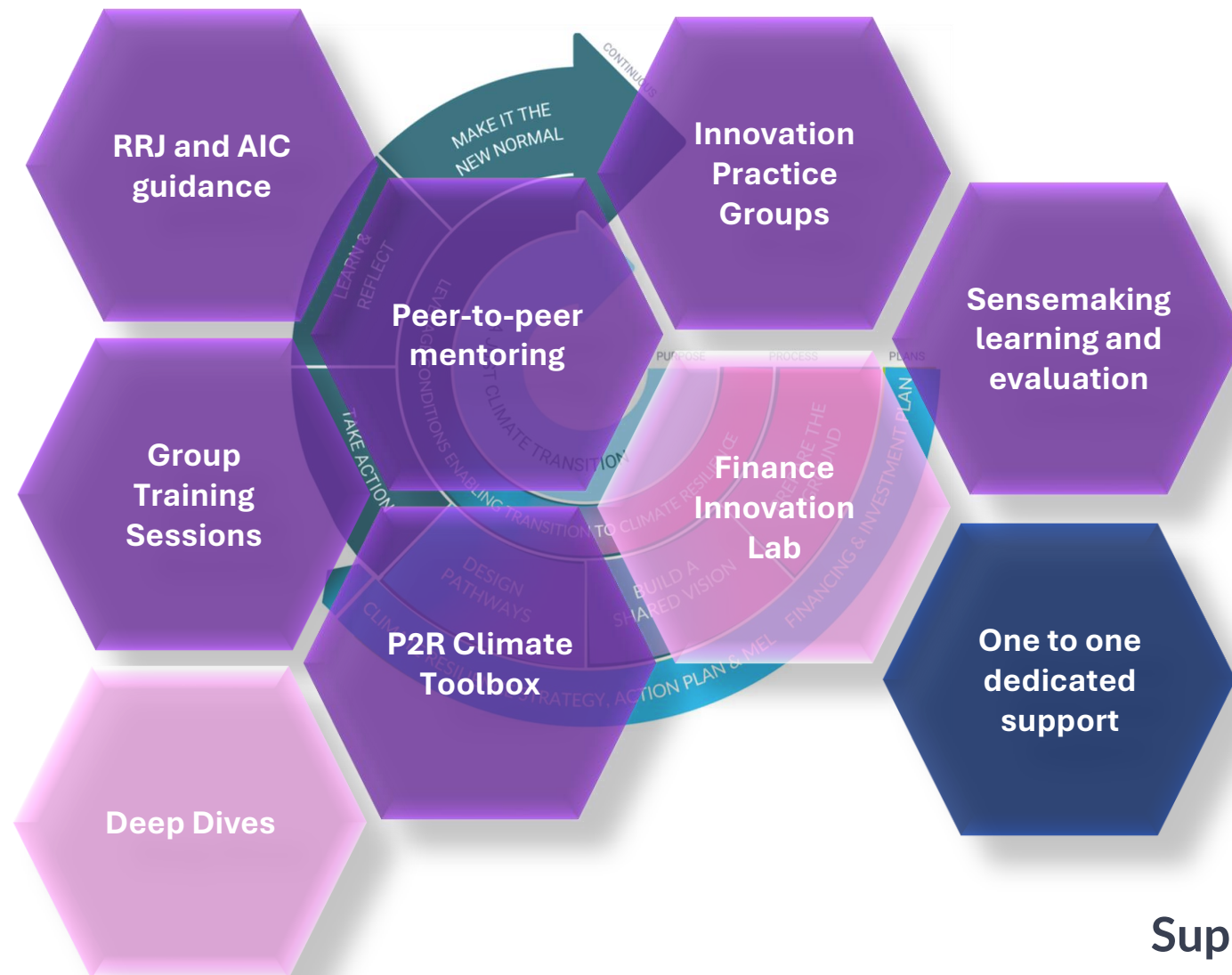
# P2R's Adaptation Investment Cycle





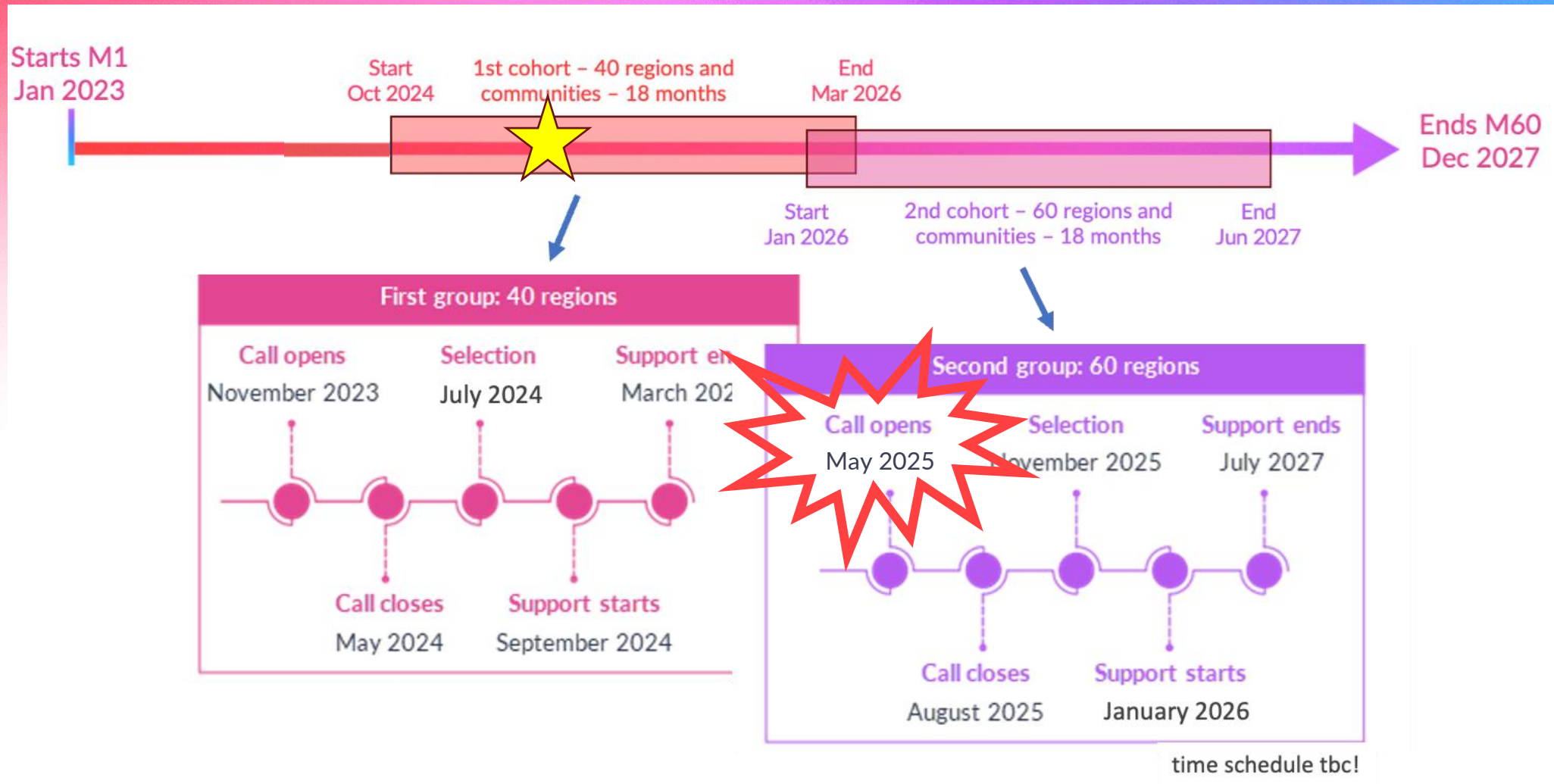


# P2R's Support Programme



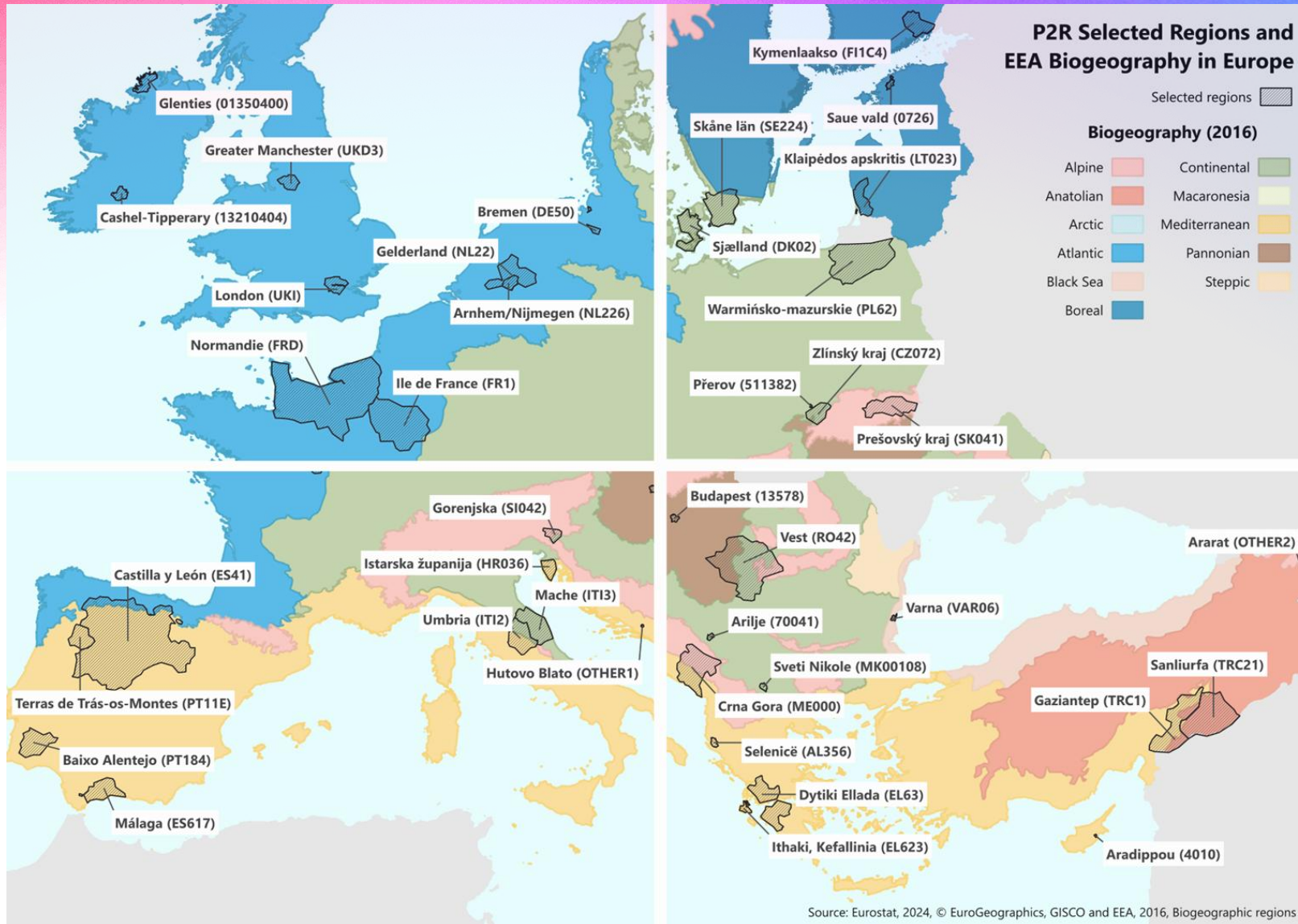
Support Programme

# Timeline of P2R





# Regions of P2R's 1st cohort



# P2R Second Call for Regions and Communities

**Applications welcome until**  
20 August 2025, 12:00 CEST

Register your application via:

<https://www.pathways2resilience.eu/second-open-call/>

Helpdesk: [pathways2resilience@climate-kic.org](mailto:pathways2resilience@climate-kic.org)

P2R's offer:

- Financial support
- Guidance & Tools
- Support Programme



# Pathways2Resilience Second Call for Regions and Communities



- Applications can only be submitted through the Pathways2Resilience [website](#)
  - Deadline: 20 August 2025, 12:00 CET
- **In numbers:**
  - 61 subgrantees
  - 210,000€ each
  - 18 months support (January 2026 – June 2027)
- **Main selection criteria:**
  - Most vulnerable regions (high climate risk and low adaptive capacity)
  - Diversity (countries, bioregions, climate risk types, scale, etc)
- **Applicants must select a specific scope of where they will apply the Regional Resilience Journey:**
  - NUTS1, NUTS2, NUTS3, LAU or equivalent in your (eligible) country





# **ADAPTATION FINANCE: GUIDANCE, RESOURCES, AND INSIGHTS**



# **ADAPTATION FINANCE: GUIDANCE AND RESOURCES**

## **SPEAKERS**

**Kit England**  
**(Paul Watkiss**  
**Associates)**



**Konstantinos Dellis**  
**(Athens University of**  
**Business &**  
**Economics)**



**Lesly Barriga**  
**(FEDARENE)**



**Jaroslav Mysiak**  
**(CMCC)**

# Understanding Adaptation Finance: Process and Instruments

CLIMAAX Community of Practice webinar

Kit England (PWA)  
Kostas Dellis (AUEB)

22/05/2025

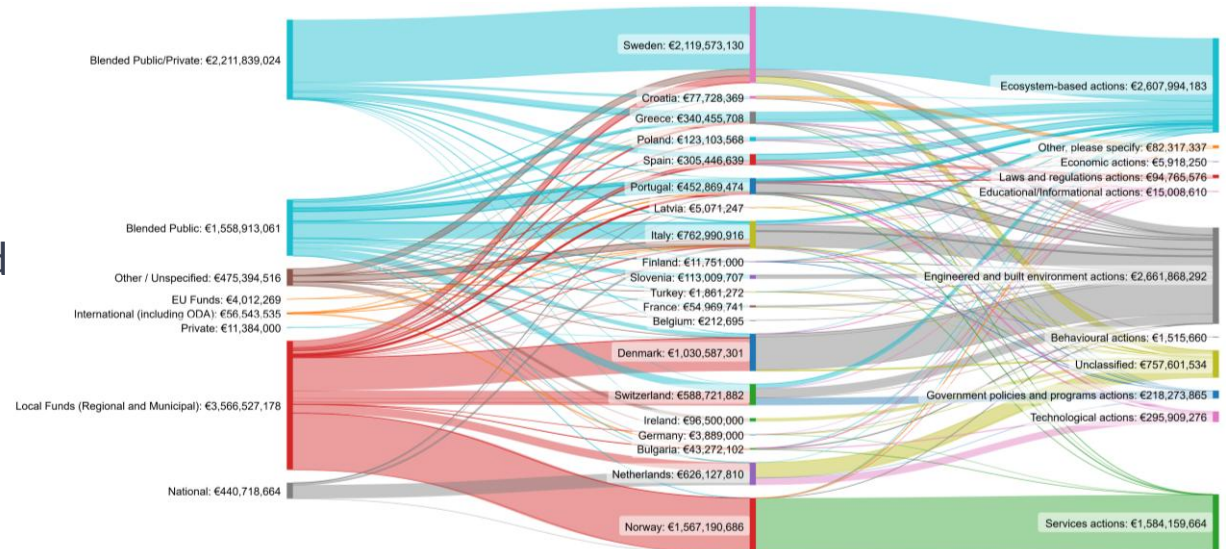
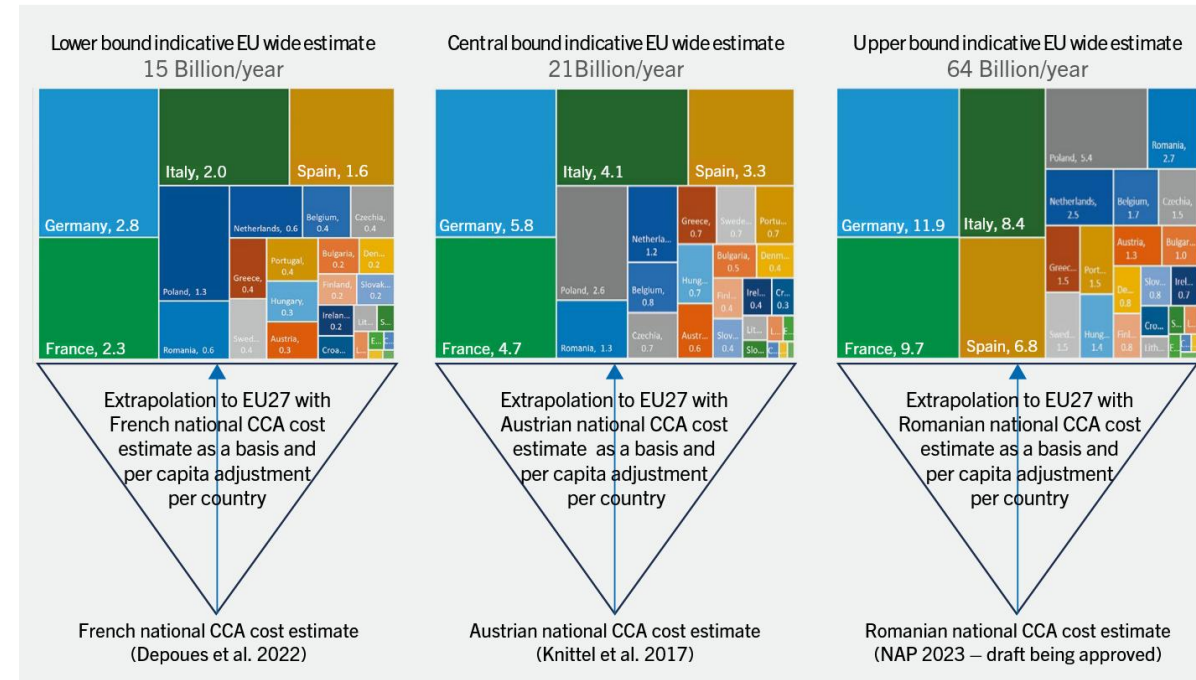


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# Context

- EUCRA highlights increasing urgency of adaptation (further understood via CLIMAAX).
- Increased focus on subnational adaptation through the EU Mission on Adaptation
- Estimated EU adaptation investment needs of €15bn - €64bn / year until 2030.
- But best (overoptimistic) estimate of flows suggest €8.5bn/yr to European Cities => gap of €7bn- €56bn /yr
- Typically public sources being used. But many territories struggle to mobilise wider finance and resource due to barriers, and limited fiscal space
- Adaptation Investment Plans intend to bridge this gap



Sources. Top: World Bank (2024) Bottom: England et al. (2023)27

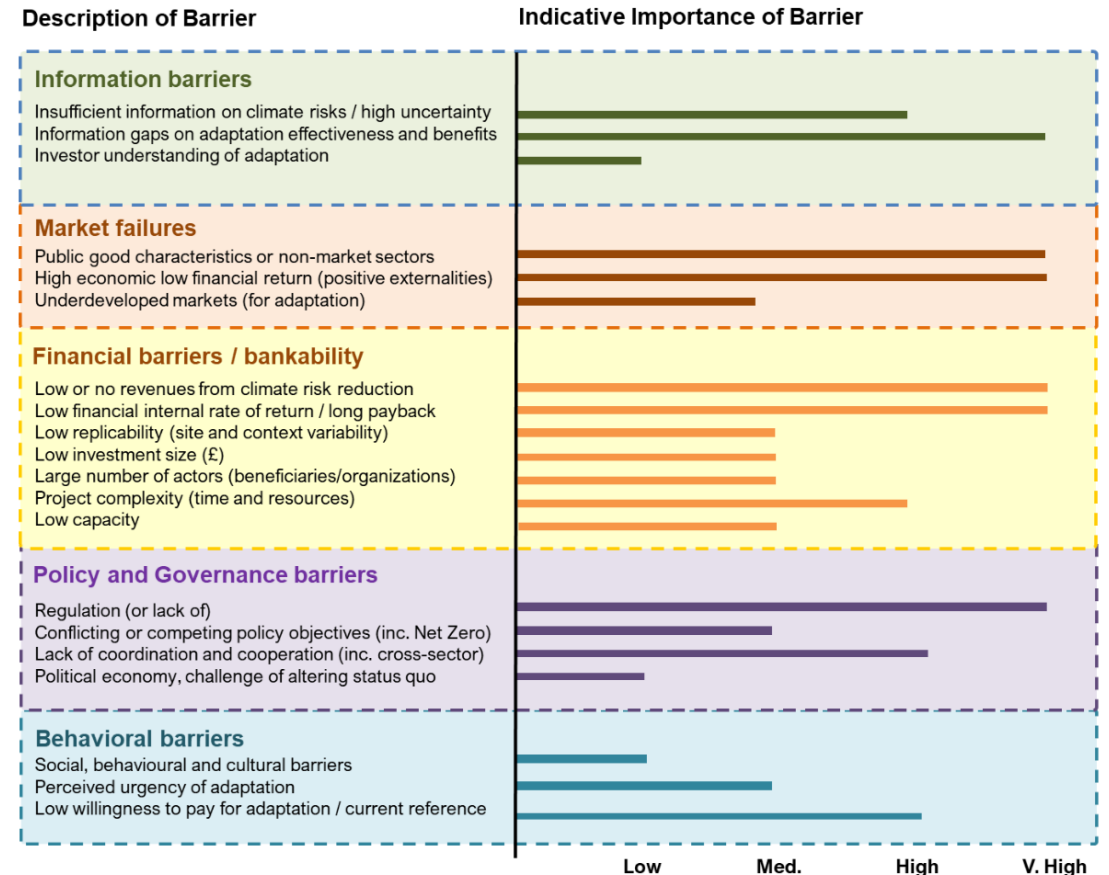


# Barriers to adaptation finance

Adaptation hard due to various barriers:

1. Those arising due to characteristics of adaptation:
  - Uncertainty/information needs
  - Limited revenues/returns,
  - public good characteristics).
  - Context specific and small size
2. Practical (e.g. availability of resources, staff time)
3. Procedural (finance often left until after adaptation planning complete)

P2R's finance work designed to address these inherent and procedural barriers head on.



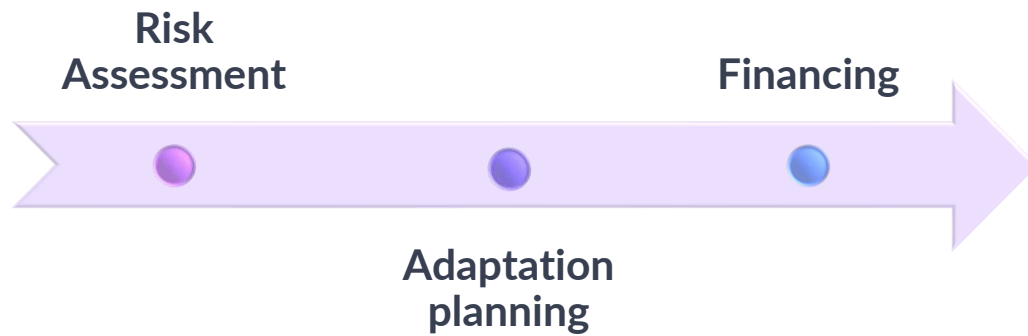
Barriers to adaptation finance and relative importance.  
Source: Watkiss, P. and Frontier Economics (2022)





# From 'finance last' to 'finance first'

## Typical 'linear' approach



Typical approaches have limited focus on economics and finance – relegated to end of process.

P2R is centring financing and economics considerations as a key consideration in planning to maximise participation of new actors

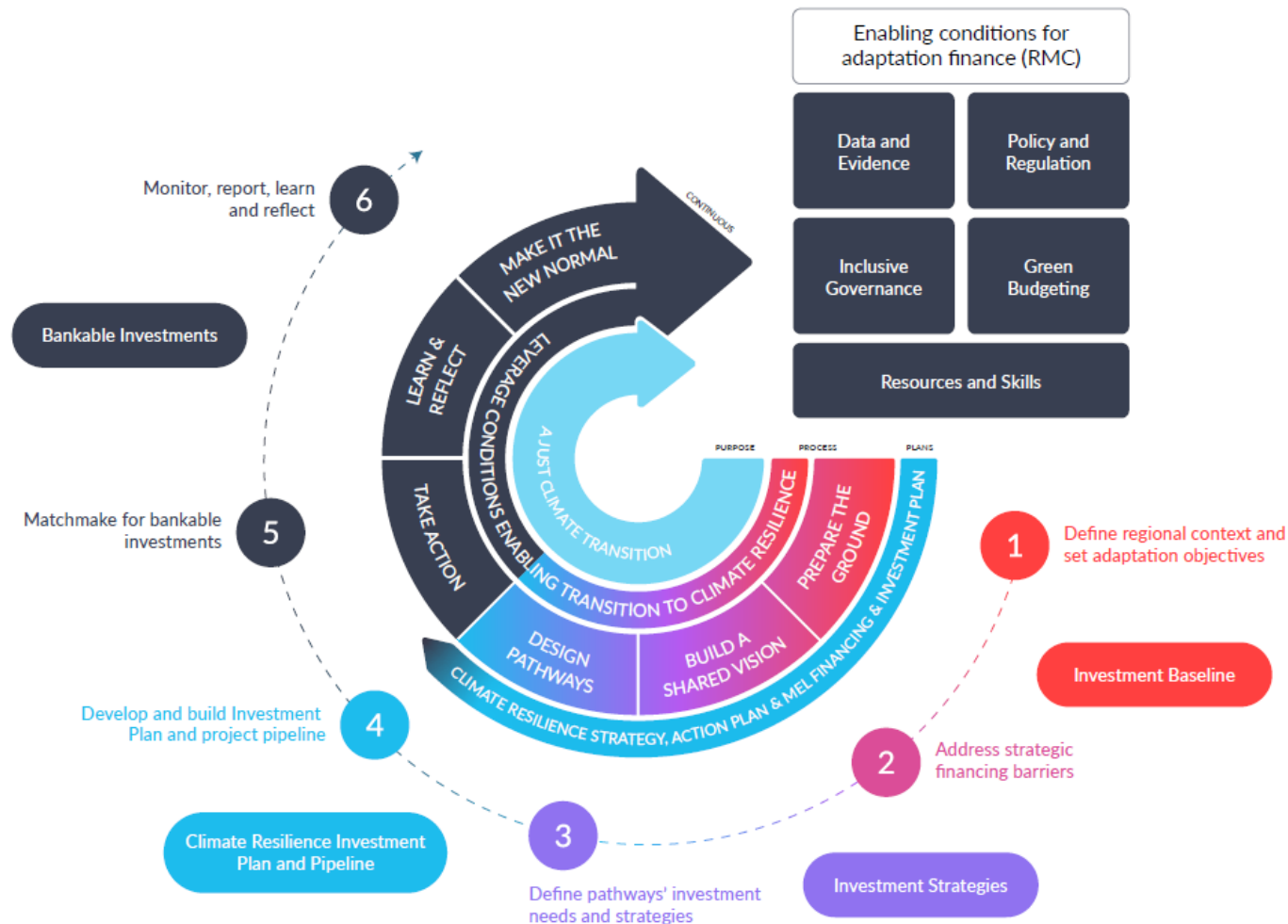
## Ideal Framework





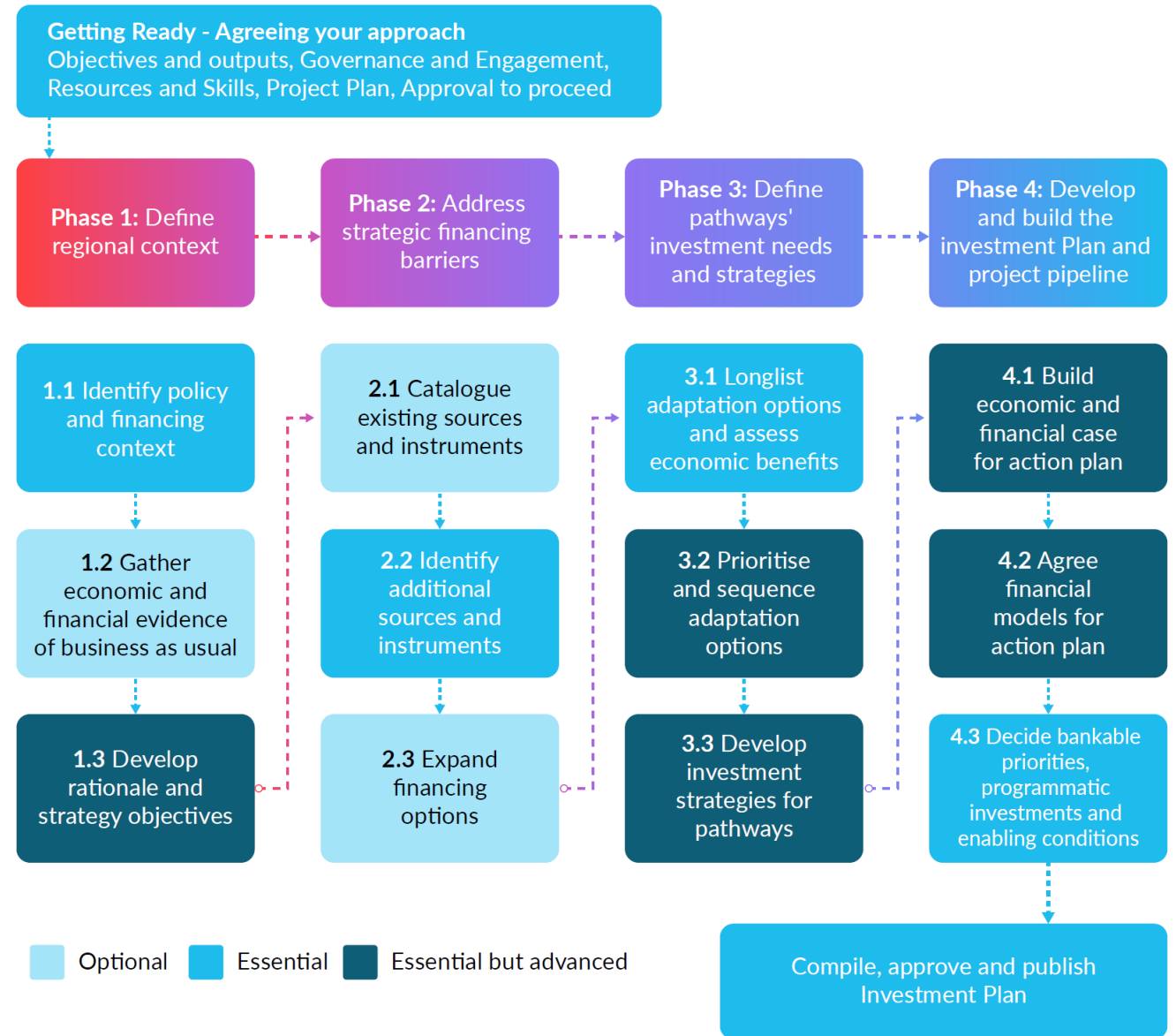
# Adaptation Investment Cycle (AIC)

- Traditional adaptation cycle very science based - Economics and finance left until step 4 (assess options).
- But in public policy appraisal, it is step one (economic rationale).
- Also a key consideration for private sector (profitability).
- P2R mainstreams these considerations through Adaptation Investment Cycle.
- 6 phases, supported by enabling conditions for adaptation finance.





- Climate Resilience Investment Plan developed in first 4 phases, supported by enabling conditions for adaptation finance.
- All tasks recommended, but some more important / difficult than others.
- Output is Climate Resilience Investment Plan aligned with Climate Resilience Strategy and Action Plan.







# Climate Resilience Investment Plans

- Key economic and financial planning tool to mobilise investment in adaptation
- Publicly available document which translates regions' high-level vision and pathways to **bankable investments**
- Provides detailed climate investment information. Three components:
  - High level investment strategies for adaptation pathways
  - Financeable action plan and pipeline of bankable projects
  - Action to improve the enabling environment (conditions for investment).
- Key for **engaging private sector** and attract major financial players (e.g., EIB)

Aligned to Climate Resilience Strategy and Action Plan

Economic and Financial Planning

Region-wide, place-based approach

Long term focus, short term action

Regional Climate Resilience Investment Plan

Covers priority risks and opportunities

Equitably, inclusively governed

Catalyst for capital

Iterative, maturing process

Figure 6: Characteristics of Climate Resilience Investment Plans.



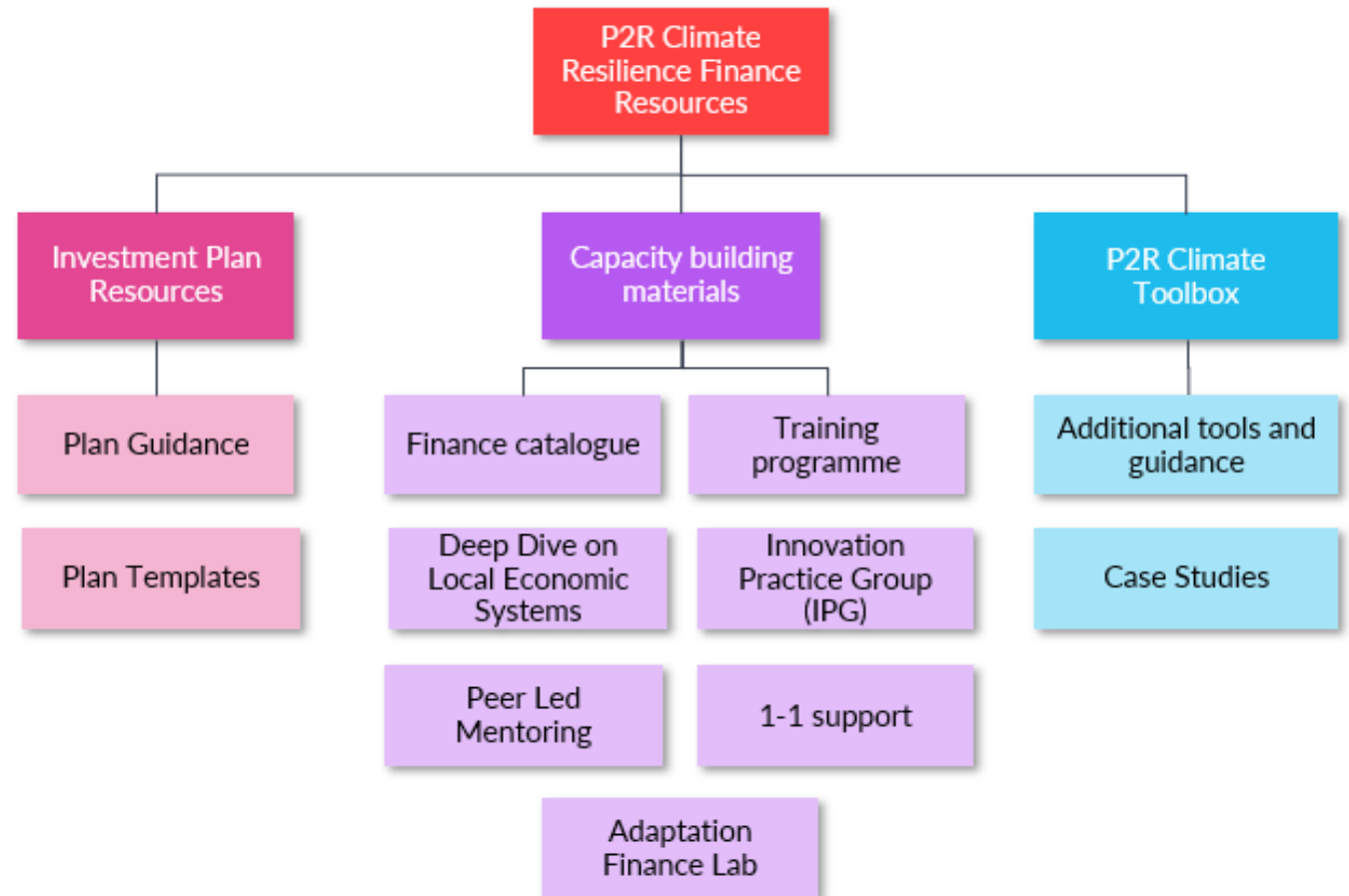
# Why develop one?

- Opens up new financing possibilities for Strategies and Action Plans through diversification and innovation
- Maximises public sector value for money and helps fit adaptation needs within limited public sector budgets
- Considers perspectives of private financiers and real economy actors to show where private funding is really viable.
- Identifies where new policies, regulations or incentives are needed to accelerate progress
- Increases the visibility of investment needs and opportunities
- Improves a region's knowledge and capacity on adaptation finance – including the private sector perspective



# Capacity Building Support

- Regions supported with capacity building programme
- Designed to meet regions where you are.
- Offers a variety of learning formats:
  - 2.5 days of structured training on each AIC phase.
  - ‘Learn at your own pace’ – guidance, drop ins
  - ‘Learn by doing’ – Investment Plan, 1-1 support, IPGs, Peer Led Mentoring, Lab.
  - Further tools planned over the project (e.g. chatbot, finance catalogue update)





# Finance Guidance

**Implementation Guidance** to support regions through the Regional Resilience Journey and the AIC

- Help regions *scope, prepare and deliver* their Climate Resilience Investment Plans
- Deep dive into the 6 Phases of the Adaptation Investment Cycle
- Detailed information on how to complete tasks, who to involve, and case studies and guidance.

**Available on the website now as a public good.**



**Developing Regional Climate Resilience Investment Plans and Project Pipelines**

Implementation guidance to support regions through the Adaptation Investment Cycle

**Task 2.2**  
Identify additional sources and instruments and barriers

RRJ task(s)	Climate Resilience Investment Plan Template Section	Effort	Importance
2.2 Explore possible futures, 2.3 Co-create a shared vision, 2.4 Develop a theory of change	2.2, 2.3, 2.4	Medium	Essential

**What is this task about?**  
This task identifies additional sources or instruments your region could be interested in using in the Investment Plan. This could include existing sources and instruments to scale, as well as new ones. The aim is to identify early preferences and barriers to their use.

**What are key inputs for this task?**  
The key inputs for this are:  

- The region's own catalogue of existing sources and instruments from Task 2.1.
- Pathways2Resilience's DS.2 - Catalogue of Sources and Instruments, for inspiration on additional sources and instruments, and their benefits, drawbacks and regional suitability.

Regions may also wish to draw on the possible futures, emerging shared vision and Theory of Change in Phase 2 of the Regional Resilience Journey as these may include indications of the mix of sources or financing arrangements which might need to be available in future.

**What are the expected outputs?**  
By the end of this task, you will have a documented list of sources and instruments to explore during the Investment Plan process. It will be accompanied by an assessment of the barriers to scaling or deploying these. It should also set out which sources and/or instruments will be excluded from consideration in the Investment Plan. Depending on the ordering of tasks, regions may wish to use the strategic financing options as an input into the development of the Theory of Change in RRJ Task 2.3 and Task 2.4.

Funded by the European Union

# The need for a Catalogue of Sources & Instruments

**Table 5 - Q. Which sources of adaptation financing have you used, do you intend to use, do you know or don't you know?**

Sources of adaptation financing	I have used	I intend to use	I know	I don't know
Cohesion Policy Funds (ERDF, Interreg)	48%	26%	14%	11%
LIFE Programme	31%	31%	24%	14%
European Rural Development funds	22%	21%	30%	28%
Horizon Europe	25%	44%	20%	11%
Other EU funds	27%	26%	18%	29%
European Investment Bank financing	9%	12%	32%	47%
Private/commercial banking financing	8%	10%	31%	50%
National funds	62%	19%	11%	8%
Regional funds	52%	17%	12%	19%
Own local funds	56%	14%	10%	20%
Other	7%	12%	12%	69%

- Diversification of sources and instruments a key priority to adapt.
- Most regions typically rely on public budgets and EU Funds
- There are many different sources and instruments that could theoretically be used for adaptation.
- A good spread of different case studies in different jurisdictions which are crowding in a lot of different actors.

Source: [European Commission, 2023.](#)



# Catalogue of Sources & Instruments for Adaptation Finance

- Excel tool of 57 sources. 78 instruments and 169 best practices.
- Designed as a practical reference tool to support development of Investment Plan and bankable projects.
- Provides detailed insights (e.g. what matters to particular sources, typical financing).







@Pathways2Resilience



@P2Resilience



hello@pathways2resilience.eu



EUROPEAN UNION

# EU MISSIONS



**Concrete solutions for our greatest challenges**

MIP4Adapt adaptation funding database

Lesly M. Barriga Delgado

#EUmissions #HorizonEU



# What is MIP4Adapt?

## MIP4Adapt = Mission Implementation Platform

- Supports the EU Mission on Adaptation to Climate Change.
- Helps regions and communities turn ambition into action.
- Provides practical tools, resources, and knowledge.
- Focused on local and regional adaptation implementation.







# Funding database



Climate  
ADAPT

SHARING ADAPTATION  
KNOWLEDGE FOR  
A CLIMATE-RESILIENT  
EUROPE

The Mission

Projects

Solutions

Knowledge and Data

**Funding**

News

Events

Community of Practice



**Purpose: To help regional and local authorities identify funding sources for climate adaptation initiatives.**

- Information on EU, national, and agency-level funding for adaptation.
- Primarily for local and regional authorities, but also relevant to businesses, NGOs, and researchers.
- Not a list of open calls, but a guide to funding programmes and issuing entities.
- Includes related funding (e.g., mitigation, transport, digital innovation) when relevant to adaptation.



# Filtering options in the Funding database

- **Countries where the funding is offered.**
- **Geographical Scope:** EU-wide or national
- **Adaptation sectors:** Agriculture, water, disaster risk reduction...
- **Target Groups:** public authorities, NGOs, private companies...
- **RAST Step of Relevance:** alignment with specific steps in the Risk Assessment & Adaptation Support Tool (RAST)



# Example EU fund

## Horizon Europe

Created 14 May 2024 | Published 14 May 2024 | Modified 25 Apr 2025

Home > Funding > Opportunities > Horizon Europe

### Objective of the funding programme

Horizon Europe is the European Union's flagship Research and Innovation programme for 2021-2027. It aims to address climate change, contribute to the UN Sustainable Development Goals, and boost the EU's competitiveness and growth, while supporting the creation, expansion, and dissemination of knowledge, technologies, research, and innovation. The programme is structured into three pillars: 1) Excellent Science (mainly for researchers), 2) Global Challenges and European Industrial Competitiveness, and 3) Innovative Europe. It also includes 5 EU missions within the Pillar II clusters to enhance the effectiveness of funding.

The most relevant parts of Horizon Europe for climate Adaptation, all from the 2<sup>nd</sup> pillar, include but are not limited to:

- EU Mission Adaptation to Climate change
- EU Mission Soil deal for Europe
- EU Mission Restore Ocean and Waters
- Cluster 5: Climate, Energy & Mobility
- Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture & Environment
- New European Bauhaus (NEB)

See general information on [how to apply to this programme](#).

Learn about [Horizon Europe funding opportunities](#).

Find further [assistance and guidance on all aspects of participation in Horizon Europe](#).

### Countries where the funding is offered

Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Armenia, Bosnia and Herzegovina, Islands, Georgia, Iceland, Israel, UN Security Council Resolution Moldova, Republic of, Montenegro, of North Macedonia, Norway, Switzerland, Türkiye, Ukraine, U

### EU funding

Yes

### Region where the funding is offered

all regions within selected countries

### RAST step(s) of relevance

Step 2. Assessing climate change risks and

### Type of funding

Grants, Other

### Funding rate (percentage of covered costs)

70-100% co-financing rate.

### Expected budget range of proposals

100.001 € - 1M €, 1M € - 10M €, > 10M €

### Can the received funding be combined with other funding sources (blended)?

Yes

### Is a Consortium required to apply for the funding?

Yes

Proposals must include at least three organisations from different EU Member States or associated countries. Special rules may apply to certain calls.

### Administering authority

The European Commission allocates the budget to specific topics and launches calls for proposals. Certain calls are managed by the Climate, Infrastructure and Environment Executive Agency (CINEA) on behalf of the Commission.

### Publication page

### General information

[Horizon Europe website](#)

### Further information

### Vulnerabilities

- Step 3. Identifying adaptation options
- Step 4. Assessing and selecting adaptation options
- Step 5. Implementing adaptation

### Eligible to receive funding

Local authorities and administrative bodies, Social, cultural and educational institutions, Companies, SMEs and private associations, NGOs

### Adaptation Sectors

Agriculture, Buildings, Disaster Risk Reduction, Forestry, Health, Transport, Water management, Energy, Tourism, Biodiversity protection, Coastal areas, Marine and Fisheries







## More information?

- Reach out to the National Contact Points (NCPs) or designated reference contacts highlighted in the programme objectives.
- Review the Funding and Financing Guide to understand available resources and support.





## Final remarks

- The **funding database** contains over **300 programmes**, supporting climate adaptation initiatives. It is currently being **updated** to reflect the latest opportunities.
- Especially valuable for **regional and local stakeholders** looking to:
  - Identify suitable EU or national funding options.
  - Align projects with strategic adaptation goals.
  - Enhance preparedness and long-term planning.





## Useful resources

1. To access the **Funding and Financing Guide**, [click here](#)
2. To search for all **EU and/or national funding opportunities**, [click here](#)
3. To explore the **Horizon Europe programme**, [click here](#)





EUROPEAN UNION



# Thank you !

**#EUmissions**

**#HorizonEU**

**#MissionClimateAdaptation**

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**cmcc**  
Centro Euro-Mediterraneo  
sui Cambiamenti Climatici

[www.cmcc.it](http://www.cmcc.it)

# Nature for insurance

## *Insurance for nature*

**Jaroslav Mysiak**  
Euro-Mediterranean Centre on  
Climate Change CMCC@Ca' Foscari

CLIMAAX Community of Practice  
May 22nd, 2025



# Risk-based instruments

Have multiple **forms** and **purposes**

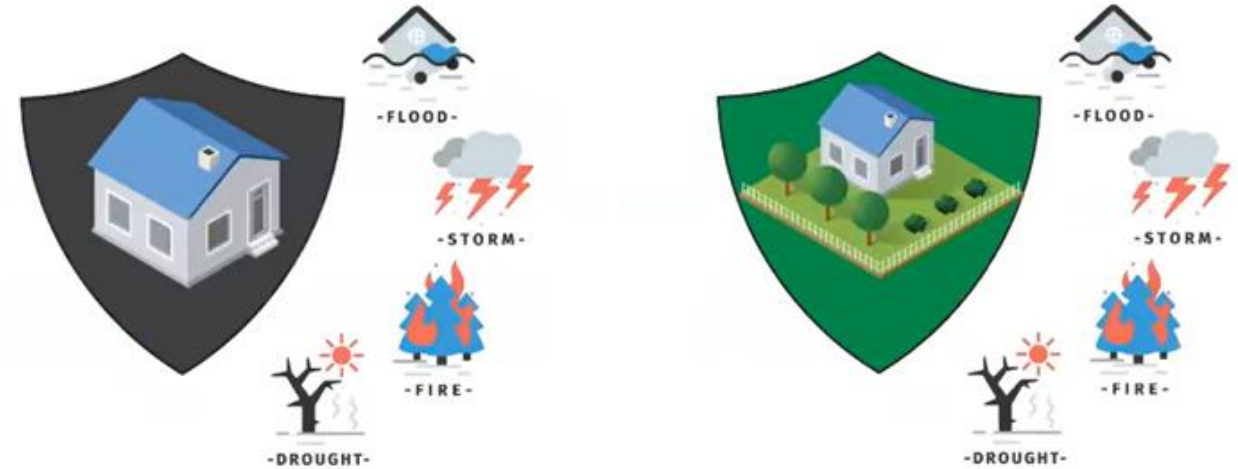
- Water tariffs with risk pricing, insurance, contingency funds, performance-based contracts ...

Allocate water resources and manage scarcity by considering the probability and severity of water-related risks.

Ensure financial preparedness for extreme events and promote resilience

## Challenges

- Requires accurate risk assessment models to avoid adverse selection and market failure.
- May create a moral hazard if users rely too much on payouts instead of improving resilience.
- Requires robust monitoring and verification to assess performance accurately.



**Insurance protects property** from climate-related damage but offers little incentive to reduce risk beyond contract terms; coverage may be lost if it becomes unsustainable.

**Insurance promotes risk reduction** through contracts and innovative schemes, fostering confidence in continued coverage as climate-related damage rises.

# Risk-based instruments

The **biodiversity finance gap** has grown to \$942 billion, with current investments insufficient to meet targets<sup>1</sup>.

Nature-based solutions (NbS) are cost-effective and as effective as engineering solutions in hazard mitigation<sup>2</sup>.

**Nature-based insurance and investment solutions** integrate ecosystem services and nature-based solutions into financial incentives to mitigate climate risks<sup>3</sup>.



The [Mesoamerican Reef Insurance Programme](#) is an initiative provides financial protection for **coral reefs** ecosystems.

[Parametric insurance](#) connected to **mangrove restoration** integrates innovative financial mechanisms to facilitate rapid restoration post-storm.



<sup>1</sup> [Biodiversity Finance Factbook](#) October 22, 2024, Bloomberg New Energy Finance (BNEF)

<sup>2</sup> Vicarelli, M. et al. On the cost-effectiveness of Nature-based Solutions for reducing disaster risk. STOTEN 947, 174524 (2024).

<sup>3</sup> Nature for insurance, insurance for nature (<https://www.naturanceproject.eu>)



# Benefits of ecosystem services



- Improvement of soil fertility
- Natural control of pest infestations
- Increase in agricultural productivity
- Reduction of soil erosion
- Reduction of greenhouse gas emissions



- Recharge aquifers
- Improve water quality
- Ensure water availability
- Restore habitat and biodiversity



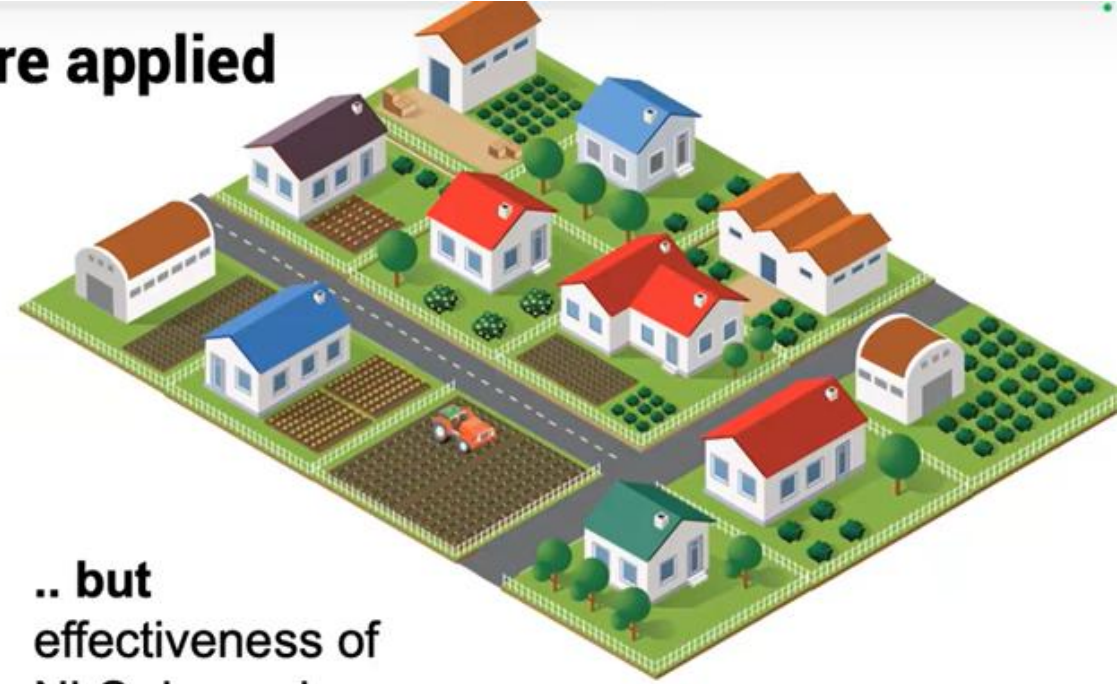
- Reduction of flood risk
- Urban regeneration
- Public services and recreational functions
- Regulation of air quality and temperature
- Habitat and biodiversity
- Energy savings

# NbS can reduce risks but it depends how they are applied



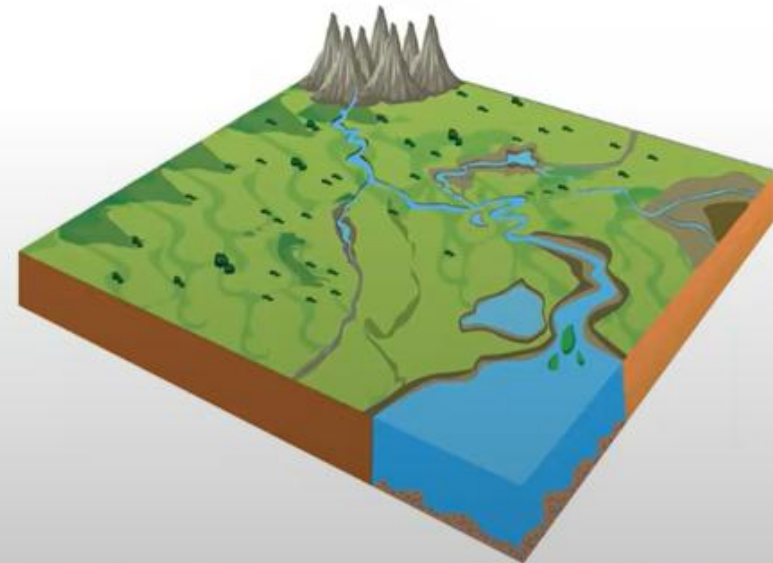
Property owners can implement NbS to protect their properties and help reduce climate-related damage, e.g.

- green roofs
- rain gardens
- permeable pavements
- tree planting
- living fences or hedges
- native landscaping
- bioswales



**.. but**  
effectiveness of  
NbS depends  
on the scale of  
application

**... or**  
where the intervention is  
implemented (in this case,  
upstream of the urban area).





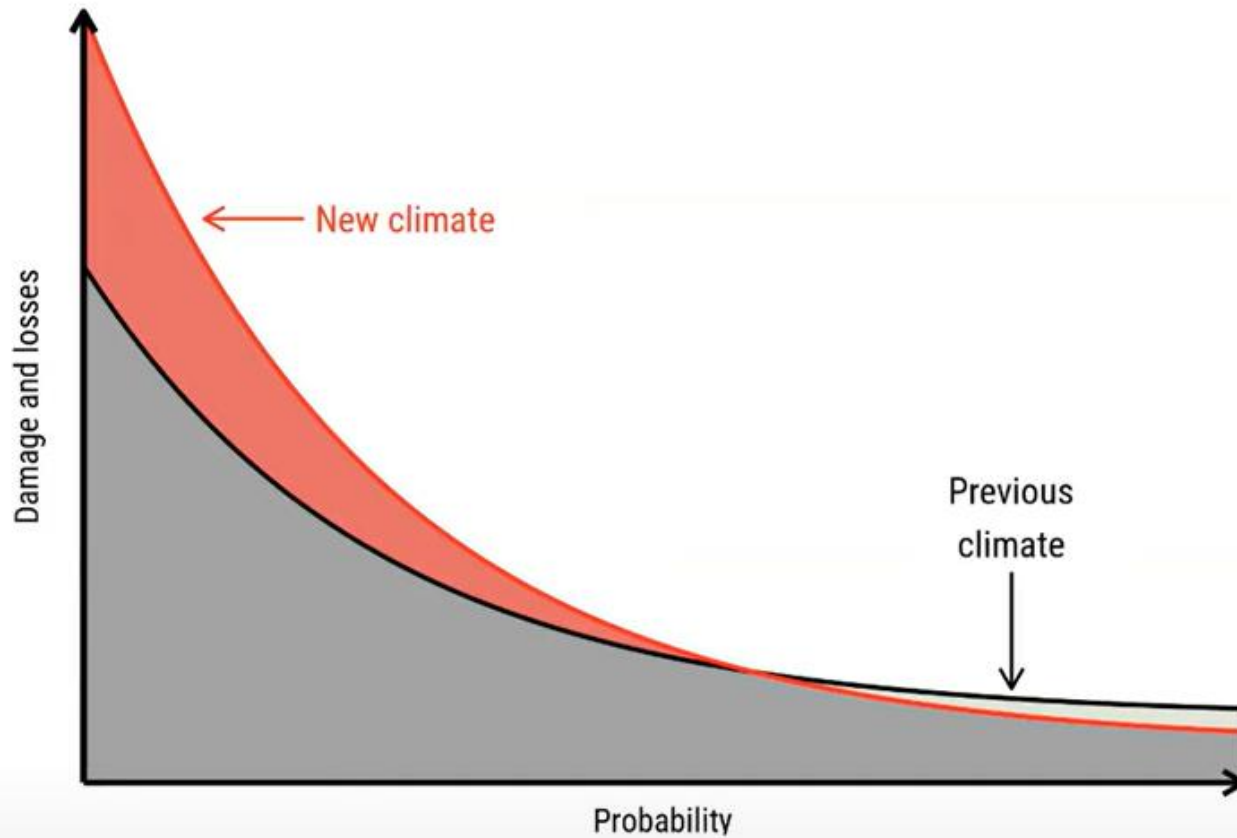
# Insurance as a source of finance for nature

Ecosystem services like water regulation, air purification, pollination, and climate regulation **have economic value, even if no price is paid** for their provision.

Insurance offers several ways to harness this value for ecosystem protection and restoration.

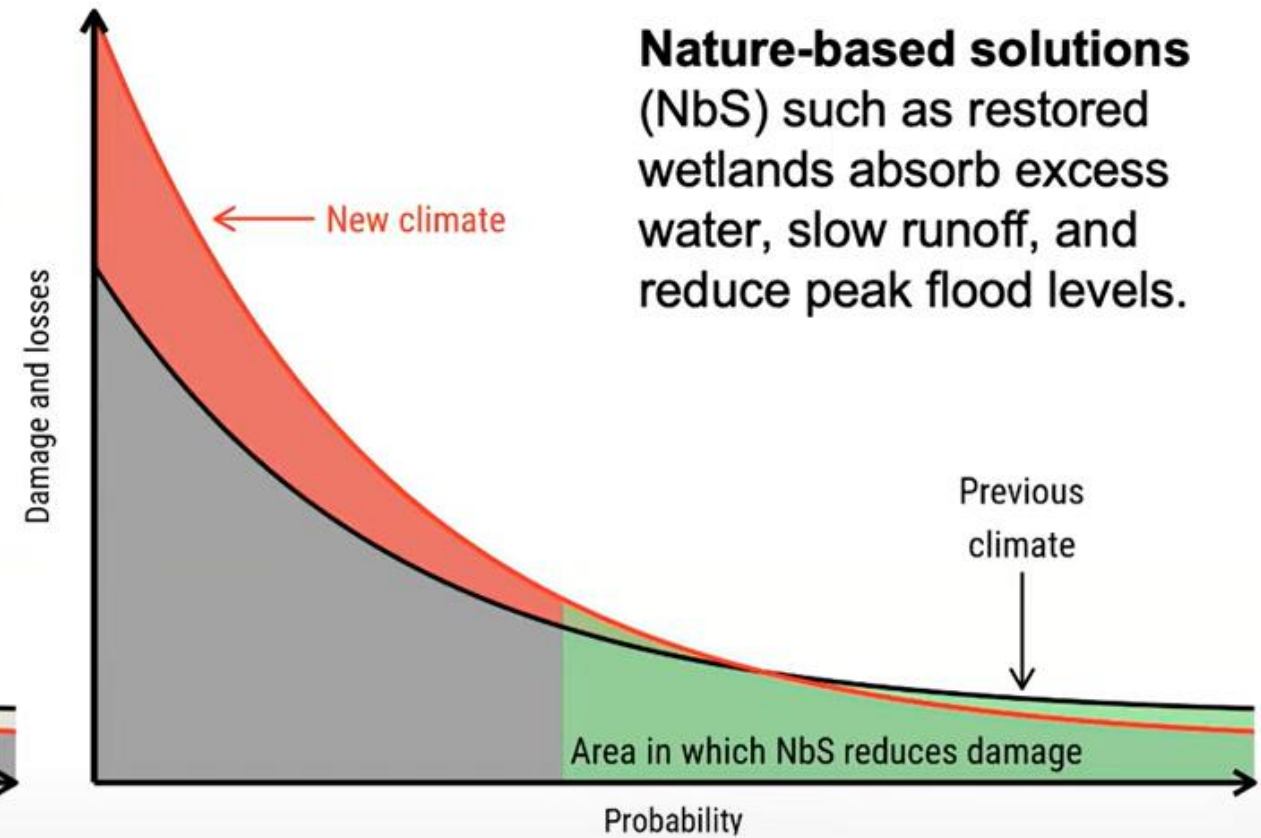


Exceedance curve



Climate change is **intensifying precipitation patterns**, increasing the frequency and likelihood of **intense rainfall events** while reducing the occurrence of **moderate precipitation**.

Exceedance curve



**Nature-based solutions (NbS)** such as restored wetlands absorb excess water, slow runoff, and reduce peak flood levels.

To some extent, at the **lower end of the risk exceedance curve**, flood risk from intense precipitation can be mitigated by enhancing natural water retention through NbS.



# Climate related financial risks

Housing stock prices can be **overestimated** if they fail to account for **climate risks** like flooding, wildfires, or extreme weather. Ignoring these threats inflates valuations, exposing homeowners, insurers, and investors to financial losses. As risks grow, properties in vulnerable areas may face **higher insurance costs**, **declining value**, and **increased default risks on mortgage loans**.



E.g. Gourevitch et al, 2023, <https://doi.org/10.1038/s41558-023-01594-8>

## Potential for risk reduction



Rural areas and low-value land uses can serve as **natural buffers**, protecting urban centers and high-value properties from climate-related hazards such as flooding. Wetlands, forests, and agricultural lands can **absorb excess water, reduce runoff, and** enhance resilience. Strategic land-use planning that preserves and restores these areas not only safeguards urban infrastructure but also supports **biodiversity and sustainable water and land management**.



# NATURANCE

## Nature for insurance, insurance for nature

EU Horizon Europe initiative

Goal. To evaluate the technical, financial, and operational feasibility and performance of solutions that integrate and combine disaster risk financing and investments with nature-based solutions

<https://www.naturanceproject.eu/>

## Nature-based insurance and investment solutions

integrate ecosystem services and nature-based solutions into financial incentives to mitigate climate risks. These innovations transform existing financial instruments, such as insurance, bonds, and equity, to leverage the value of ecosystem services.



**Knowledge communities and networks** are groups united by common interests to share experiences and build expertise. They include professionals, researchers, practitioners, educators, and stakeholders collaborating on knowledge creation, dissemination, application, and advocacy.

**Innovation labs** are creative hubs for developing and testing solutions. They provide a space for experts, entrepreneurs, and policymakers from knowledge networks to collaborate on innovative solutions.





# Community standards

A process supported by the NATURANCE project is underway to develop a **CEN Workshop Agreement (CWA)** focused on establishing metrics and guiding principles for nature-based insurance solutions. This initiative aims to create a shared reference framework to assess performance, foster trust, and enable uptake across insurance, investment, and policy sectors.

Watch out:

- Collection of insurance innovation cases being prepared for COP30
- Festival of Financial Innovation, Brussels, **February 4–6, 2026**



## NATURANCE

**Nature for insurance, insurance for nature**

<https://www.naturanceproject.eu/>

Project supported by the EU's Horizon Europe – the Framework Programme for Research and Innovation (2021-2027), grant agreement No. 101060464.

# UPCOMING EVENTS: CLIMAAX BARCELONA WORKSHOP



## REGION-TO-REGION EXPERIENCE EXCHANGE:

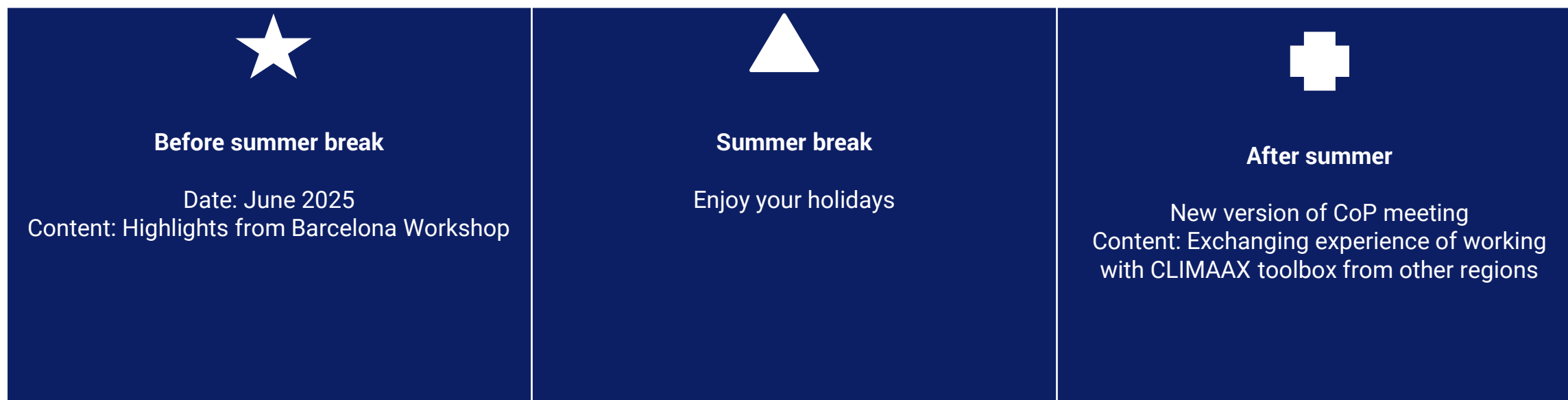
This event will bring together regional representatives, implementing institutions and developers to

- ☐ exchange knowledge
- ☐ discuss experiences, challenges, and solutions from CLIMAAX handbook applications
- ☐ showcase success stories from the first implementations of the CLIMAAX Handbook.

 **June 11: "Success Stories: Framework & Workflows" session will be live-streamed!**  
**Stay tuned for more details —coming soon!**

# New lineup for CLIMAAX CoP Meetings

- Based on your feedback, we're adapting the CLIMAAX CoP to focus more on practical, technical exchanges.
- In the new format (after summer break), sessions will spotlight specific hazards (e.g. heat, floods), with regions and developers sharing how they use the CLIMAAX toolbox and workflows

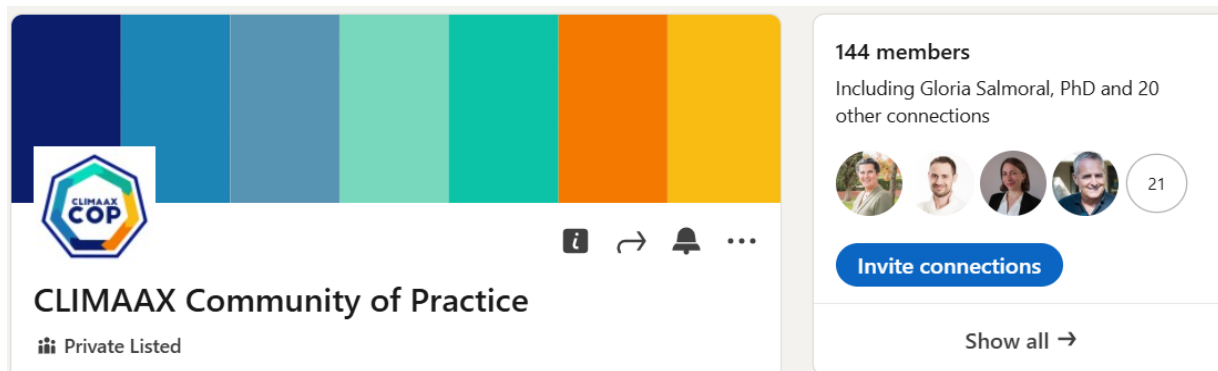




# HOW TO ENGAGE IN THE COMMUNITY OF PRACTICE

- Join our LinkedIn group
- Take our survey
- Subscribe to the CoP to receive communication of further updates

<https://www.climaax.eu/community-of-practice/>



**!! Scan this !!**



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[www.climaax.eu](http://www.climaax.eu)

Thank you and see you  
next time!

[cop@climaax.eu](mailto:cop@climaax.eu)



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