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Community of Practice
Tracking Progress:
Monitoring and Evaluation in Climate Adaption
20.06.2024

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Tracking Progress: Monitoring and Evaluation in Climate Adaptation

June 20th, 10:00hs CET

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Agenda

Duration (min)	Agenda item
5	Welcome & opening remarks
10	Setting the scene
10	Showcasing the development of RAST Step 6 and resources available for regions and local authorities
45	Showcasing experiences
15	Q&A
5	Closing remarks

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Housekeeping

- The working language of the meeting is English.
- Please note that the meeting is being recorded.

  The recordings will be available at a later stage after processing.
- Please keep your microphone muted.

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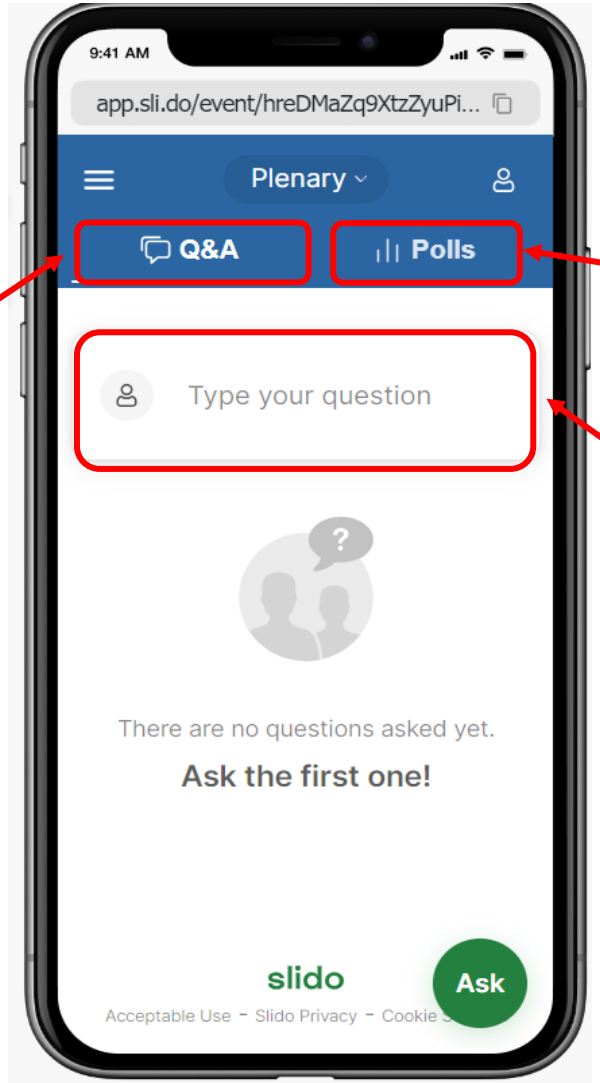

Click here to ask a question.

Click here for accessing the polls.

Type your questions here.

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Setting the scene

Introduction to key M&E concepts, tools and frameworks

Stephanie Bilgram

Thematic Working Group on Monitoring and Evaluation

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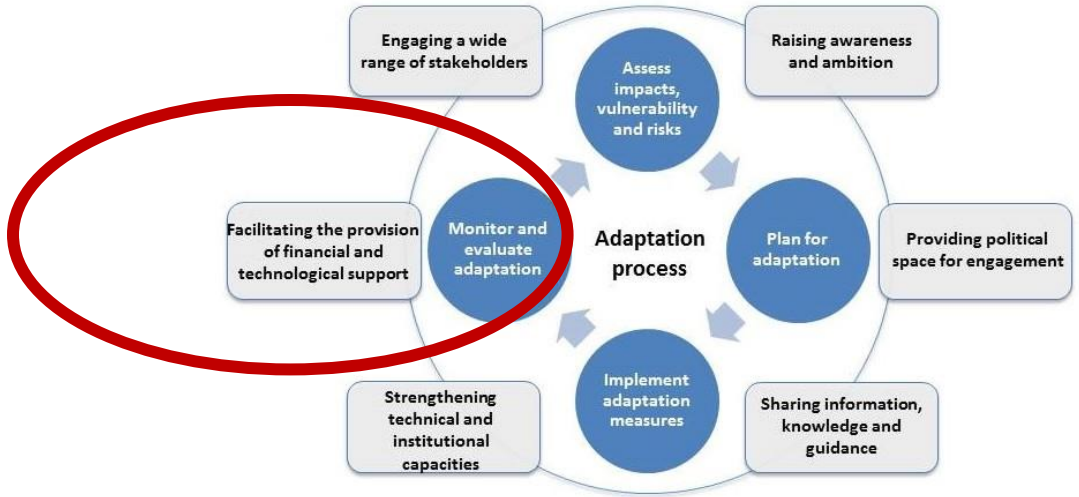
Monitoring and evaluation of climate resilience

- Monitoring & Evaluation are an integral part of the adaptation process, mentioned in the Paris Agreement, the Sendai Framework for DRR and the SDGs
- In the adaptation cycle, monitoring refers to the tracking of progress made in implementing an adaptation action
- Evaluation refers to the determination of the effectiveness of an adaptation action/ policy



Source: Global Center on Adaptation, Adaptation cycle under the UN climate change regime, What does climate adaptation and resilience look like? - Global Center on Adaptation (gca.org)

Goals of M&E

- Assessment of climate vulnerability, adaptation and resilience
  → Measuring the process of adaptation and measuring adaptation outcomes
- Understanding planning, implementation and progress of an adaptation activity → informing policy makers
- Continuous learning (iterative process) and accelerated efforts
- Identification of maladaptation/ failure
- Demonstration of results (on different levels, e.g. national, sub-national, programme, sector etc.)

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Monitoring and evaluation: How does it complement each other?

Monitoring

- Data collection, recording and analysis → information on urgent matters & early indications on progress
- Continuous/ periodic short time frames
- Documentation of progress towards an objective

Evaluation

- Assessment of information and analysis of key issues → determination of changes
- Periodic (longer time frames)
- Analysis of achievements or non-achievements and underlying reasoning
- Identification of maladapation/ unintended consequences

→

- Assessment of suitability, efficiency and effectiveness of moeasures/ processes/ policies
- Learning

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Key considerations

- Monitoring is executed on different levels, from global (e.g. Agenda 2030, UNDRR Sendai Framework) to intervention level (FAO/UNDP M&E for adaptation planning in agriculture)
- M&E frameworks need to be tailored to the specific context; there are some key considerations:

Purpose of M&E (e.g. outcome evaluation, process monitoring, adaptation readiness)	Content of M&E system
Intended use of M&E findings	Available resources to develop and operate it

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What are key concepts and frameworks

- There is a range of existing frameworks, methods and data sources that can be used and adaptated for the individual purpose and need
- **Examples are:**
  - Lancet Countdown,
  - WHO Framworks for Climate Resilience Measuring of health systems
  - UKCIP AdaptME Toolkit
  - IISD Climate Resilience and Food Security Framework
  - Convenance of Mayors
  - Resilience Maturity Model
  - ISO37123: Indicators for resilient cities

  ... and many more

Indicator-based approaches

- Mosty used: indicator-based approaches
  - Quantiative indicators (quantifiable evidence of progress)
  - Qualitative indicators (based on interviews etc.)

→ Specifically useful for decision- and policy makers

Limitations of indicator-based approaches, such as :

- complexity of adaptation cannot be reflected fully in indicators,
- maladaptation can be overseen,
- limited explenatory power of indicators

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Process and outcome indicators

Planning
Development of actions/ plans/policies

Process-based indicators:
Implementation of action/ measure

Outcome-based indicators:
Measuring the effectivness of action/plan/policy

Implementing and Monitoring
Reflecting/ reporting on adaptation plans/ policies/ actions

Process-based indicators:
Measure degree of completion of action

Outcome-based indicators:
Measure achievemnt of objective

Based on ICLEI Canada, Introducing Indicators_FINAL (icleicanada.org)

Challenges of monitoring

- No universial indicator for adaptation → lack of common metrics and hard to define what to measure
- Lack of data
- Difficulty in attributing changes to adaptation interventions/policies
- Uncertainty and complexity
- Long-term horizon
- Context specificity

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What are lessons learned from EU Mission projects?

- Many projects/ regions etc. start from scratch for developing monitoring approaches
- Goal was to gather learnings from three projects working on monitoring climate resilience
- Identified lessons learned on monitoring and evaluation implementation based on interviews

Open Research Europe

Open Research Europe 2024, 4:81 Last updated: 17 JUN 2024

Check for updates

OPEN LETTER

Deriving lessons learned from monitoring adaptation activities in projects under the EU mission on adaptation [version 1; peer review: 1 approved, 1 approved with reservations]

Stephanie Bilgram[1], Carla Klusmann[1], Christian Kind[1], Elisa Andreoli[2], Chiara Castellani[2], Dimitris Kofinas[3], Jan Cools[4,5], Antonio Trabucco[6], Chrysi Laspidou[3]

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Abstract
Actions to strengthen climate resilience are gaining more traction. In order to ensure effective adaptation, it is important to monitor the outcomes and impacts of these actions. However, there are numerous challenges and a multitude of approaches when it comes to monitoring adaptation to climate change. This paper addresses challenges in setting up mechanisms for monitoring climate resilience and adaptation projects. Drawing from three EU Horizon 2020 projects under the EU Mission on Adaptation to Climate Change, it synthesizes challenges and insights to support future initiatives in their monitoring endeavors for other projects to learn from. Findings, acquired through workshops with experts who shared learnings and challenges, highlight four key themes: the challenge of tailoring global frameworks to local needs, data availability and evaluation of data, interdisciplinary collaboration in monitoring, and stakeholder engagement for monitoring endeavors.

Keywords
Monitoring, climate resilience, climate adaptation, indicators, metrics

Open Peer Review

Approval Status ✓ ?

	1	2
version 1 24 Apr 2024	✓ view	? view

1. **Joshua Garland**, Lund University, Lund, Sweden
2. **Diana Reckien**, University of Twente, Enschede, The Netherlands

Any reports and responses or comments on the article can be found at the end of the article.

Page 1 of 15

Learnings and important aspects (1)

(i) From global indicator sets to demo-site specific indicator sets and metrics

- Provide a robust foundation
- Comparability accross diverse contexts
- Priorisation of indicators
- Allocation of resources for monitoring

(ii) Data availability, applicability, and evaluation

- Screening of data availability at project start
- Usage of qualitative data
- Definition of a method for harmonisation of data
- Plan for evaluation of data

Learnings and important aspects (2)

(iii) Interdisciplinarity in climate adaptation

- Clear definition of terms
- Shared understanding of monitoring accross disciplines and sectors

(iv) Stakeholder engagement

- Strategic engagement of stakeholders for indicator development
- Identification of blind spots for overlooked aspects which should be monitored
- Generation of qualitative data

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Thank you !

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An introduction to Step 6 of the Regional Adaptation Support Tool for regions and local authorities

Terry Karampini

European Environment Agency

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Step 1
Preparing the ground for adaptation

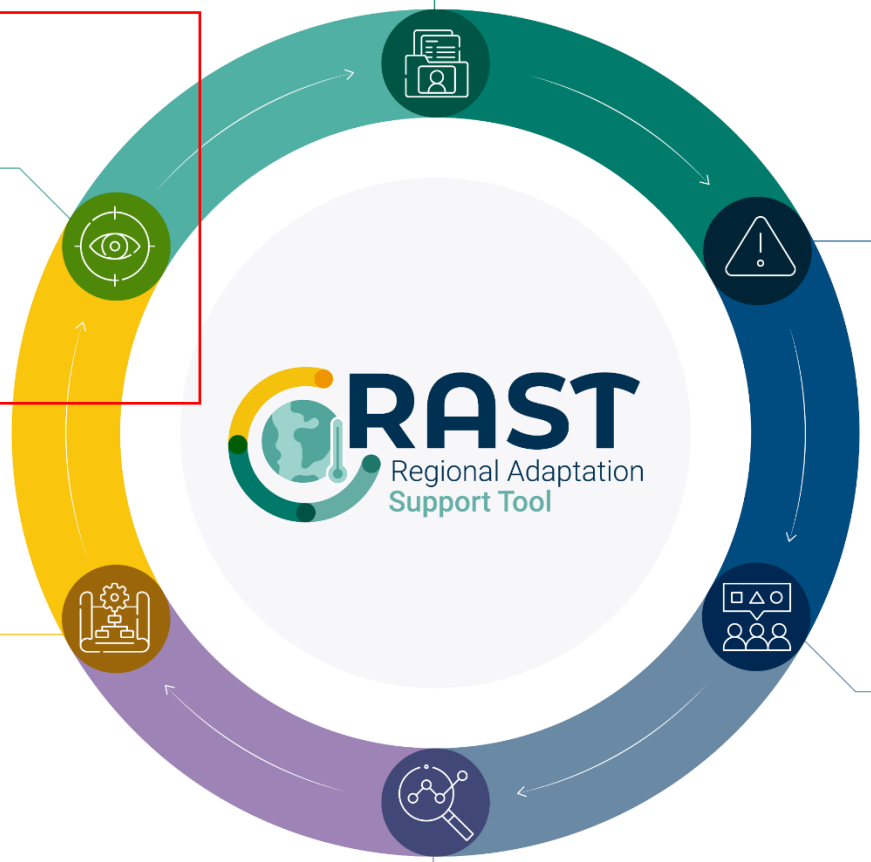
Step 2
Assessing climate risks and vulnerabilities

Step 3
Identifying adaptation options

Step 4
Assessing and selecting adaptation options

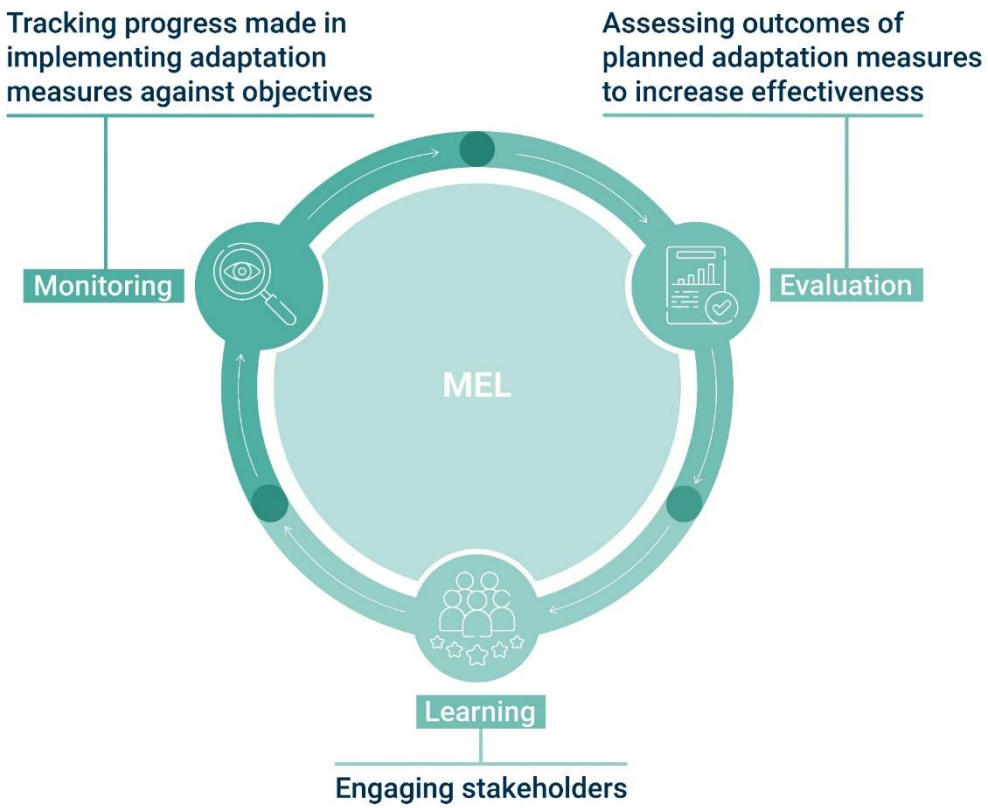
Step 5
Implementing adaptation policies and actions

Step 6
Monitoring, Evaluation and Learning (MEL)



Visit the RAST page on the Mission Portal

Step 6 | Monitoring, Evaluation and Learning (MEL)



Monitoring e.g. measuring change in permeable surfaces to increase natural rainwater infiltration to prevent flooding

Evaluation e.g. effectiveness of initiatives aimed at promoting nature based infiltration in reducing flood risk and climate vulnerability

Learning eg. through feedback loops or public consultations

Main takeaways

- **Goal:** Climate adaptation plan stays on track and delivers the intended results
- **MEL should be continuous:** Start considering what is to be achieved from the very beginning of the adaptation planning process
- **Stakeholder engagement is key**: Engage meaningfully with stakeholders on MEL from the beginning

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Step 6.1 Developing your MEL approach

- Clearly define and communicate the scope, purpose and objectives of your MEL approach (e.g. monitor progress, evaluate adaptation policies' effectiveness, increase transparency, raise awareness)
- See how stakeholders will be involved and how data will be organised systematically
- Align MEL to practices at various levels of governance (national, city level)
- Engage stakeholders systematically
- Use lessons learned to improve your adaptation plan

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Step 6.2 Defining your MEL framework

Set of criteria or indicators – how adaptation measures in your plan will be monitored and evaluated to assess effectiveness in achieving climate resilience

Combine quantitative and qualitative methods

The MEL framework should be relevant, clear, realistic, proportionate to the level of resources

Table 1 Example of outputs and outcomes indicators

Climate change impact	Adaptation measure	Output	Outcome
Water shortage due to droughts	Wetland rehabilitation	Hectares of wetlands rehabilitated	Reduction in the impacts of drought on water quantity

Figure 4 Donatti; et al., 2020

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Step 6.3 Learning from results

Learning should take place throughout the implementation of climate adaptation plans – refine plans

Adopt a learning strategy - Learn from successes and failures through monitoring and evaluation to help you manage climate risks effectively

Foster a collaborative learning approach by actively involving stakeholders (e.g. public consultations)

Promote cross-level learning, among regions, localities, communities, enhancing collective understanding

When updating plans, prioritise insights gained through learning

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Urban Adaptation in Europe

Aneliya Nikolova

European Environment Agency

Reporting at the sub-national level

- Often, the sub-national work is conducted alongside NAP/NAS.
- Municipalities and regions are frequently responsible for implementation of measures at local level.
- Some cities and municipalities have their own adaptation strategies and plans.
- Several countries are in the early stages of developing a system to track sub-national adaptation activities.
- National authorities play an important role in scaling and evaluating adaptation actions.
- Many local adaptation plans are recent, so thorough progress reports are pending.

Source: ETC CA - EEA Technical Paper - Is Europe on track with climate resilience? – Status of reported national adaptation actions in 2023

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Risk assessment & policy readiness:

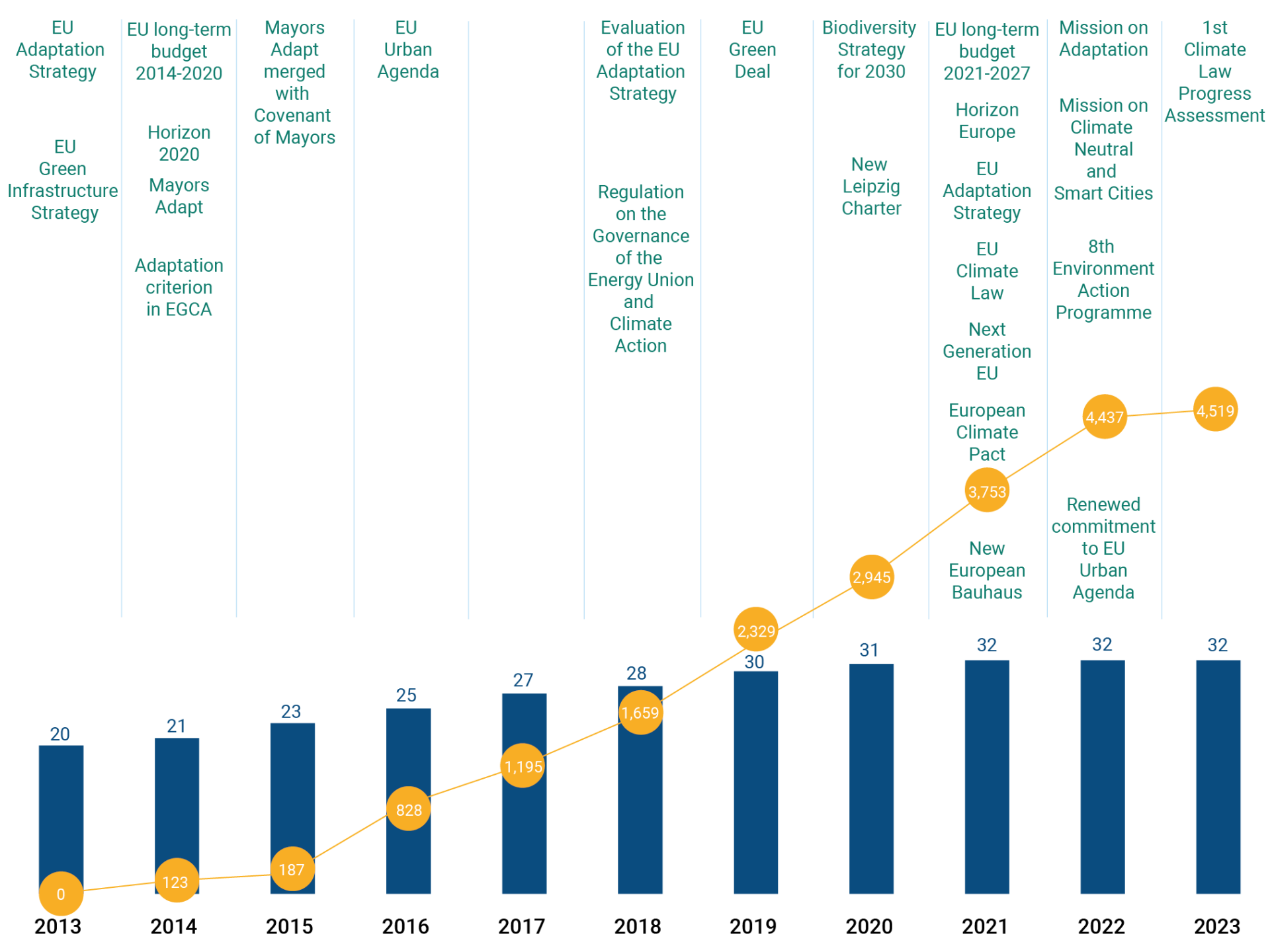
[European Climate Risk Assessment]

Towards societal preparedness (response):

*[Urban adaptation in Europe]

*Responding to climate change impacts on human health in Europe

[Press release] and [full report] available on EEA website

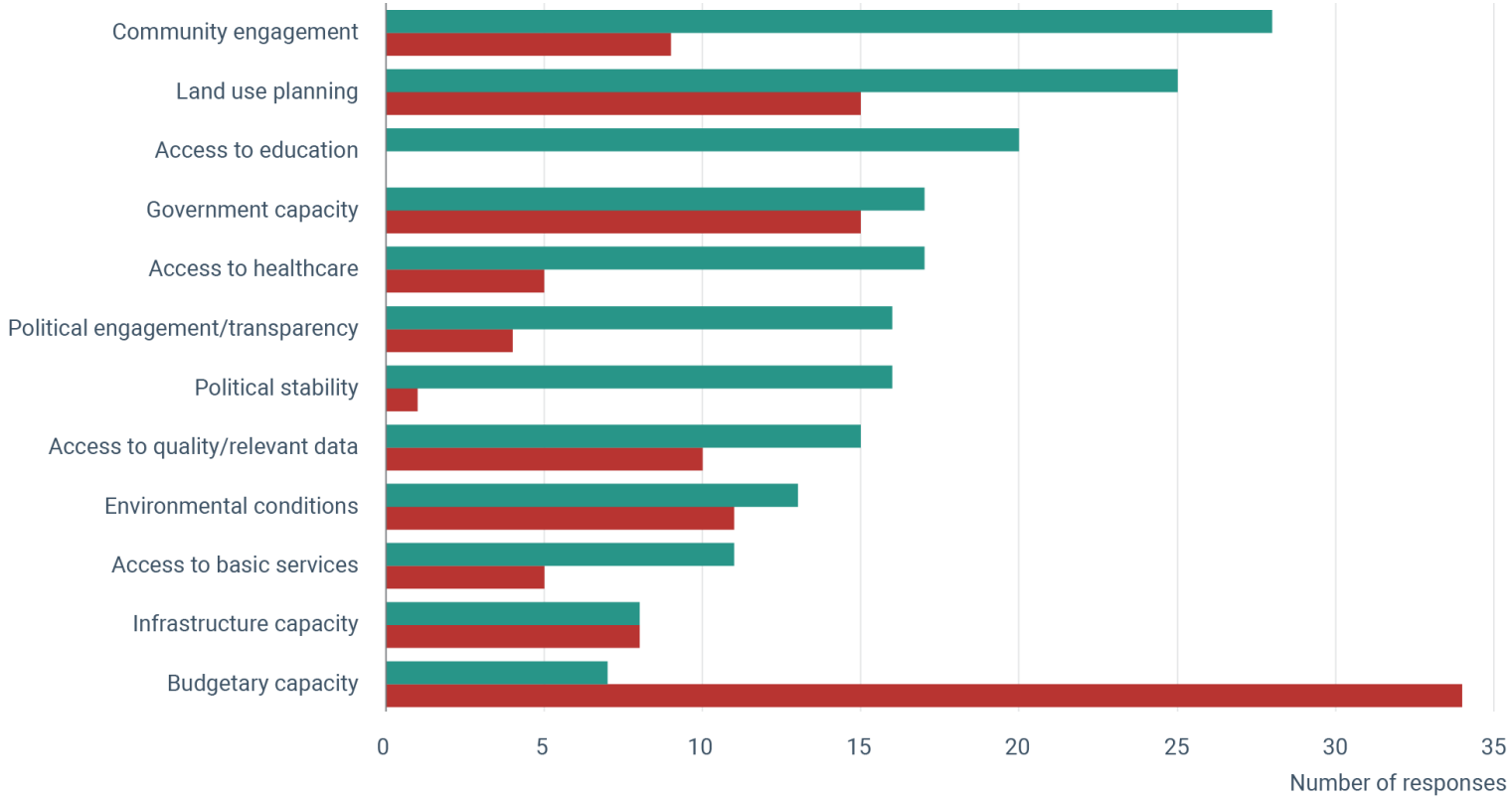


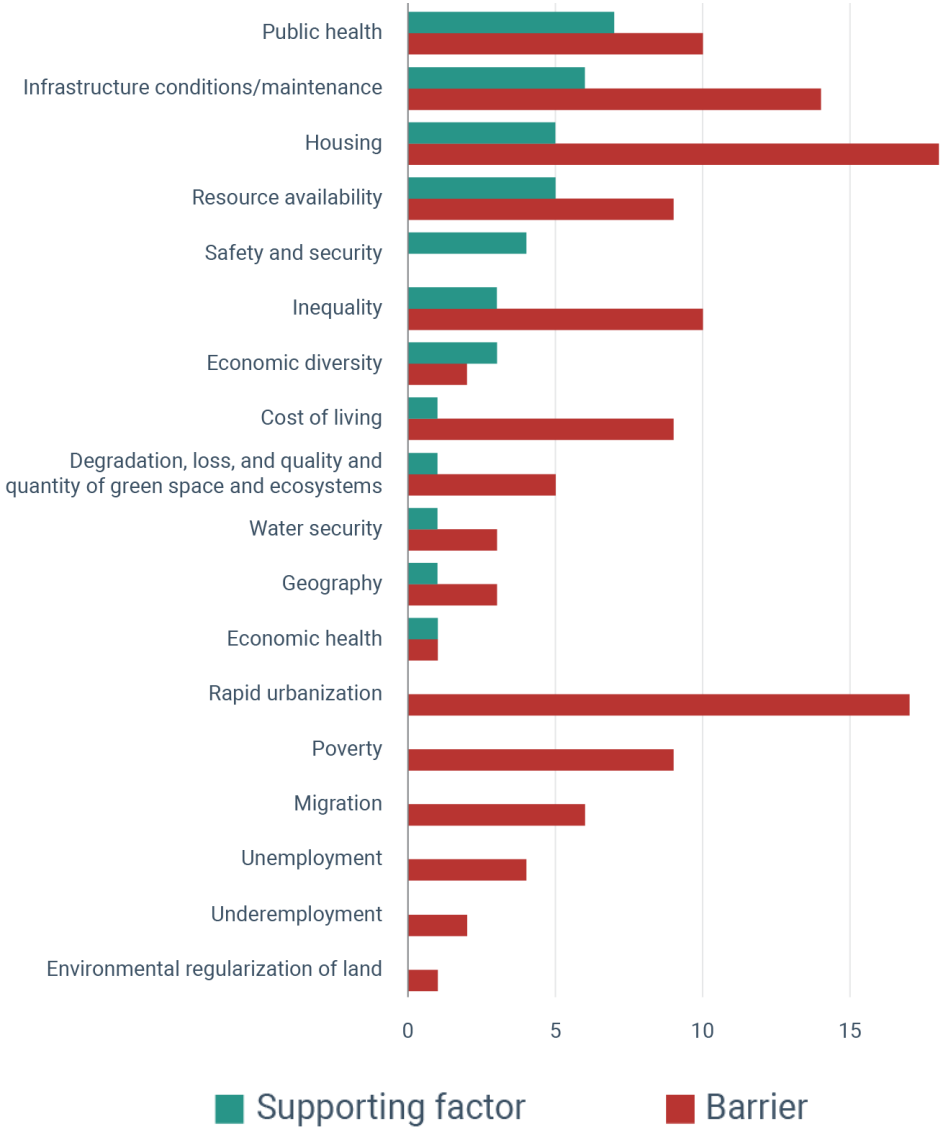
* Covenant of Mayors **adaptation** signatories

=> 202.5 M people

Nr. Covenant of Mayors signatories on adaptation (EEA38)

Nr. Countries with National Adaptation Strategies and/or Plans (EEA32)





Enabling factors

* Community engagement
* Budgetary capacity
* Long-term political commitment
* Knowledge and data
* Networks and peer-learning

CDP, 2023

* Adaptation needs to be ***mainstreamed*** and ***upscaled*** → a more clearly defined common goal on adaptation would help guide this

- *55%* of local climate action plans define metrics
- Only *2%* of these are linked to an actual **target**

Advantages of continuous monitoring and reporting

- **Transparency:** Provides clear and open communication about progress and challenges.
- **Enhanced Progress Monitoring:** Supports course correction throughout implementation, ensuring that goals are met more effectively.
- **Increased Visibility:** Attracts funding by showcasing progress and achievements to potential investors and donors.
- **Enhanced Prioritization of Climate Action:** Improves the direction of public spending and funding from external sources, ensuring that resources are allocated to the most critical areas.

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Reporting under the Mission on Adaptation

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Tracking progress at the sub-national level

- Reporting through the Mission on Adaptation will be available soon
- One-stop-shop for tracking progress across key dimensions: governance, climate risks and vulnerabilities, stakeholder engagement, implementation, MEL

Sharing experiences

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Sharing experience: Monitoring and evaluation framework

Joao Lopes,
Filipe Ferreira,
Andre Pereira

Lisbon Metropolitan Area

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Concrete solutions for our greatest challenges

Tracking Progress: Monitoring and Evaluation in Climate Adaptation

Lisbon Metropolitan Climate Adaptation Plan – 20 June 2024

João Paulo Lopes – joao.lopes@aml.pt
André Pereira – andre.pereira@aml.pt

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Lisbon Metropolitan Area context

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- **Lisbon Metropolitan Area**
- 18 municipalities
- 3.015 km²
- 2.821.349 inhabitants
- 27% PT population
- 36,1% PT GDP

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. l. . de lisboa

Main Objetives of Metropolitan Climate Adaptation Plan

- Reducing exposure to climate risks, mitigating impacts on people and goods
- Increase adaptative capacity, to deal with the impacts of climate changes
- Promoting knowledgment, about climate change, its impacts and vulnerabilities

Phase 1
Basic adaptation scenario

stage 01 **Scope, objectives and framework**
- Thematic contextualisation
- Identification of the objectives, method and plan organisation
- Definition of the strategic reference framework

stage 02 **Climate contextualisation**
- National and metropolitan climate contextualisation

stage 03 **Bioclimatic scenarisation**
- Bioclimatic scenarisation based on RCP 4.5 and 8.5 scenarios

stage 04 **Assessment of the institutional environment and activities at local level**
- Analysis and articulation of approach and strategies at the district level
- Risk percepetion analysis

stage 05 **Socio-economic contextualisation**
- Diagnostic review
- Prospective review

Phase 2
Impacts and vulnerabilities

stage 06 **Current impacts and vulnerabilities assessment**
- Risk cartography
- (mapping of vulnerable areas)
- Climate sensitivity assessment
- Identification and mapping of current impacts and vulnerabilities
- Current impacts and vulnerabilities assessment
- Adaptive capacity characterisation and assessment oat metropolitan and district level

stage 07 **Future impacts and vulnerabilities assessment**
- Risk cartography (modeling scenarios)
- Identification and assessment of future impacts and vulnerabilities
- Climate risk assessment
- Ranking of adaptation priorities

Phase 3
Adaptation options

stage 08 **Adaptation measures at metropolitan, district level and by strategic sector**
- Identification of adaptation measures at metropolitan, district level and by strategic sector
- Multiple criteria analysis and prioritisation
- Identification and assessment of non-adaptation costs

stage 09 **Integration of adaptation in the municipal, inter-municipal and metropolitan planning**
- Guide to the integration of adaptation in spatial planning

stage 10 **Models, processes and management instruments, follow-up and monitoring**
- Definition of the management model
- Definition of the funding model for the implementation of adaptation
- Definition of the monitoring model
- Definition of the communication and institutional disclosure model

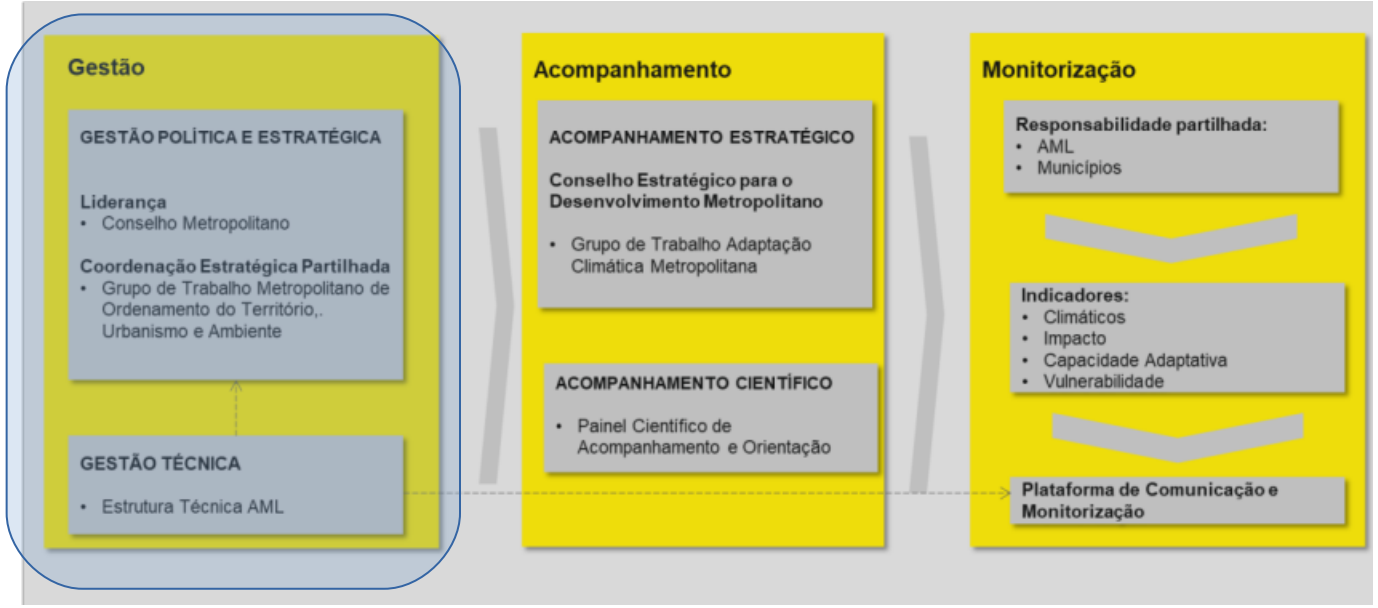
Adaptation options

- 4 Priority Climate risks (High temperatures, Floods, Droughts, Sea level rise)
- 13 Strategic Objectives
- 50 Adaptation Measures
- 195 Adaptation Actions

Management, Follow-up and Monitoring process

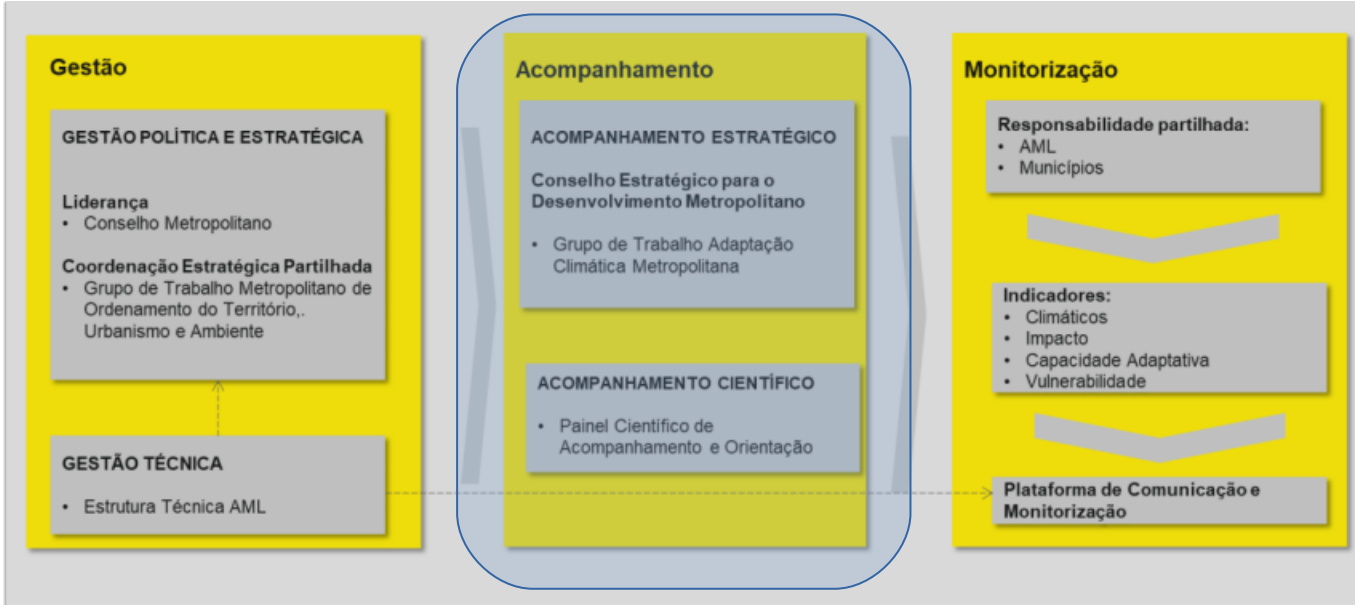
- **Strategic Management**
- Metropolitan Council
- Spatial Planning, Urbanism and Environment Working Group

- **Technical Management**
- LMA Technical Structure



- **Strategic Follow-up**
- Strategic Council for Metropolitan Development

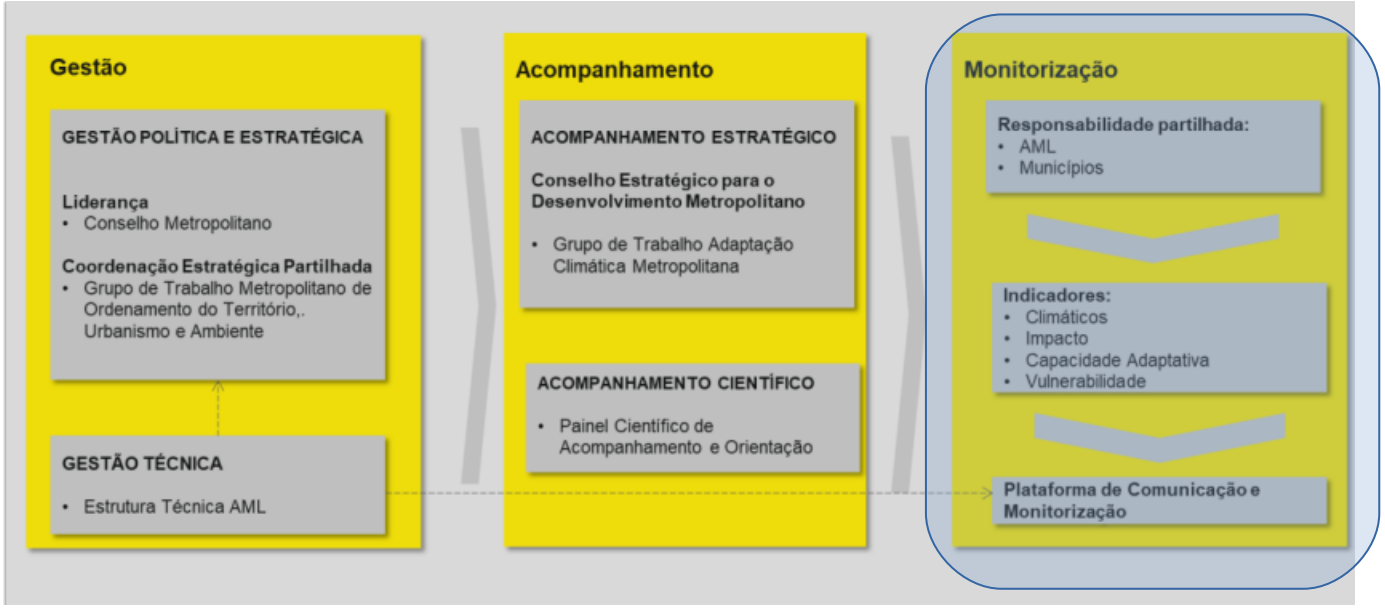
- **Scientific Follow-up**
- Steering Scientific Panel



- **Monitoring**
- Shared responsibility between LMA and Municipalities

- **Indicators**
- Climate
- Impact
- Adaptive Capacity
- Vulnerability
- Performance

- **Monitoring Platform**
- GIS PMAAC-AML



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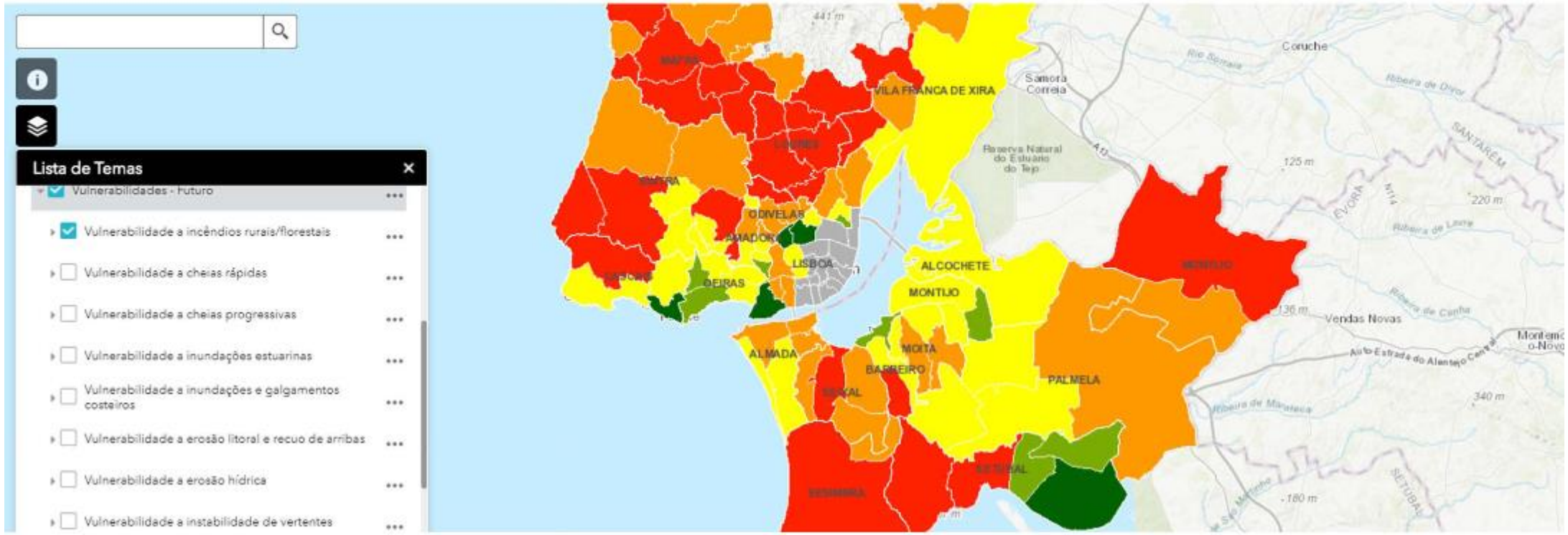

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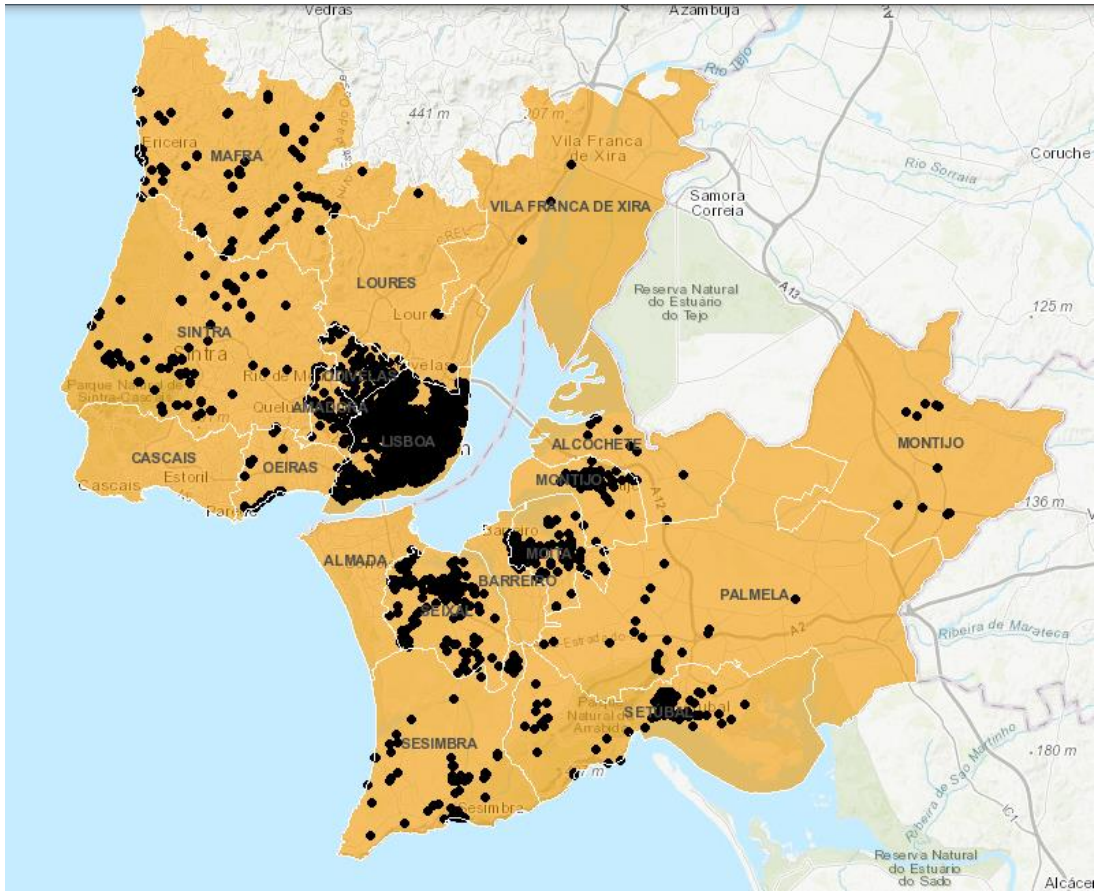
Indicator System

Climate	Impact	Adaptation Capacity	Vulnerability	Performance
Temperatures	Number of extreme events	Protected areas	Human losses from events	Number of projects
Rainfall	Typologies of impacts	Houses without air conditioning	Damages on buildings	Total investment
Wind		Firefighters	Heatwave excess mortality	
Sea Level		Gross value of businesses	Wildfire affected area	

- **Monitoring for the 2025 Evaluation Process**
- Climate – LMA weather stations + revised 2100 National Adaptation scenarios
- Capacity – updated 2021 census
- Impact – updated Local Climate Impact Profiles
- **Vulnerability** – multiple sources
- **Performance** – Metropolitan strategic projects + 2030 Integrated Territorial Investments

Monitoring Platform Update



Impacts and vulnerabilities

- Local Climate Impact Profiles (UKCIP)
- Streamlined spatial distribution and typologies of events
- Challenge: Improvements on impact reporting

Performance

- Initial inquiry on projects and intentions
- Challenge: Go beyond investment values
- Objective: Better integration with other indicators

Município	Projeto	Monitorização PMAAC-AML		Estado	Investimento
		2021	2023		
Almada	Corredor Verde Atlântico – Lagoa de Albufeira				NQ
Almada	Corredor Verde Almada – Costa de Caparica				NQ
Almada	Agro-Parque Terras da Costa e do Mar				2.750.000,00€
Almada	Eixo Central de Almada e Zonas Envolventes				2.832.322,00€
Almada	ReDuna - Projeto de restauro ecológico do sistema dunar das praias de S.João da Caparica e Cova do Vapor (2ª fase)				200.000,00€
Almada	Renaturalização de zona de acacial				NQ
Almada	BlueAction			Concluído	37.000,00€
Almada	Eficiência Energética no Edifício do Fórum Municipal Romeu Correia			Concluído	450.000,00€
Almada	Rede de hortas municipais de Almada			Em curso	NQ
Almada	NACLIM - North Atlantic Climate			Concluído	NQ
Almada	PMDFI "Plano Municipal de Defesa da Floresta contra Incêndios 2019 – 2028."			Em curso	7.082.362,00€
Almada	PMEPCA "Plano Municipal de Emergência de Proteção Civil de Almada"			Em curso	NQ
Almada	SPORE - Space for Shore			Concluído	NQ
Almada	MultiAdapt – Projecto de adaptação multifuncional para regulação de cheias, amenização micro-climática e promoção			Concluído	80.480,74€
Amadora	Corredor Azul Intermunicipal – Ribeira de Carenque				789.235,00€
Amadora	Corredor Azul Intermunicipal – Rio da Costa				636.289,00€
Amadora	Corredor Azul Intermunicipal – Ribeira de Algés				542.938,00€
Amadora	Corredor Azul Intermunicipal – Ribeira da Amadora				405.060,00€

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Thank you !

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Sharing experience:

Platform for the evaluation of the impact of climate change in Navarra in the framework of the LIFE-IP NAdapta-CC project

Ion Sola Torralba
Fernando Señas Bea

Navarra

Navarra region

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Navarra

- Population: 671,746, half of them in the capital, Pamplona, and its neighbour villages
- Area: 10,391 km2
- GDP per capita: 15,684 euro

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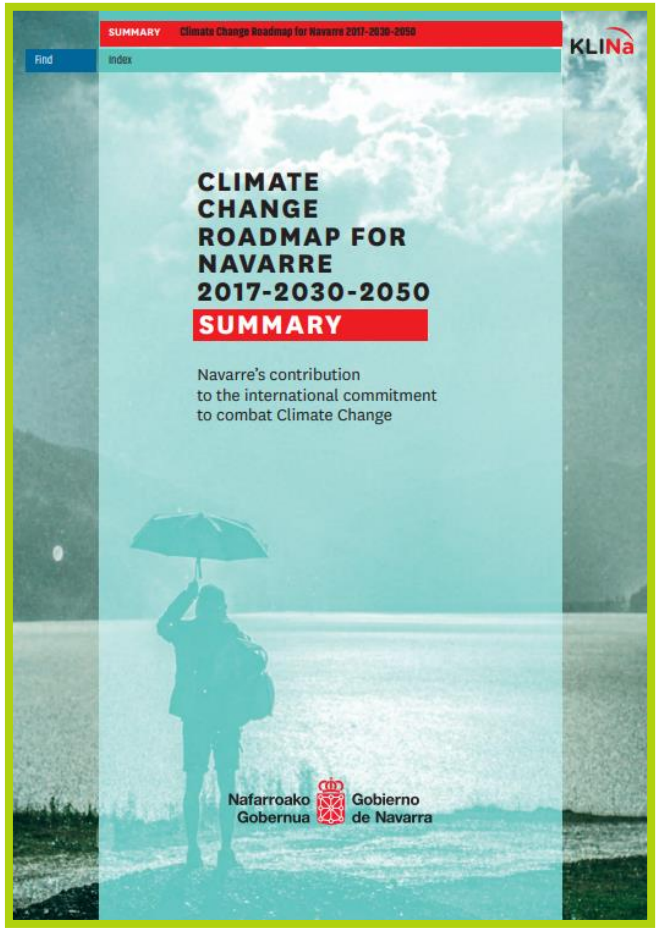
LIFE-IP NAdapta-CC Project

2018: Climate Change Roadmap for Navarre: KLINa



- Comprehensive and cross-cutting strategy.
- Adaptation and mitigation.
  - Transition to a low-emission economy.
  - Towards a sustainable and resilient territory.
- Contribution to:
  - EU Strategy.
  - Paris Agreement.
  - SDGs.

https://klina.navarra.es/

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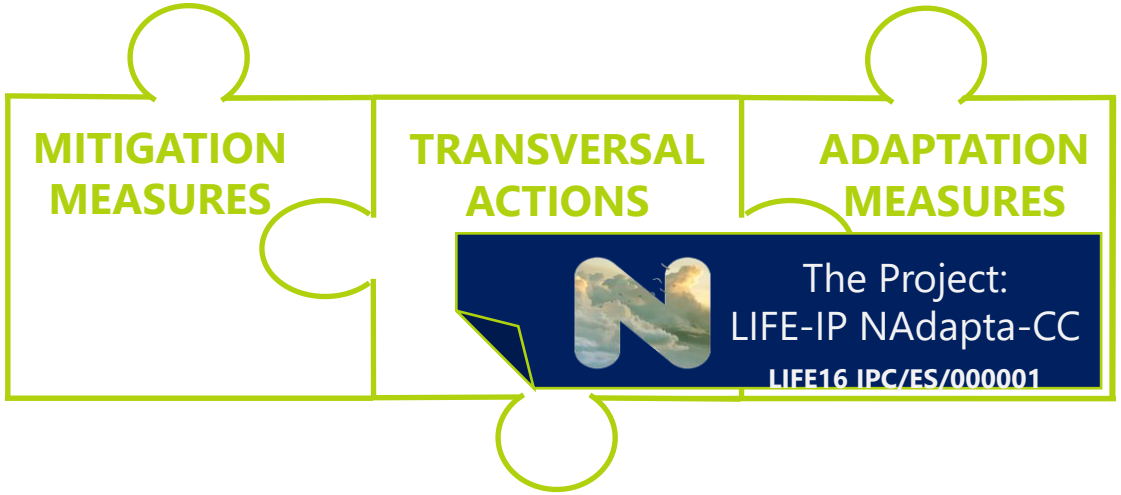
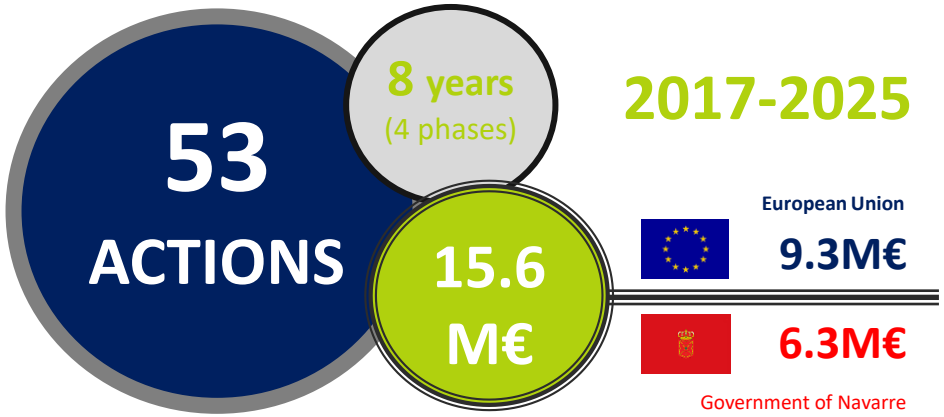
LIFE-IP NAdapta-CC Project:





- **Objective:**

Increase resilience to climate change in Navarre:

- Intersectoriality.
- Long-term sustainability.
- Participation and networking.
- Implementation of the actions included in Navarre's Climate Change Roadmap, **KLINa**.

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LIFE-IP NAdapta-CC Project: Technical areas

Covenant of Mayors for Climate & Energy EUROPE

- Monitoring and local level
- Agriculture and livestock
- Water
- Health
- Forestry
- Infrastructures and territorial planning

LIFE16 IPC/ES/000001 CONSORTIUM

Gobierno de Navarra
Nafarroako Gobernua

AGENDA 2030

Gobierno de Navarra
Departamento de Desarrollo Rural y Medio Ambiente

Nafarroako Gobernua
Landa Garapeneko eta Ingurumeneko Departamentua

Instituto de Salud Pública y Laboral de Navarra

Nafarroako Osasun Publikoaren eta Lan Osasunaren Institutua

GAN-NIK
Gestión Ambiental de Navarra
Nafarroako Ingurumen Kudeaketa

NILSA

Nasuvinsa
Navarra de Suelo y Vivienda, S.A.

INTIA

upna
Universidad Pública de Navarra
Nafarroako Unibertsitate Publikoa

Monitoring the effects of climate change

Monitoring the effects of climate change

- The system of indicators for monitoring the effects of climate change in Navarre aims to design and develop a dashboard to assess the **territorial impact of the effects of climate change** in Navarre.
- This dashboard shows the situation and evolution of Navarre in relation to climate change and makes it possible to **monitor the solutions and adaptive transformations** implemented within the framework of the project.

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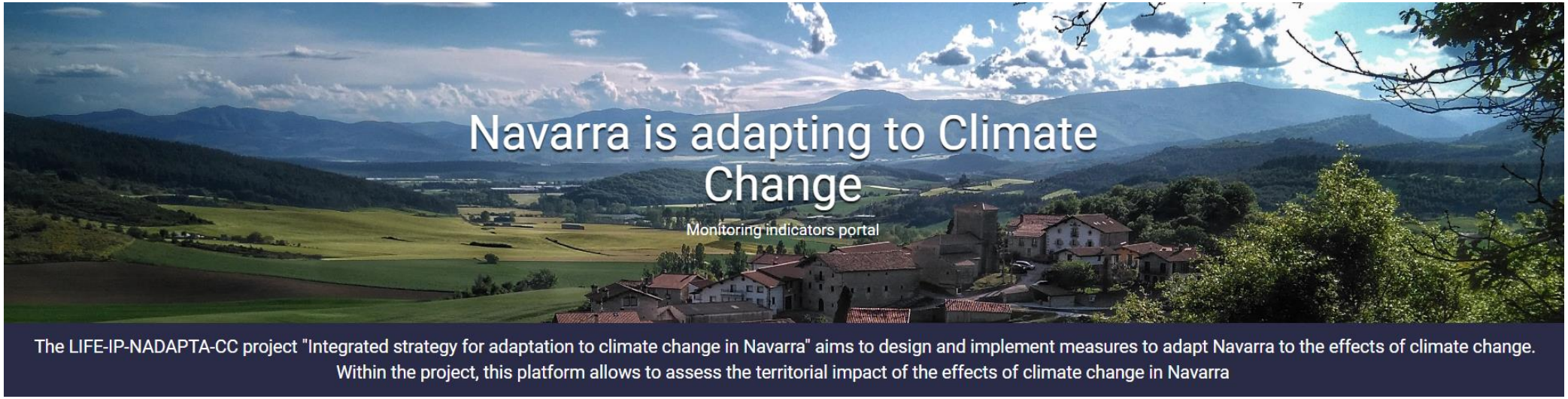
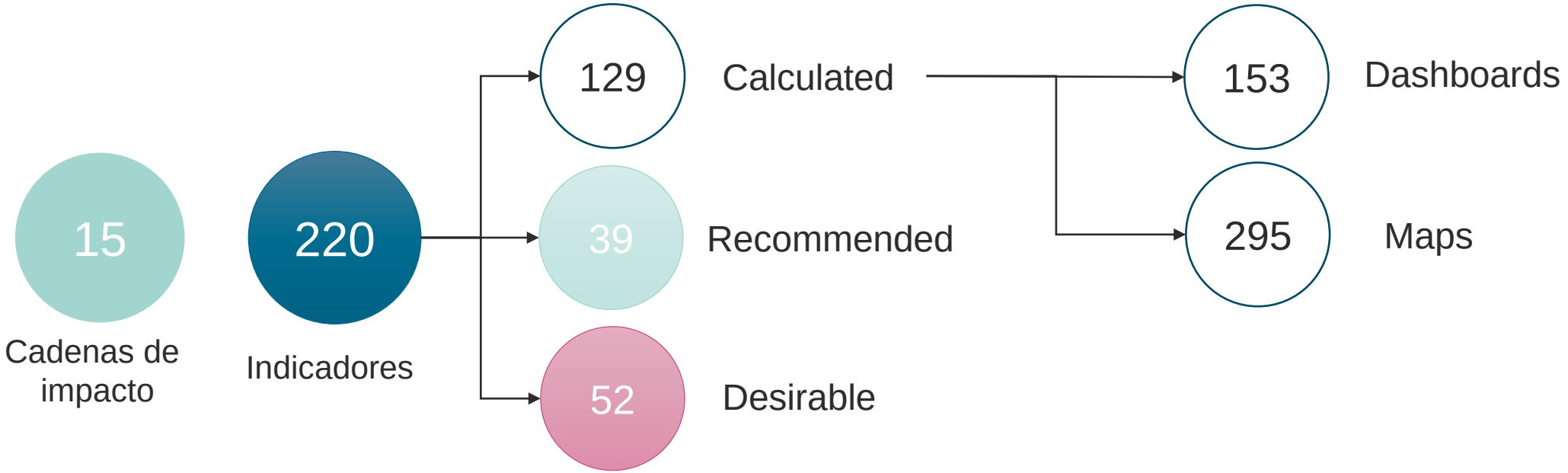
Web platform



https://monitoring.lifenadapta.eu ES
https://monitoring-en.lifenadapta.eu ENG

Key figures

- Web platform published in 2021 (in Spanish and English) with 15 impact chains and 220 proposed indicators: 129 existing, 39 recommended and 52 desirable:



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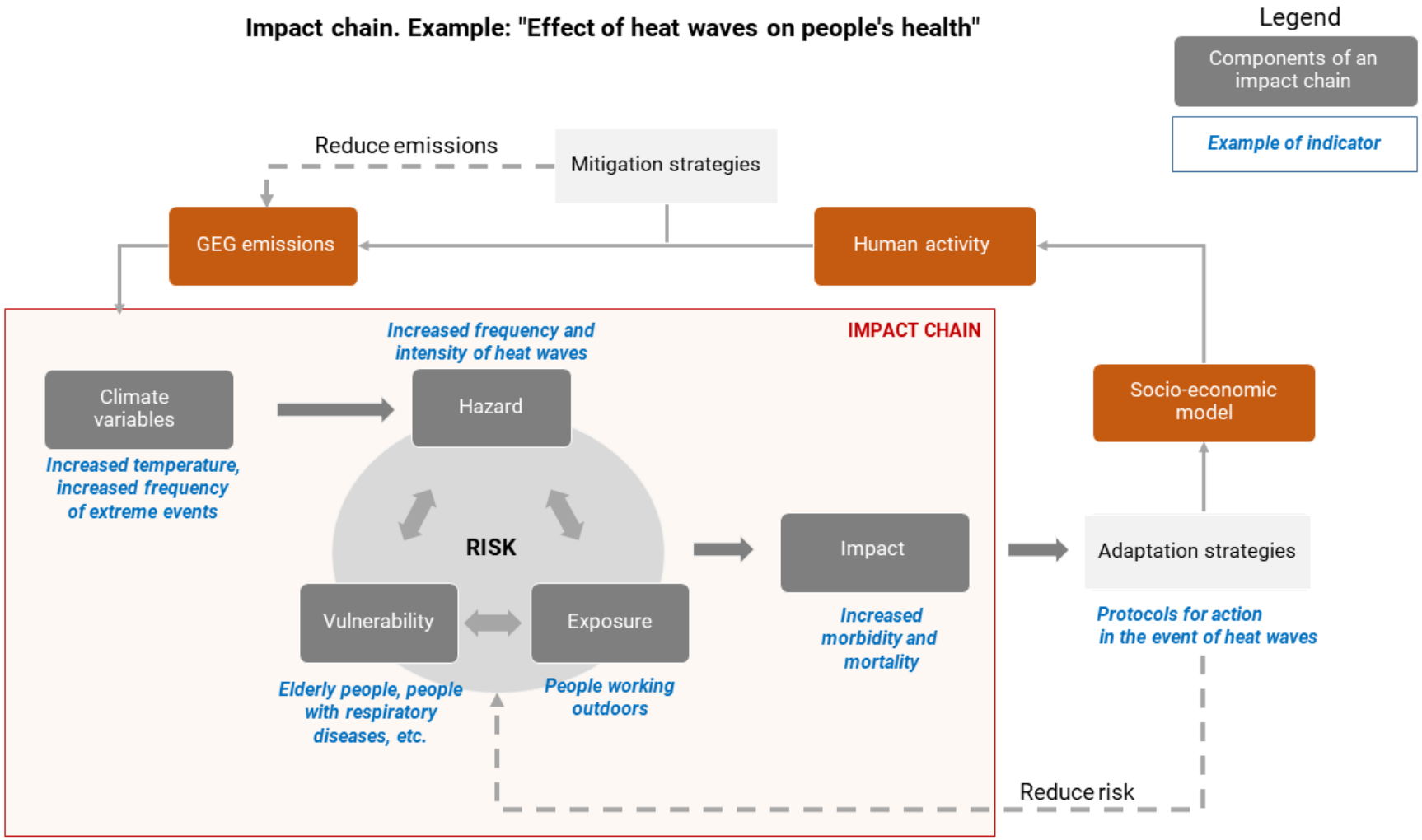
Impact chain concept



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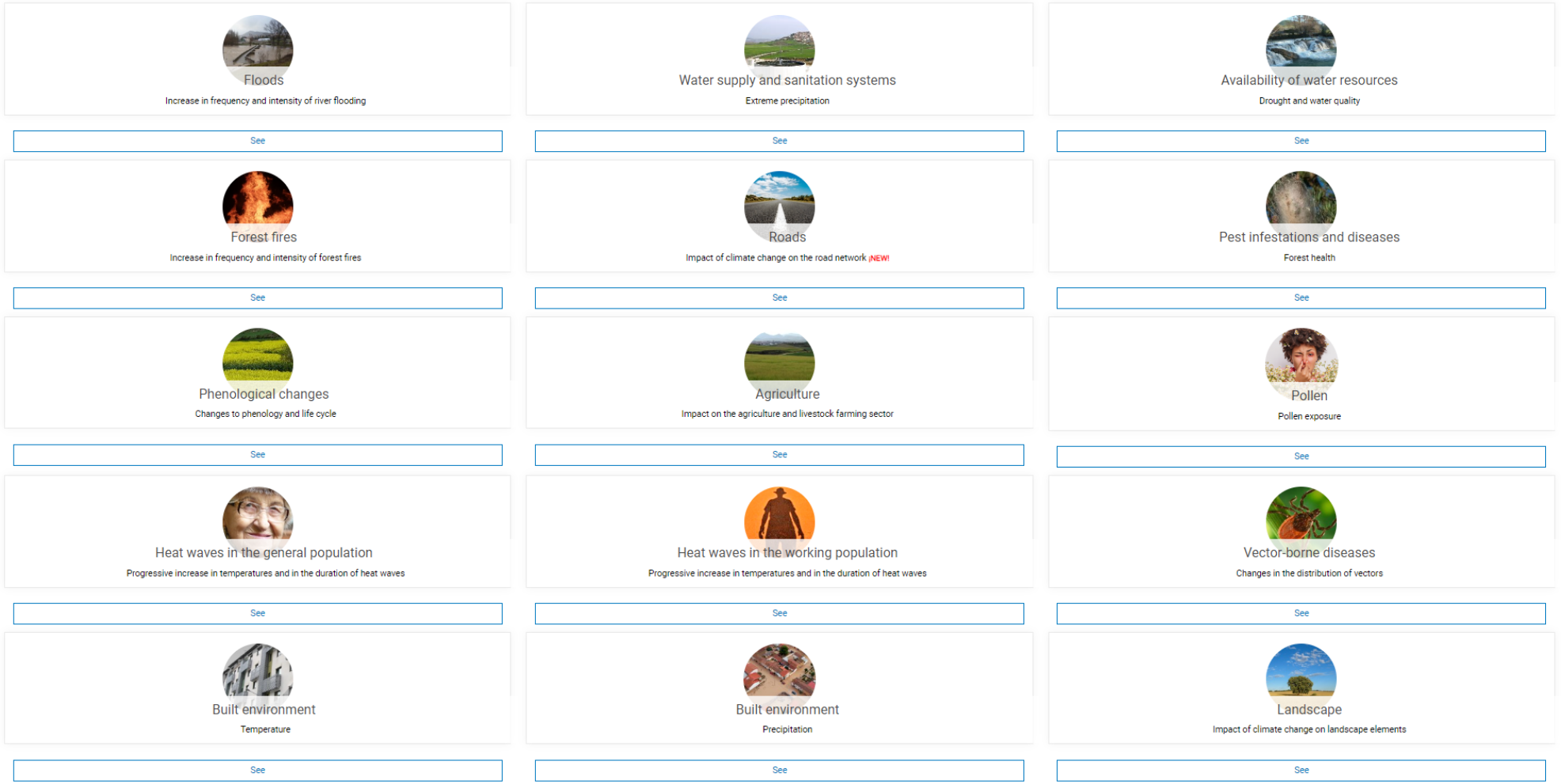
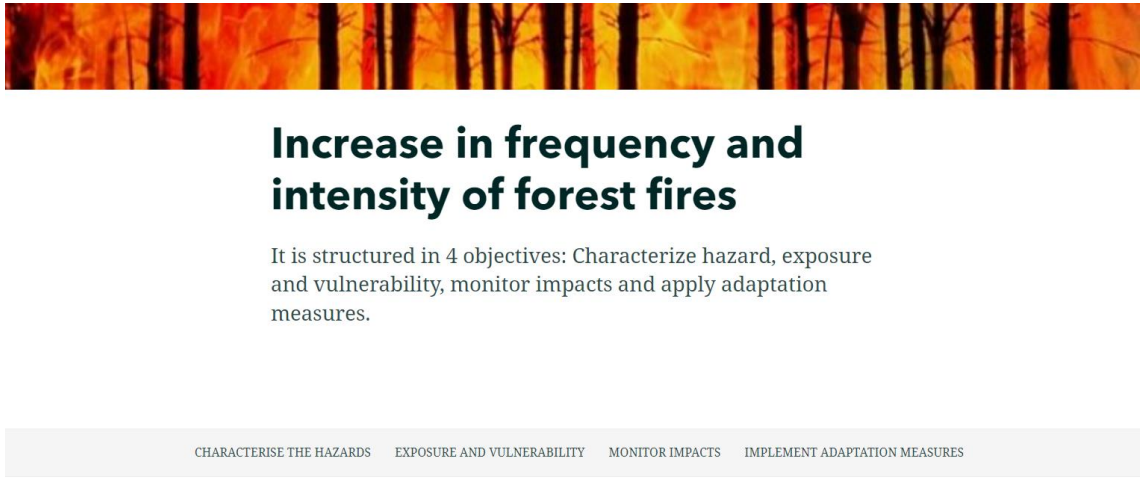
Impact chains



Objectives

- 1. Characterise the hazard (climatic variables)
- 2. Characterise exposure and vulnerability
- 3. Monitor impacts
- 4. Implement adaptation measures



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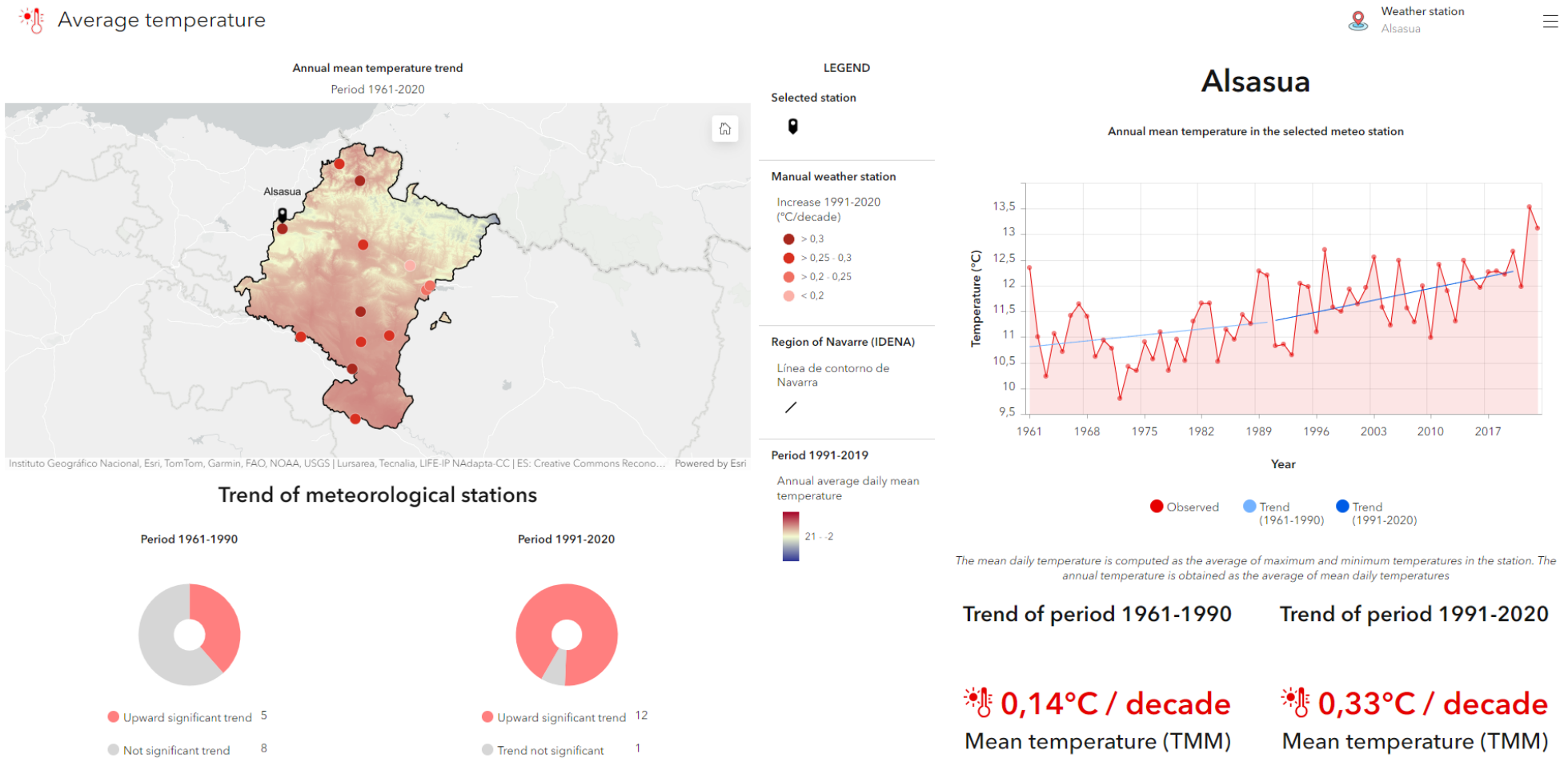
Objective 1. Characterise the hazard



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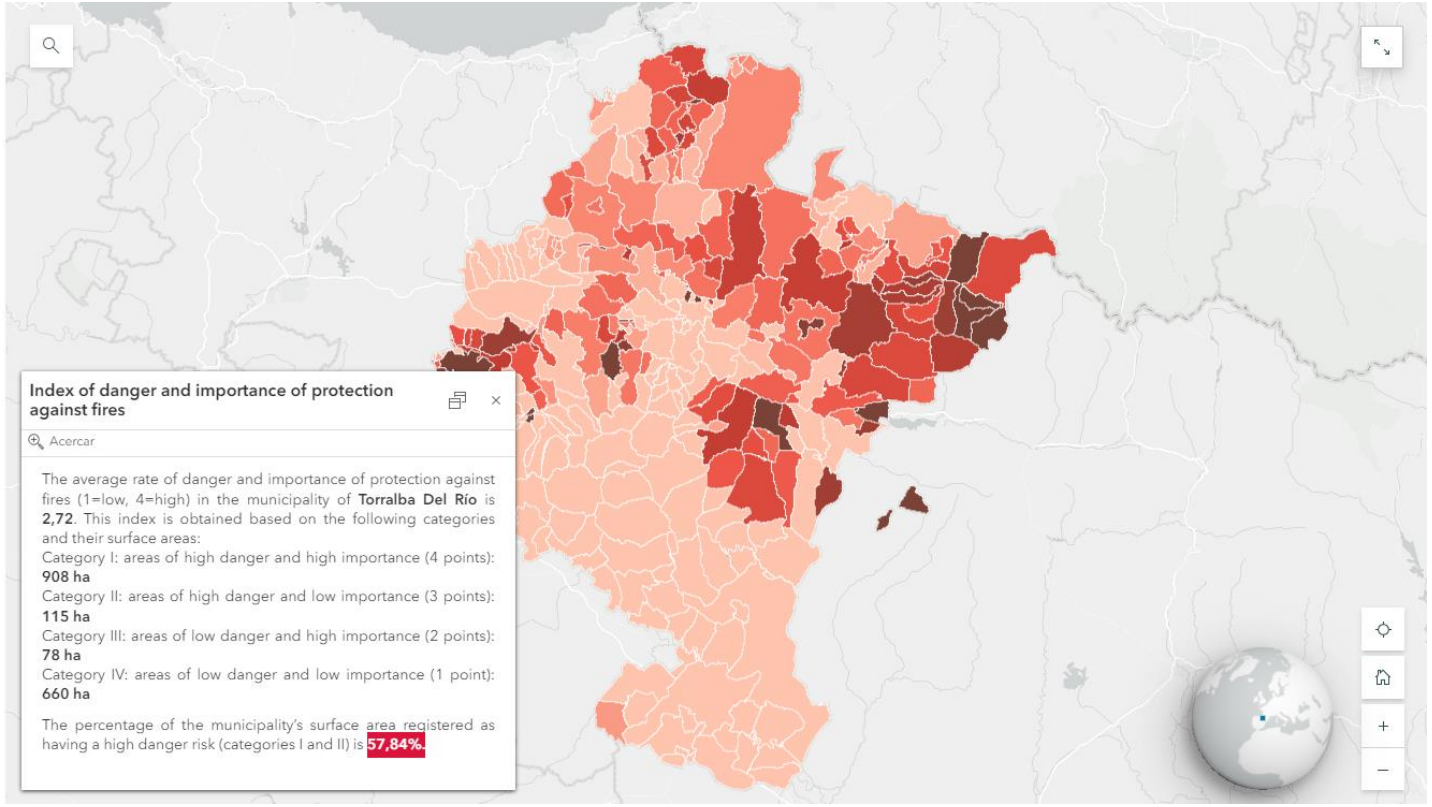
Objective 2. Characterise exposure and vulnerability

Index of danger and importance of fire protection at municipal level. The index value is between 1 and 4 (see data and metadata)



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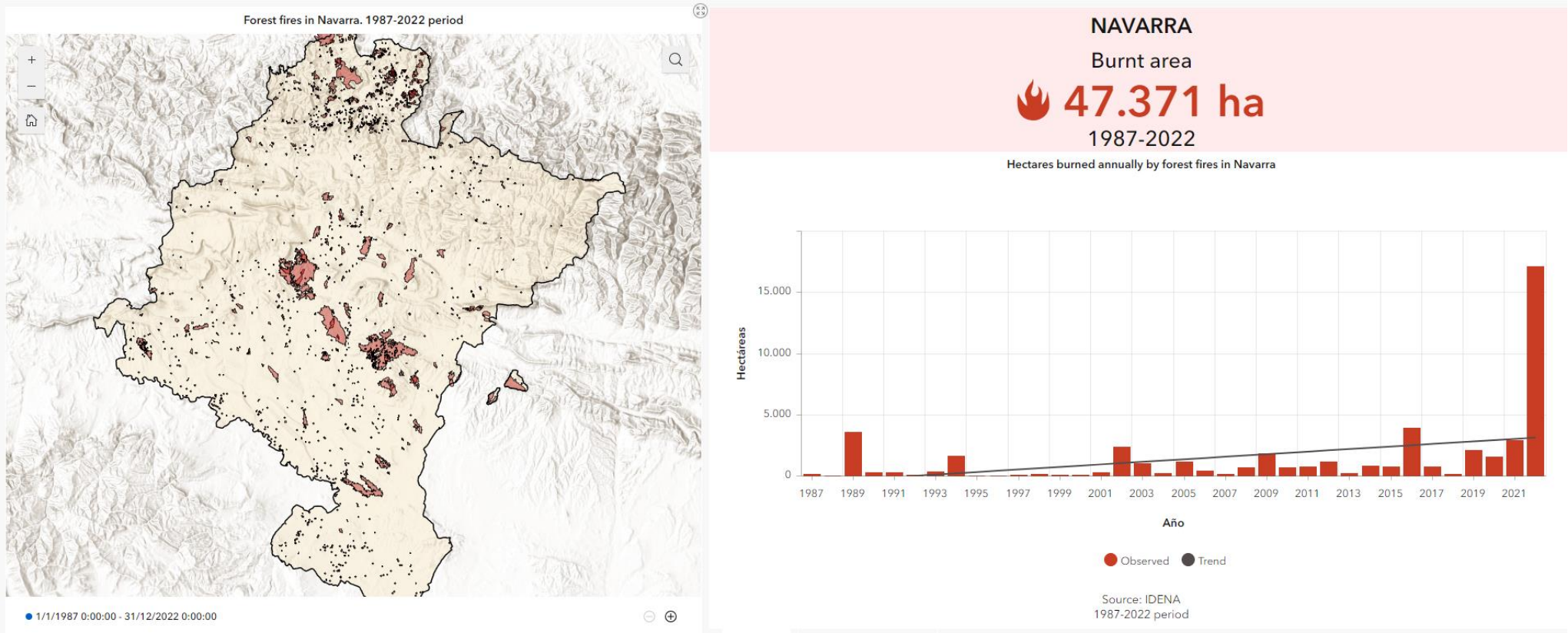
Objective 3. Monitor impacts



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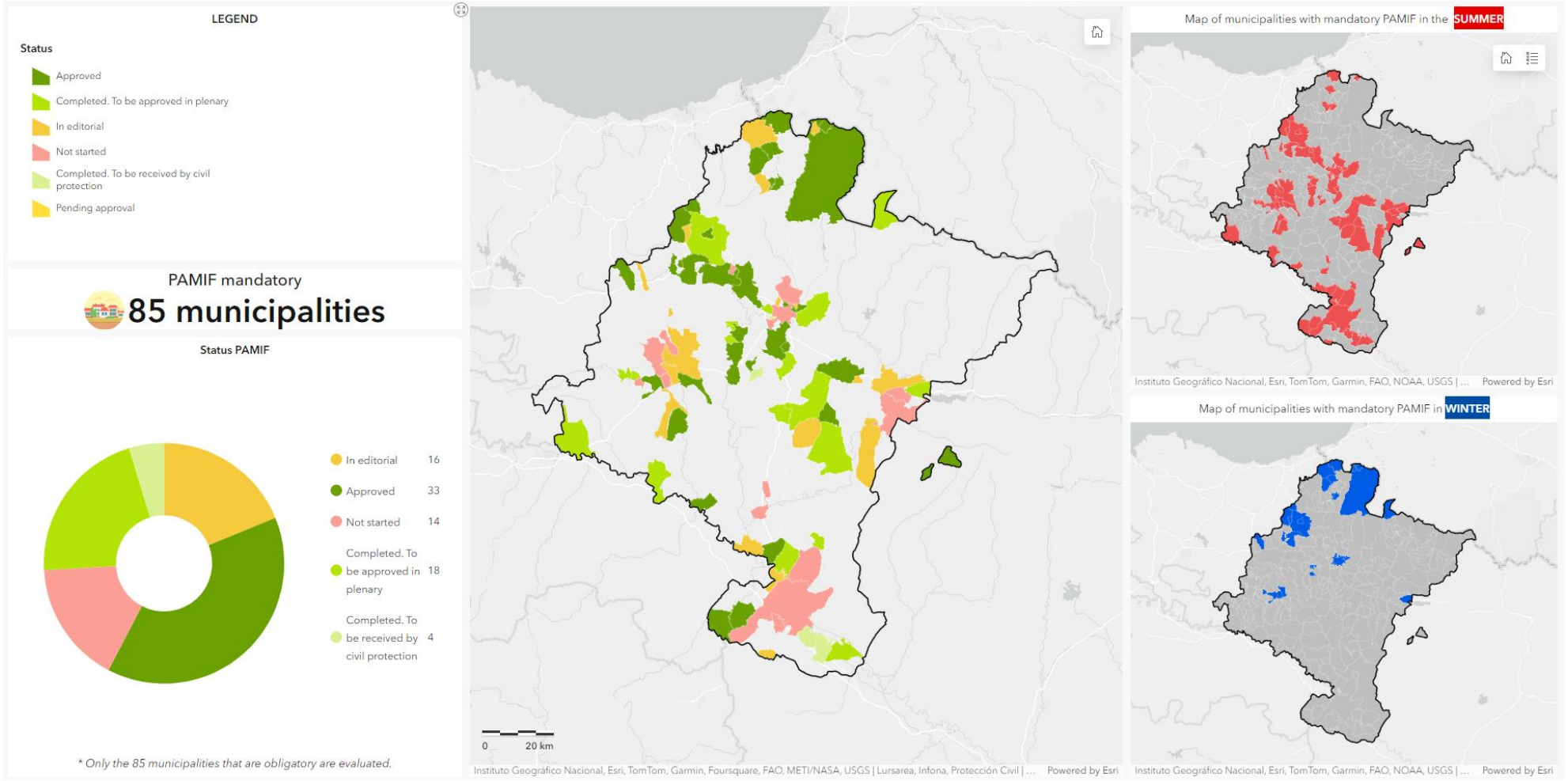
Objective 4. Implement adaptive measures



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Covenant of Mayors in Navarra

Covenant of Mayors
for Climate & Energy
EUROPE

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Covenant of Mayors in Navarre

- The LIFE-IP NAdapta-CC project includes adaptation measures at regional level.
- In addition, municipalities are reporting **adaptation, mitigation and energy poverty actions at municipal level** in the framework of the Covenant of Mayors for Climate and Sustainable Energy.
- A website has recently been published where the different phases of the Covenant of Mayors process can be consulted, starting with joining the initiative, planning, implementation of actions and evaluation of the impact of these actions on the achievement of the objectives.

https://pactoalcaldias.navarra.es

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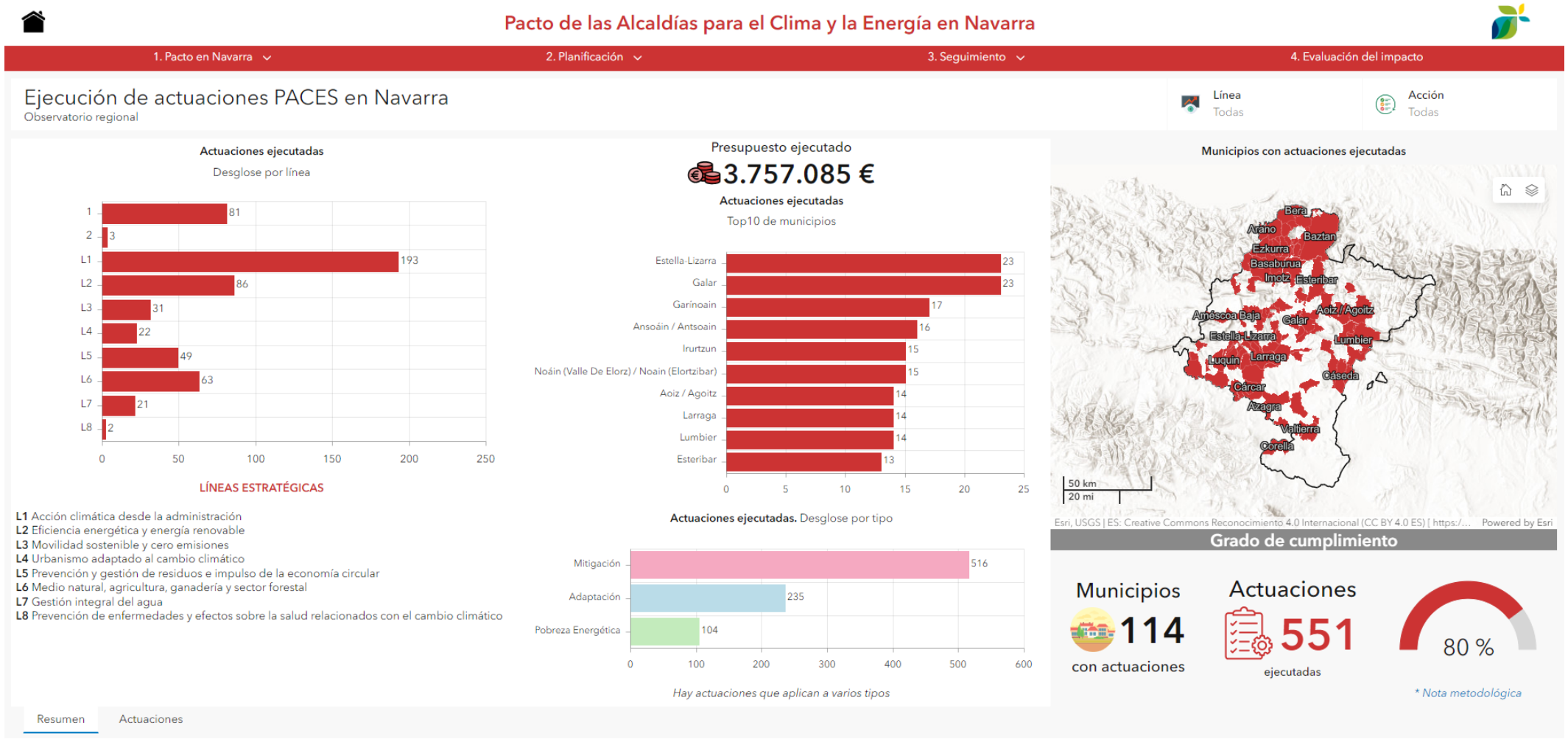
Web platform



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Thank you !

#EUmissions

#HorizonEU

#MissionClimateAdaptation

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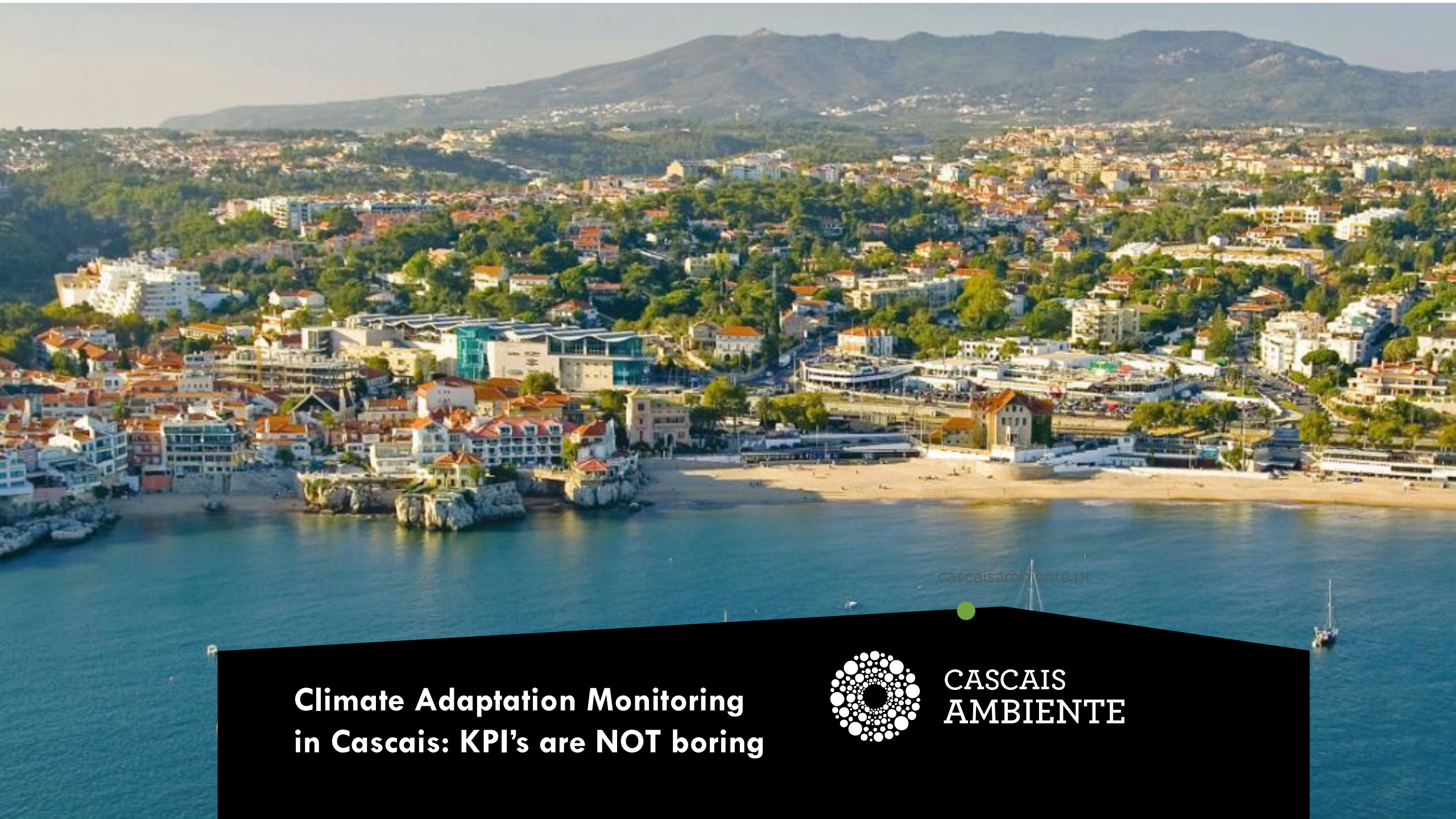
Sharing experience: Development of Monitoring and Evaluation Framework with Stakeholder engagement

João Dinis

Cascais



Climate Adaptation Monitoring in Cascais: KPI's are NOT boring

CASCAIS AMBIENTE

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Cascais

+ 97 km2

+ 30 km coastal line

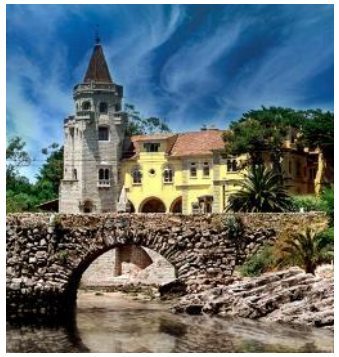
+ 1/3 of protected landscape

+ Metropolitan Area of Lisbon

+ Renowned tourist destination

+ 206 000 inhabitants

+ Unrivaled heritage







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Cascais






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Cascais' Action Plan for Climate Change Adaptation

Structured action 2030

Cascais is a frontrunning city on climate and sustainable policies. It has produced unrivaled policy support policies. This drives our action with a knowledge-based strategy.

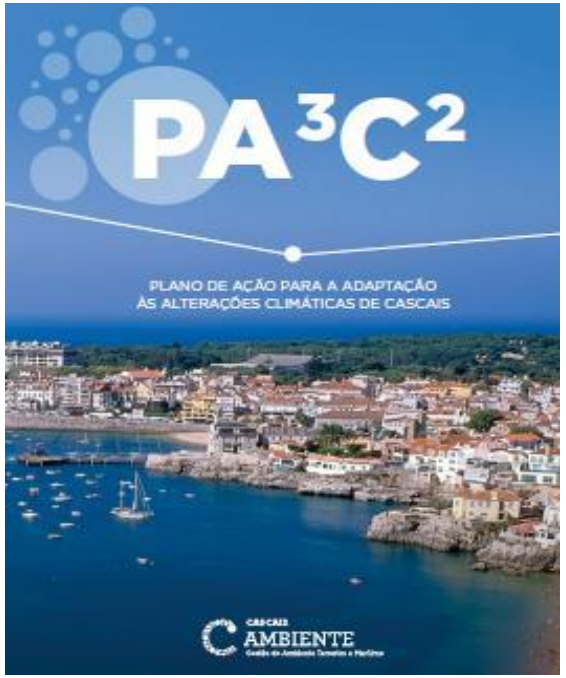
+ Planning ahead: 3 political terms

+ Updated climate scenarios with IPCC 5. Corroboration of PECAC's scenarios.

+ inter-institutional collaboration and co-responsibility

+ Integration with UN's Sustainable Development Goals 2030 and national commitments

+ Submitted on Town Hall Meeting in September 2017: mandatory commitment



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

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Cascais' Action Plan for Climate Change Adaptation

Designed to be monitored

Adaptation requires a wide set of KPI's to assess action impact and resilience thresholds for risk management.

+ KPI's have been defined through BASE adaptation governance model.
+ Inclusive approach for "reasonability" assessment
+ It's bidirectional: support climate efforts and service results
+ Yearly monitored through an assessment report
+ In line with climate-adapt, Covenant of Mayors and national guidelines

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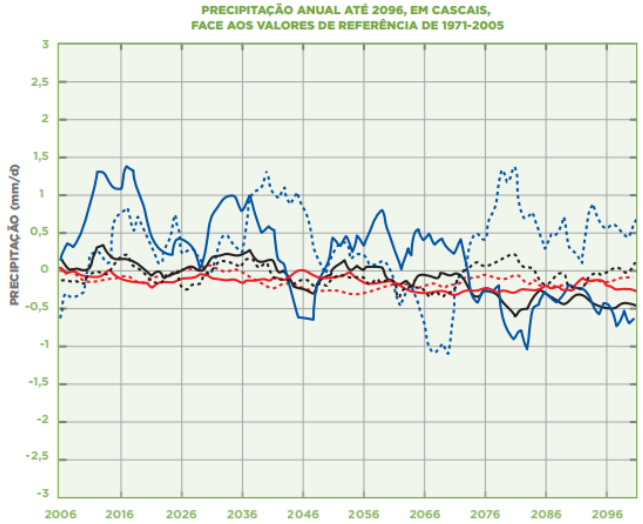
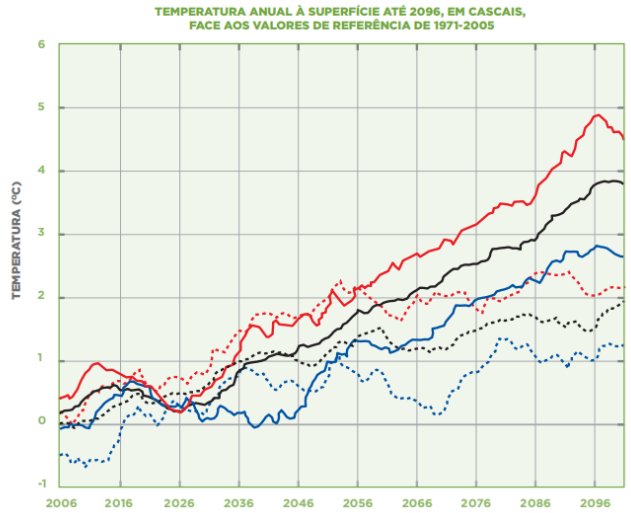
Cascais' Action Plan for Climate Change Adaptation





Climatic variable	Impacts
	Decrease of average of precipitation
HOT	Increase of average temperature, mainly maximum
	Sea level rise
	Increase of extreme precipitation events

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Cascais' Action Plan for Climate Change Adaptation

	Adaptation Measures
1	Stakeholder awareness
2	Residual and pluvial water separation network
3	Sustainable school
4	Local alternatives to water supply
5	Green corridors and riverbeds requalification
6	Eliminate pollution in water beds
7	Reforestation in the natural park with native species and control of invasive ones
8	Full implementation on the fire prevention plan
9	Coastal erosion prevention actions
10	Contingency plan for heat waves
11	Vigilance and control of vector diseases
12	New urban green parks and natural infiltration areas
13	Legislation for bioclimatic architecture in urban areas

+ 13 Measures

+ 82 actions

+ €11 500 000 investment

+ Mostly "non-structural" or "green solutions".

+ "gray solutions" for water supply infrastructure

+ Transversal reply to the Sustainable Development Goals 2030

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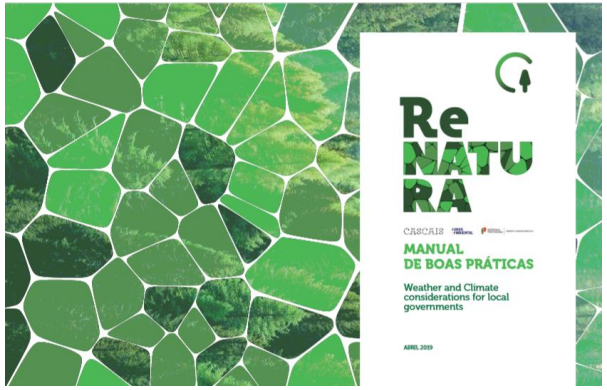
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
6 CLEAN WATER AND SANITATION
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
17 PARTNERSHIPS FOR THE GOALS


As Alterações Climáticas levantam sérios desafios para as cidades e áreas urbanas.
Em Cascais, prevê-se um aumento da temperatura média anual e fenómenos extremos mais frequentes e intensos, como as Ondas de Calor, que podem afetar a saúde e a qualidade de vida dos cidadãos.
ATENÇÃO aos Alertas para Ondas de Calor!
Ajude as pessoas isoladas e mais sensíveis ao calor.
A família, os amigos, os vizinhos, os agentes de proximidade...
Todos temos um papel a desempenhar
Na presença de uma onda de calor, atenção aos esforços intensos e prolongados, mesmo com boa saúde.
Algumas pessoas merecem ATENÇÃO ESPECIAL
Bebés e crianças
Idosos
Doentes crónicos e aqueles que
Pessoas que vivem isoladas, com mobilidade condicionada ou que se encontrem


Tempo Quente
De 2016-08-06 às 08:59:59
Até 2016-08-07 às 20:59:59
Temperatura Máxima
Persistencia de valores elevados da temperatura maxima.


ESTÁ CALOR?
PÕE-TE AO FRESCO!
cascais.pt
CASCAIS
Tudo começa nas pessoas


CASCAIS
WORKSHOP
ESPAÇOS VERDES URBANOS ADAPTADOS ÀS ALTERAÇÕES CLIMÁTICAS
Laboratório da Paisagem (Guimarães)
8 Fev | 14h00 às 18h00
Workshop gratuito e aberto a estudantes, técnicos autárquicos e empresas na área da gestão dos espaços verdes urbanos e planeamento do território.


Re
NATU
RA
CASCAIS
MANUAL
DE BOAS PRÁTICAS
Weather and Climate considerations for local governments


AMBIENTE
CASCAIS
FUNDO
ADAPTCASCAIS
CASCAIS





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Cascais' Action Plan for Climate Change Adaptation

Are we going the right way?

Following implementation, the climate council convenes yearly to discuss results at both political and technical levels.

+ KPI's are provided by the services for the yearly report: 2018 - 2023

+ Assessing implementation together with resilience. Adding complexity!

+ Learning that climate risk fluctuates depending on occurrences.

+ Yearly data registration for transparency and democratization of adaptation

+ **Implementation VS Continuing implementation: a transformational finding!**

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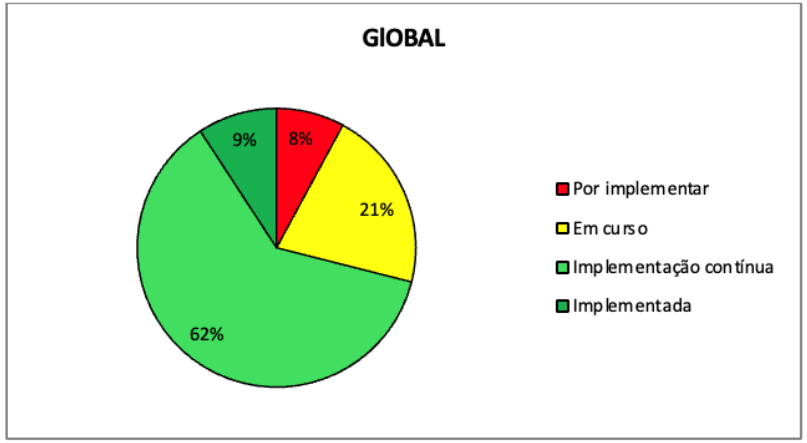
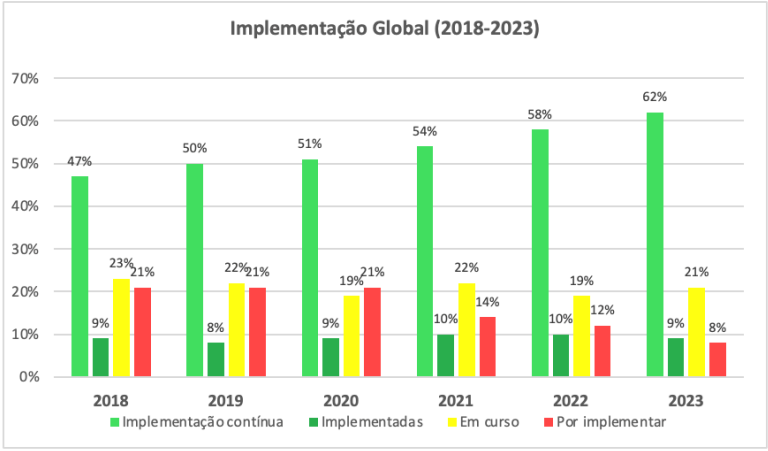
Cascais' Action Plan for Climate Change Adaptation

MEASURE 1	ACTIONS	Implementation 2023	Indicator (unit/year)	2022 Value	2023 Value
Awareness-raising and communication campaigns	1.1 Definition of a Communication Strategy differentiated by target audience: Employees (Internal Communication) and Population (External Communication). Liaison with other working groups	To be implemented	I 1.1 Communication activities/campaigns (No.)	20 Activities	20 Activities
	1.2. Online Interactive Platform	Ongoing	I1.2 Events (workshops, capacity building,Climate Action Board etc)(No.)I1.3 Participantes involved in communication actions (No.)	391 Participants ----	391 Participants ----
	1.3 Dissemination and awareness of citizens and partners to support the implementation of the PA3C2 adaptation measures	Continuous Deployment	I 1.4 Visitation of the microsite *I 1.5 Public perception of CA in Cascais*	----	----
	1.4. Climate 2030 Activities – Climathon / Climate Week / Climate Change Exhibitions	Continuous Deployment	*Being implemented	16 Activities 1860 Participants ---- ----	16 Activities 1860 Participants ---- ----

MEDIDA 13	ACTIONS	Implementation 2023	Indicator (unit/year)	2022 Value	2023 Value
Legislation for bioclimatic planning and architecture	13.1 Creation of a working group for the integration and articulation of legislation for bioclimatic planning and architecture	**Ongoing**	I 13.1 Working Group Meetings (No.)	21 Meetings (EURU))	5 Meetings (EURU)
	13.2 Define criteria for the location and licensing of hypermarkets and large commercial units	**To be implemented**	I 13.2 Beneficiaries of incentives for bioclimatic planning and architecture (No.)	NA	IN
	13.3 Incentive system to support adaptation measures in urban operations	**Ongoing**	I 13.3 Incentive Systems to Promote Bioclimatic Planning and Architecture (No.)	0 incentives	Incentives for the adoption of LEAD Gold/Premium (discounts/compensation in large enterprises) - 3 cases
	13.4 Incentives to promote public space and interconnection between neighbourhoods	**To be implemented**	I13.4 Trained technicians (No.)	4 trained technicians	4 trained technicians (on execution units)
	13.5 Qualification of technicians in the area of planning and spatial planning	**Continuous Implementation**	I13.5 Adaptation measures transposed into IGT regulation	0 measures	Publication of the MIP revision
	13.6 Simplification and articulation of existing legislation	**Ongoing**	I13.6 IGT (PDM, PP, PU) and Execution Units, with LiderA certification (No.)	(3 IGT competing for certification)	1 IGT with certification (2 IGT competing for certification)
	13.7 Encourage intervention operations in urban areas to increase naturalized green areas	**Ongoing**	I13.7 Entrepreneurship Projects/Buildings in the Municipality with LiderA certification (No.)	(1 project to compete for certification)	3 licensing ventures that will adopt LEAD Gold
			I13.8 Evolution of REN and RAN areas (unaffected/reassigned) (m2)	26 083,18 m2 REN disaffected 850 ml Disaffected RAN	16,520.1 m2 unallocated RAN

MEDIDA 9	Ações	2021	2022	2023
Plano de Proteção do Litoral e Ribeiras	9.1. Identificação dos locais de risco no litoral e ribeiras	Implementação contínua	Implementação contínua	Implementação contínua
	9.2. Sinalização dos locais de risco identificados	Implementação contínua	Implementação contínua	Implementação contínua
	9.3. Sistematização das áreas de risco e das faixas de proteção do Plano de Ordenamento da Orla Costeira (POOC) e Plano Diretor Municipal (PDM), através de georreferenciação	Implementação contínua	Implementada	Implementada
	9.4 Elaboração de propostas de intervenção e mitigação dos riscos associados	Implementação contínua	Implementação contínua	Implementação contínua
	9.5. Saneamento das Arribas Instáveis	Implementação contínua	Implementação contínua	Implementação contínua
	9.6. Implementação de sistemas de monitorização das áreas de risco	Em curso	Em curso	Em curso
	9.7. Adaptação de um sistema de avisos e alertas à população no âmbito dos riscos costeiros	Implementada	Implementada	Implementada
	9.8. Elaboração de um estudo de previsão da evolução da erosão costeira no âmbito das alterações climáticas para o Município de Cascais	Por implementar	Por implementar	Por implementar
MEDIDA 10	**Ações**	**2021**	**2022**	**2023**
Plano de Contingência para Temperaturas Extremas Adversas	10.1. Implementação dos Planos de Contingência de Temperaturas Extremas Adversas	Implementada	Implementada	Implementada
	10.2. Totens informativos com sensores de radiação, temperatura e índices de calor nas praias e ações de sensibilização dos cidadãos	Em curso	Em curso	Em curso
	10.3. Rede local de monitorização meteorológica	Implementação contínua	Implementação contínua	Implementação contínua
MEDIDA 11	**Ações**	**2021**	**2022**	**2023**
Vigilância e controlo de vetores transmissores de doenças	11.1 Monitorização entomológica de perímetros de pontos de entrada	Em curso	Implementação contínua	Implementação contínua
	11.2. Identificação de espécies capturadas em ações de vigilância	Em curso	Em curso	Implementação contínua
	11.3. Vigilância epidemiológica de doenças transmitidas por culicídeos e ixodídeos	Por implementar	Em curso	Implementação contínua
	11.4. Vigilância analítica de ixodídeos colhidos em humanos	Em curso	Implementação contínua	Implementação contínua
	11.5 Notificações para eliminação ou redução de locais de proliferação e/ou controlo de	Por implementar	Em curso	Implementação contínua





Cascais' Action Plan for Climate Change Adaptation

CASCAIS

Tudo *começa nas* pessoas

João Dinis joao.dinis@cascaisambiente.pt

Q&A session

Siret Talve
Mission Board

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We value your input!

Please share your thoughts on today's event:

What did you find most interesting or valuable?
What areas could be improved for future events?

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Closing remarks

Erlend Hansen
MIP4Adapt

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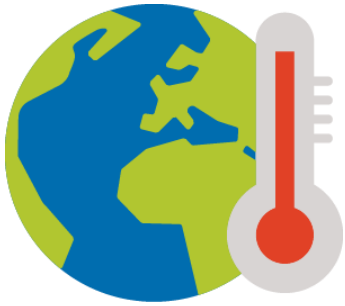
Closing remarks

- Recording, presentation and a summary report of the event will be shared on the online community site.
- Upcoming events and deadline:

Thematic July Month: Temperature Rising

  - Igniting Awareness: Strategies for Wildfire Resilience and Readiness, 3 July
  - Heatwave Chronicles: Strategies for Resilience in a Warming World, 10 July
  - Technical assistance cut-off date, 30 June



- We are moving our Community and associated services from CIRCABC to Futurium!
- Registration to the online EU Mission Adaptation Community

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Thank you !

#EUmissions

#HorizonEU

#MissionClimateAdaptation