

# EU Support for Climate Action in IPA II Beneficiaries

**TRATOLOW – Transition towards the low emissions and climate-resilient economy in the Western Balkans and Turkey**

Workshop on Monitoring and Indicators for Adaptation, July 6, 2022

Reference: EuropeAid/140519/DH/SER/MULTI



This project is funded by  
the European Union

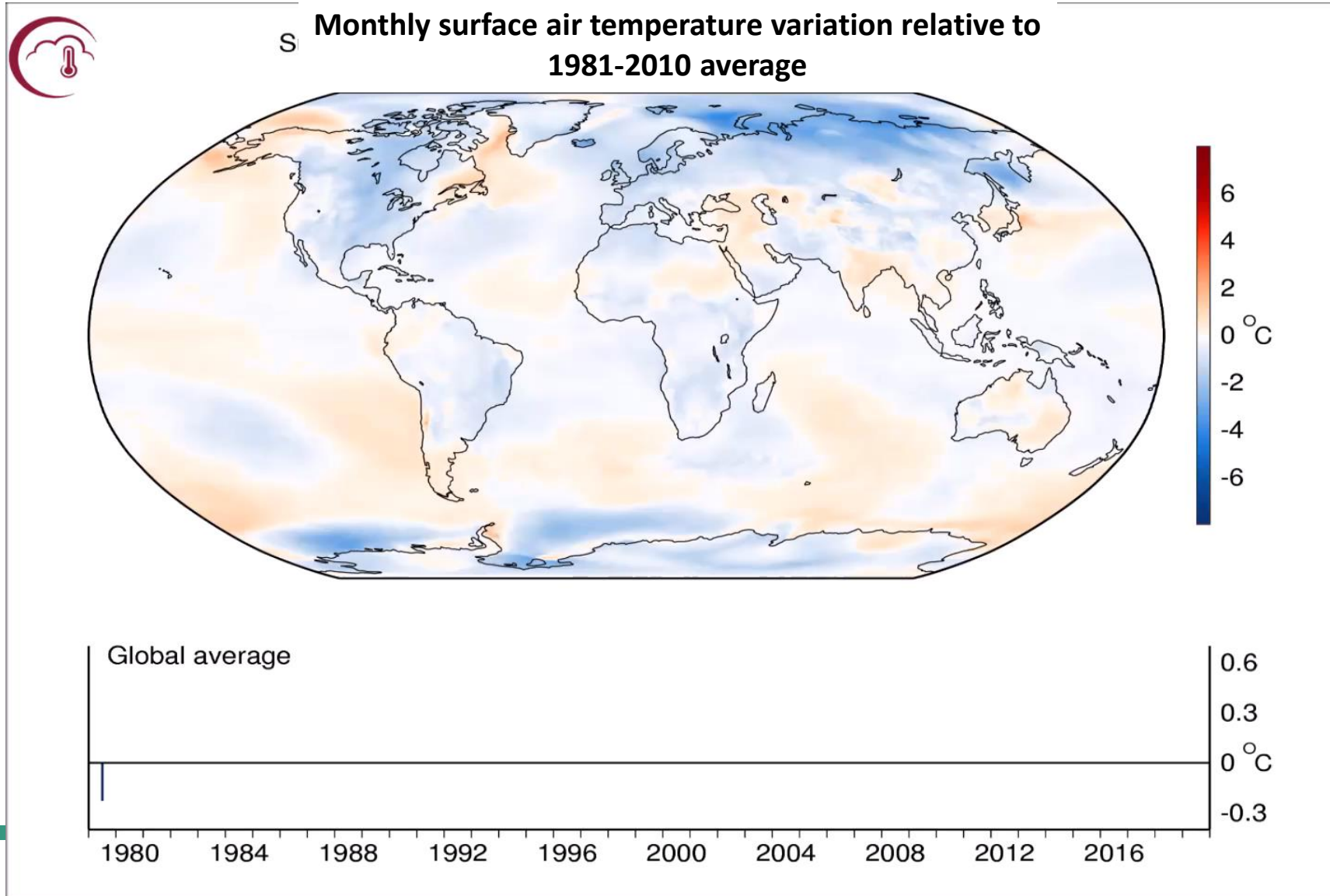
umweltbundesamt<sup>®</sup> **NIRAS**

The project is implemented by the Consortium of  
Umweltbundesamt GmbH (lead) and NIRAS

# Overview of Adaptation Monitoring and Indicators – lessons from emerging practice in Europe



# Adaptation will be vital (despite mitigation efforts) whatever happens

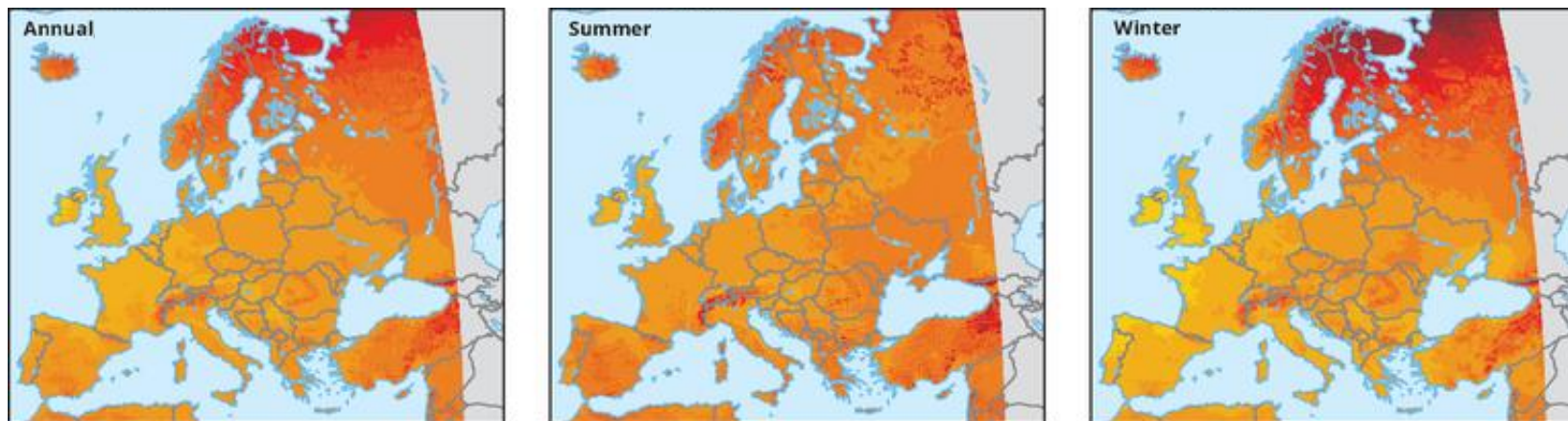


Source: Copernicus Climate Change Service



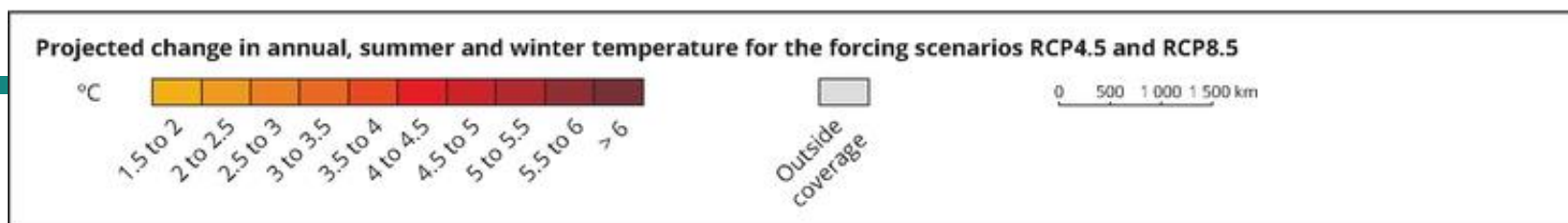
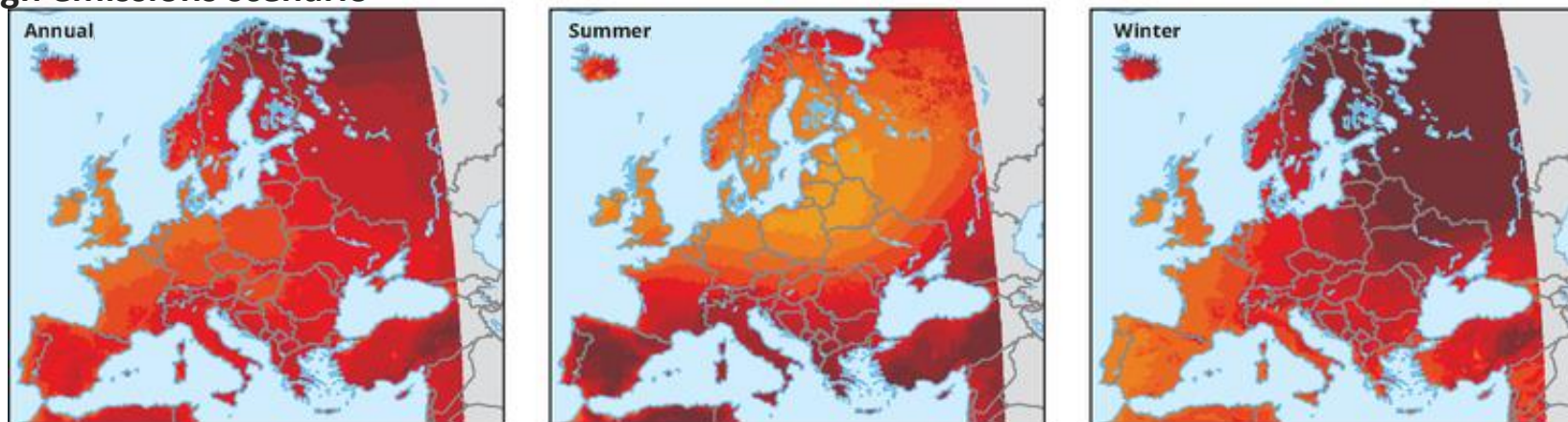
# Europe will get even warmer...

## Low-medium emissions scenario



**Temperature change:**  
**annual, summer, winter**  
(projected change for 2080s,  
two scenarios)

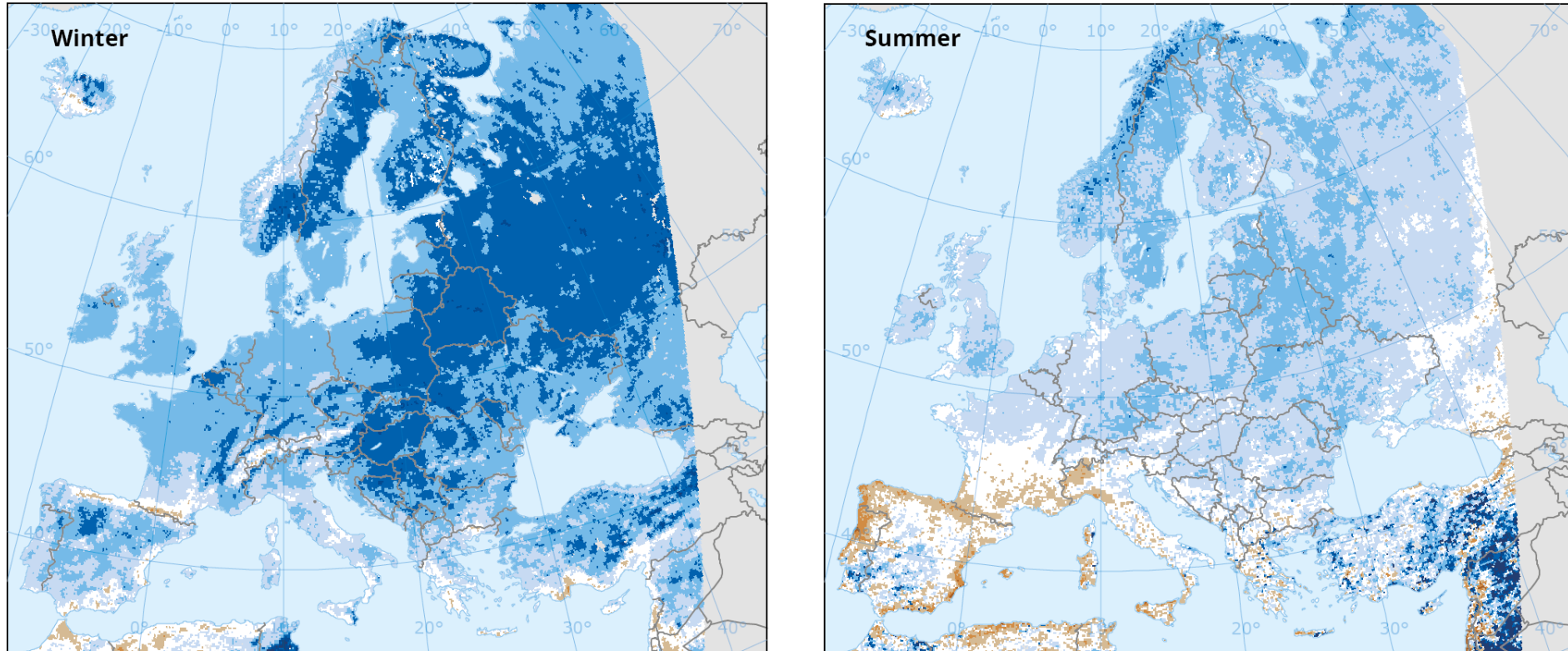
## High emissions scenario



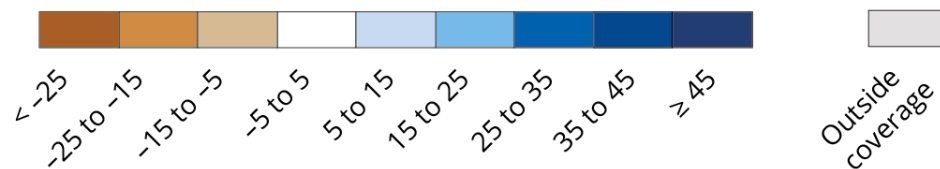
Source: EURO-CORDEX (Jacob et al., 2014)

# ...and more prone to flooding and droughts

**Winter and summer heavy rain (projected change for 2080s, high emissions scenario)**



**Heavy winter and summer precipitation change (%)**

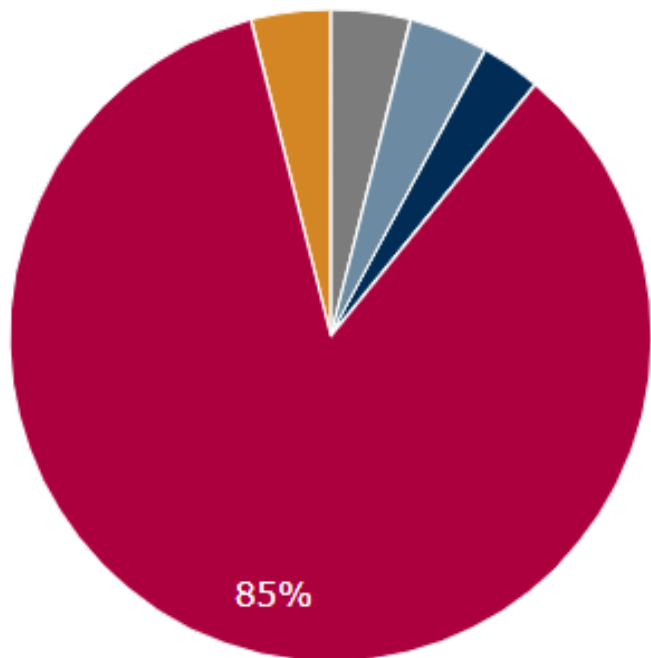


0 500 1 000 1 500 km

Source: EURO-CORDEX  
(Jacob et al., 2014)

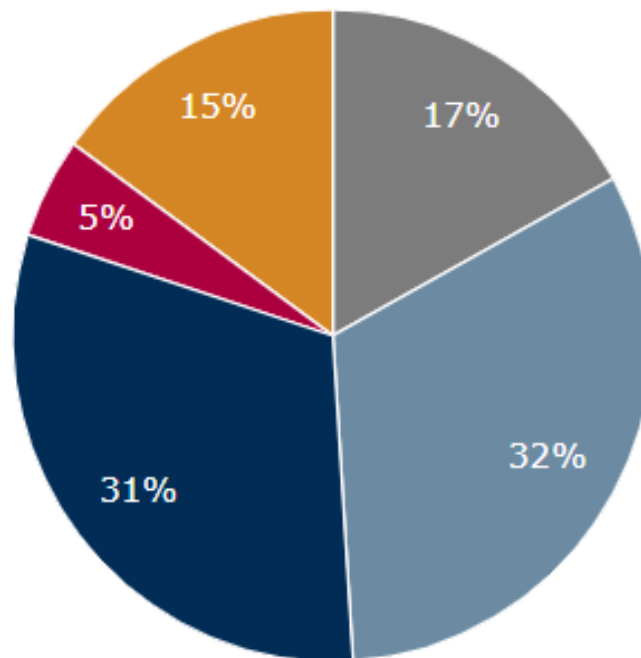
# Climate- and weather-related losses

**Fatalities**



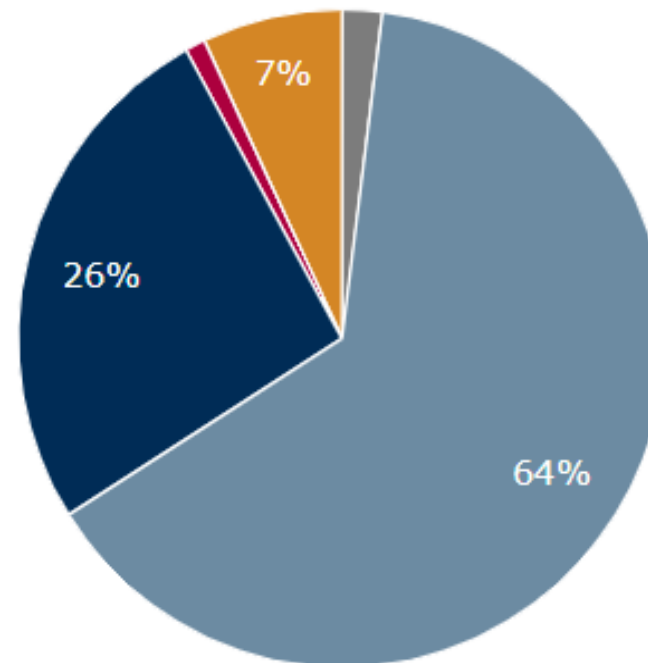
Almost 90,000 climate- and weather- related fatalities

**Total losses**



EUR 430 billion economic losses (only 1/3 insured)

**Insured losses**



- Geophysical events
- Meteorological events
- Hydrological events
- Climatological - Heatwave events
- Other climatological events

EEA, 2019, based on Munich Re data



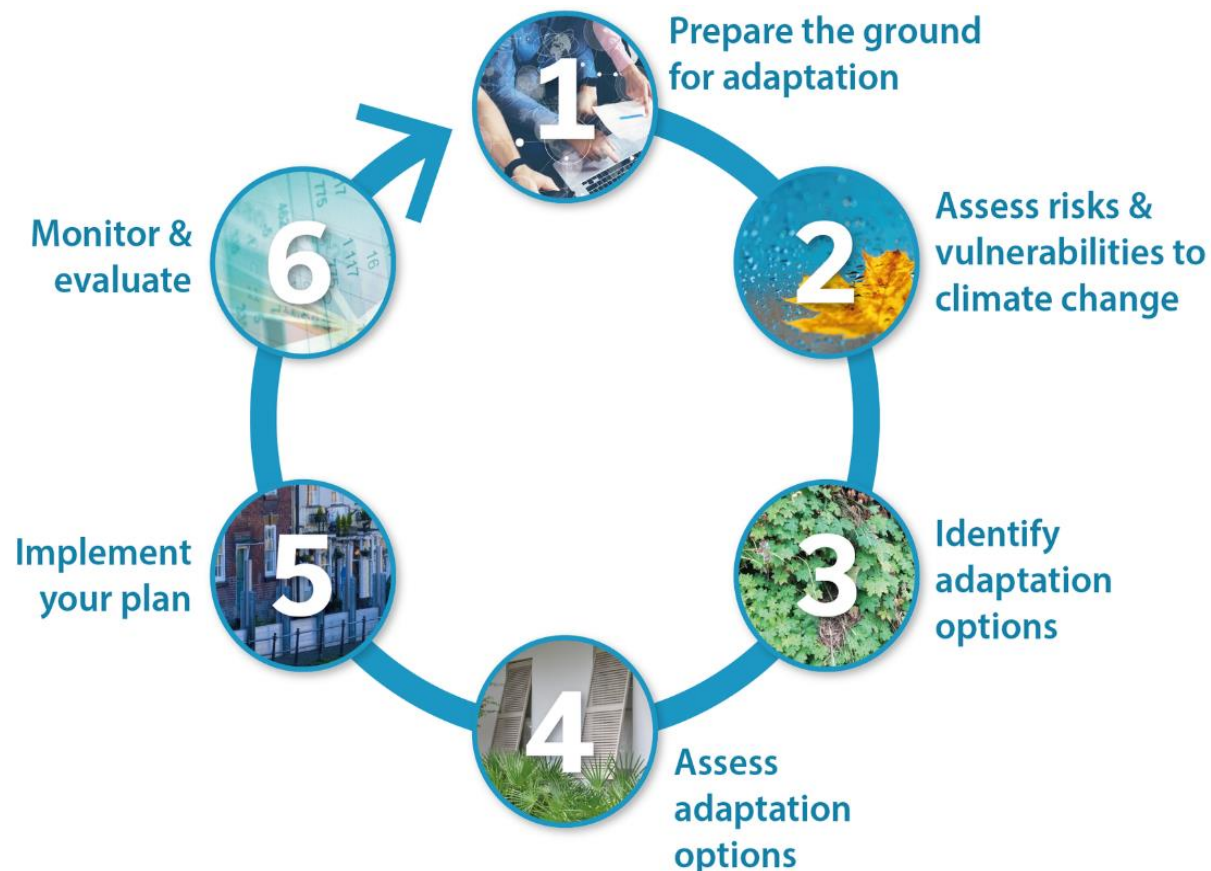
# Progress in national adaptation policies

Strategies vary in extent and detail

EEA Member States	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria													*		
Belgium															
Bulgaria															
Croatia <sup>(1)</sup>															
Cyprus															
Czechia															
Denmark															
Estonia															
Finland										*					
France															
Germany											*				
Greece <sup>(2)</sup>															
Hungary <sup>(3)</sup>														*	
Ireland <sup>(4)</sup>															*
Italy															
Latvia <sup>(5)</sup>															
Lithuania															
Luxembourg														*	
Malta <sup>(6)</sup>															
Netherlands <sup>(7)</sup>												*			
Poland															
Portugal											*				
Romania												*			
Slovakia														*	
Slovenia															
Spain															
Sweden <sup>(8)</sup>														*	
United Kingdom															
Iceland															
Liechtenstein															
Norway															
Switzerland															
Turkey															

	No adaptation policy adopted
	National adaptation strategy (NAS) adopted
	NAS and national adaptation plan (NAP) adopted
*	NAS revision adopted

# Time for IMPLEMENTATION and MONITORING



## Monitoring & Evaluation (M&E):

- ✓ a key aspect of an iterative adaptation process
- ✓ can help us to understand progress and performance
- ✓ can help us to learn and communicate lessons
- ✓ should inform future policy and practice
- ✓ plays a critical role enabling adaptation to evolve and improve over time



# PURPOSES OF NATIONAL MRE SYSTEMS

## Drivers and objectives in European countries

- ✓ **Tracking progress in implementation** of national strategies/action plans and **effectiveness** of policies/actions
- ✓ **Enhancing the knowledge base:** detecting trends in climate impacts and vulnerabilities
- ✓ **Policy learning:**
  - ✓ **Revision of national adaptation strategies/action plans**
  - ✓ **Application** of MRE results into **policy** and **planning**
  - ✓ Improvement of **mainstreaming, coordination, governance**
- ✓ **Communication:** Awareness raising, enhancing society's preparedness and adaptive capacity
- ✓ **Legal requirements, political commitment** to regular MRE in NAS documents, **administrative good practice**
- ✓ European and international **reporting requirements**

# KEY CONCEPTS AND TERMS

## Monitoring and evaluation are distinct, but closely linked processes

- ✓ **Monitoring:** continuous process of tracking and examining progress in planning and implementing adaptation interventions as well as climate change impacts, other drivers of vulnerability or resilience, contextual factors (by means of data, indicators, etc.)
- ✓ **Evaluation:** systematic and objective assessment of the effectiveness of adaptation plans, policies, actions at defined points in the policy/program cycle (e.g., ex ante, mid-term, ex post)
  - ✓ Further evaluation criteria may include: efficiency, relevance, equity
  - ✓ Based on qualitative and quantitative data (incl. from monitoring)

# Adaptation indicators: why they matter

Roles of indicators in the adaptation process:

- ✓ General: Representative parameter for measuring/characterizing relevant attributes of a system/entity in order to provide meaningful information about its state (reducing complexity of the real world)
- ✓ Critical means by which adaptation processes, outputs and outcomes are tracked and assessed
- ✓ Signposts of implementation progress
- ✓ clues on whether and how change is occurring and if outcomes are being achieved
- ✓ Aid (auxiliary means) for reviewing the degree of accomplishment of adaptation objectives

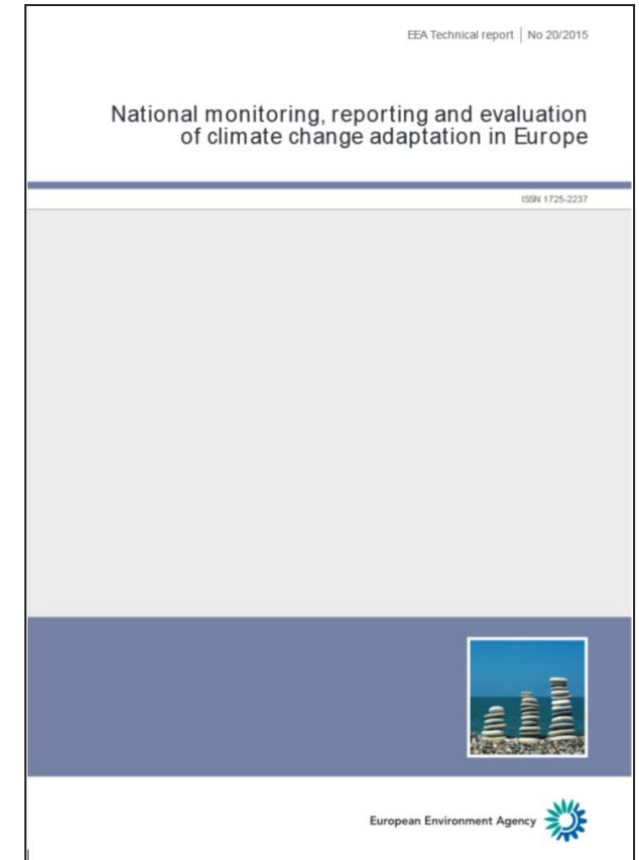


# Benefits of adaptation indicators

- ✓ Allow **comparison** (between countries, regions, sectors, climate risks)
- ✓ Help identifying **vulnerability “hot spots”** and **prioritizing** adaptation investments
- ✓ Data-based indicators perceived as **objective** and **robust**
- ✓ Quantitative indicators are able of **communicating clear and simple messages** (appealing to policy makers)
- ✓ Standardized indicators allow **repeated measurement** and establishment of **time series** => identification of **trends**
- ✓ Indicator systems for various policy fields and topics exist in most countries => use of **pre-existing indicators** is often possible, beneficial in terms of efficiency, and useful regarding mainstreaming of adaptation

# Action on national level adaptation - MRE is increasing in Europe

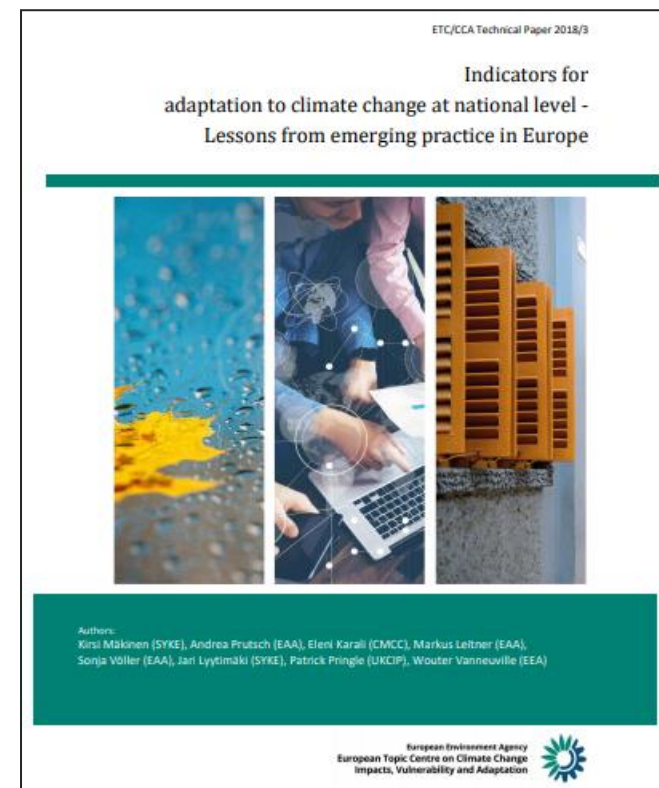
- ✓ In 2015, 14 countries had systems for monitoring, reporting and/or evaluation of adaptation in place or under development
- ✓ Across European countries progress on adaptation strategies and plans varies considerably – same for MRE of adaptation
- ✓ Insights from this dynamic field of practice can be valuable to countries with established approaches as well as those just beginning to consider MRE of adaptation
- ✓ Experiences contribute to an essential information base for countries to learn from



Link: <https://www.eea.europa.eu/publications/national-monitoring-reporting-and-evaluation>

# Indicators respond to the need to understand progress and performance of adaptation policies

- ✓ Global level: synergies between Paris Agreement, Sendai Agreement and SDGs
- ✓ EU level: SDG indicators relevant for adaptation
- ✓ Country examples with a focus on learning
  - ✓ differences in sectors, impacts, presentation, data collection, types of indicators, ...
  - ✓ limitations of adaptation indicators



Link: [https://cca.eionet.europa.eu/reports/TP\\_3-2018](https://cca.eionet.europa.eu/reports/TP_3-2018)



# Lessons Learned

- ✓ There is **no “perfect/shining” example of an M&E system**
- ✓ **Early and clear definition of purpose and objectives of M&E system** saves time and resources and helps taking better decisions at a later stage
- ✓ **Learning is one fundamental purpose of M&E systems**
  - ✓ Distinguishing between different types: technical, social and systemic learning
  - ✓ Focus on systemic learning, aiming to improve policy-making and implementation, seems to be lacking in many M&E systems.
- ✓ **High value of sharing experiences** (what worked and didn't) among people who design M&E schemes and **reflecting on them**
- ✓ **Gap between people carrying out M&E activities & translating results of these activities into meaningful messages for policy-makers**
  - ➔ gap must be bridged, if we aim to use M&E results to inform policies and other relevant decision-making

# Adaptation indicators: challenges and limits

- ✓ Lack of universal, clearly defined and measurable objective
- ✓ Climate mitigation: reduction of GHG emissions and/or conservation of storage capacities of carbon sinks
  - ✓ Changes are easier to track through relatively straight-forward quantitative measures (carbon dioxide equivalents)
- ✓ Climate adaptation: more varied, diffuse and subjective objectives; diverse dimensions and aspects
  - ✓ No single measure of adaptation
  - ✓ What to monitor and how? How to measure “reduced vulnerability/increased resilience”? What constitutes successful adaptation?
- ✓ Indicators can only capture partial aspects of complex (and vaguely formulated) adaptation goals
- ✓ Choice of aspects to be monitored/evaluated and selection of indicators is crucial!

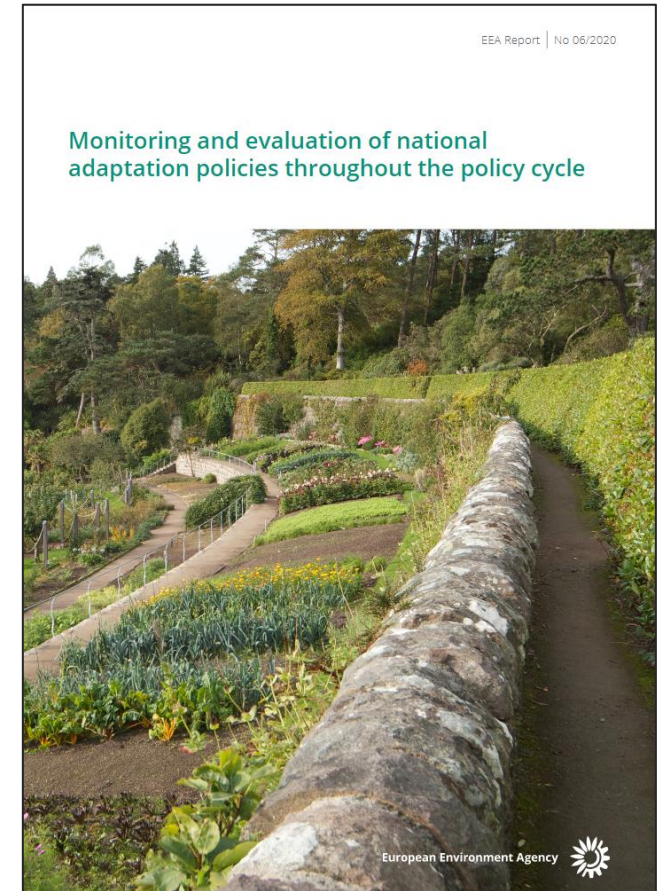
# Adaptation indicators: challenges and limits

- ✓ Careful selection of indicators is essential
  - ✓ “Everything is an indicator of something, but nothing is an indicator of everything” (Cairns et al. 1993)
  - ✓ Overriding requirement: relevance, meaningfulness, ability to show trends
- ✓ Trade-offs between scientific accuracy and practicability
  - ✓ Scientific quality requirements: (statistical) validity, credibility, robustness, replicability, traceability, transparency, legitimacy
    - ➔ can be demanding and expensive
- ✓ Practice-related requirements: user-friendly, practicable, feasible, cost-efficient, easy to manage, accepted, easy to understand and to communicate
  - ➔ Compromises are inevitable => pragmatic approaches are required!



# KEY findings EEA M&E report

- ✓ **Participatory approaches** contribute to further building up resilience and increasing adaptive capacity
- ✓ **Co-production of knowledge** & stakeholder engagement are crucial for the adaptation policy cycle
- ✓ **Knowledge** on CCIVR has **improved sizably** at all scales over recent years
- ✓ **Public finance** towards climate change adaptation **increased** but private sector finance is harder to identify
- ✓ MRE relevant for **documenting the impacts of implemented policies**
- ✓ MRE can ensure **learning loops** that **further support implementation**



Link:

<https://www.eea.europa.eu/publications/national-adaptation-policies>

# KEY findings EEA M&E report

- ✓ **MRE informs** more effective **adaptation implementation**
- ✓ **Progress on experience of tracking processes**, but move towards understanding the outcomes and impacts of policies and actions
- ✓ **Monitoring**
  - ✓ receive quantitative & qualitative data for monitoring process & progress
  - ✓ interpreting available data & deriving relevant messages
- ✓ **Evaluation**
  - ✓ needs to be a specific and separate effort
  - ✓ put emphasis on getting deeper insights into some elements and into progress from these insights
    - ➔ feeding back into revising adaptation policy. Few countries have gained deeper insights through evaluation.

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