Measuring progress towards adaptation in Europe: Adequacy and effectiveness of adaptation actions

Aleksandra Kazmierczak / Enhancing adaptation action and support/ 31 August 2022



European Environment Agency (eea.europa.eu)

- Agency of the European Union
- 32 member + 6 collaborating countries
- EEA **gathers** data and information from across Europe and **translates** them into assessments and knowledge to **inform** policy and decision-making
- Need for adaptation indicators on:
 - Social aspects -> Vulnerability and exposure of population
 - Natural ecosystems -> Land use and land cover
 - *Economic aspects* -> Economic losses and damages
- <u>Climate-ADAPT</u>: European adaptation platform

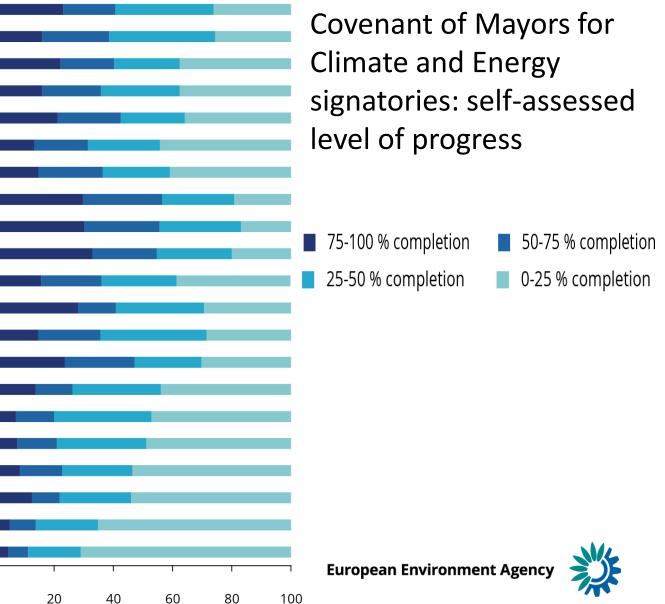


Process and outputs of adaptation policy planning cycle

0

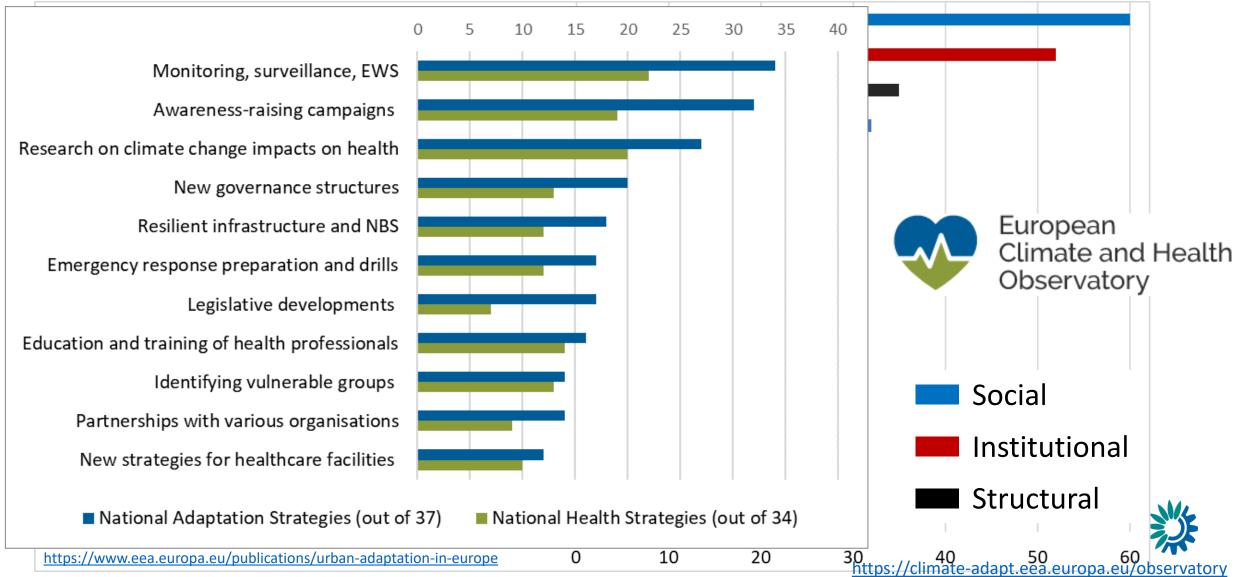
Preparing the ground	Adaptation commitments integrated into the local climate policy	
	Human, technical and financial resources identified	
	Adaptation team appointed and clear responsibilities assigned	
	d Horizontal coordination mechanisms in place	
	Vertical coordination mechanisms in place	
	Consultative and participatory mechanisms set up	
	Continuous communication process in place	
Assessing risks and vulnerabilities	Mapping of the possible methods and data sources	
	Assessment(s) of climate risks and vulnerabilities undertaken	
	Possible sectors of action identified and prioritised	
	Available knowledge periodically reviewed and updated	
Identifying adaptation options	Full portfolio of adaptation options compiled	
	Possibilities of mainstreaming adaptation assessed	
	Adaptation actions developed and adopted	
Implementation	Implementation framework set	
	Adaptation actions implemented and mainstreamed	
	Coordinated action between mitigation and adaptation set	
Monitoring and evaluation	Appropriate monitoring and evaluation indicators identified	
	Monitoring framework in place for adaptation actions	
	Progress regularly monitored and reported	
	Adaptation strategy and/or action plan updated, revised and readjusted	

https://www.eea.europa.eu/publications/urban-adaptation-in-europe

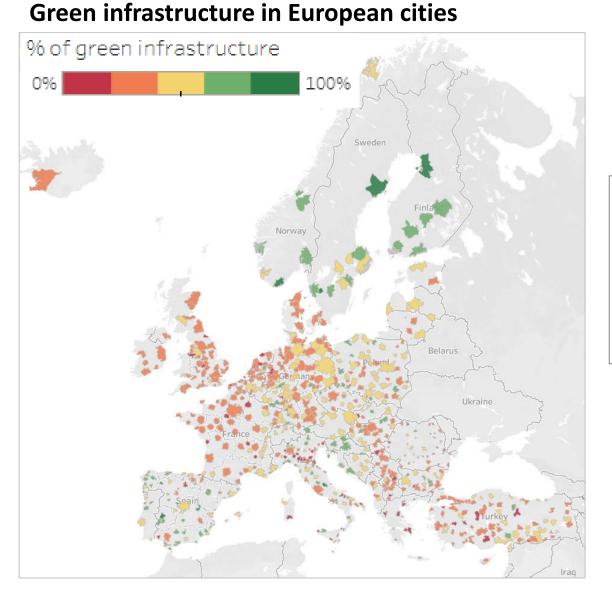


Adaptation actions planned: mainly 'soft' actions

Mynesief adaptations actions most feaguently phanead by cities in Epopletes



Assessing provision and effectiveness of adaptation measures



EU Adaptation Strategy 2021

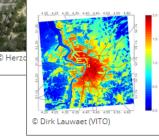
Implementing nature-based solutions on a larger scale would increase climate resilience

The effectiveness of NBS is assessed on a case-by case basis

The integrated system of Nature-based Solutions to mitigate floods and drought risks in the Serchio River Basin (Italy)

New North Zealand Hospital: A resilient acute care hospital for the future, Hillerød, Denmark

Adapting to heat stress in Antwerp (Belgium) based on detailed thermal mapping



The city of Antwerp, in order to better understand the problem of heat stress, commissioned the research organization VITO to map the current and future temperatures and thermal comfort in the city. The research results indicate that the urban heat island of Antwerp exacerbates the impact of climate change on the urban population as the amount of heatwave days in the city raises twice as fast as in the rural surroundings. To tackle the problem of heat stress in the city, adaptation measures at three different scales (city-wide, local and the individual citizen) are put forth. At the city-wide scale, the installation of green roofs is made mandatory for new or renovated buildings with a suitable roof, as are permeable and green parking lots. The regulations also aim to increase albedo of public buildings. At the local scale, the thermal comfort is improved by installing fountains and ponds, planting trees and creating parks in public spaces that are

https://climate-adapt.eea.europa.eu/knowledge/tools/case-study-explorer



https://www.eea.europa.eu/data-and-maps/dashboards/urban-green-infrastructure-2018

Thank you

Aleksandra Kazmierczak / Enhancing adaptation action and support/ 31 August 2022