



A European perspective on urban adaptation

Birgit Georgi, 24 October 2012

European Environment Agency 



75% of Europeans live in cities



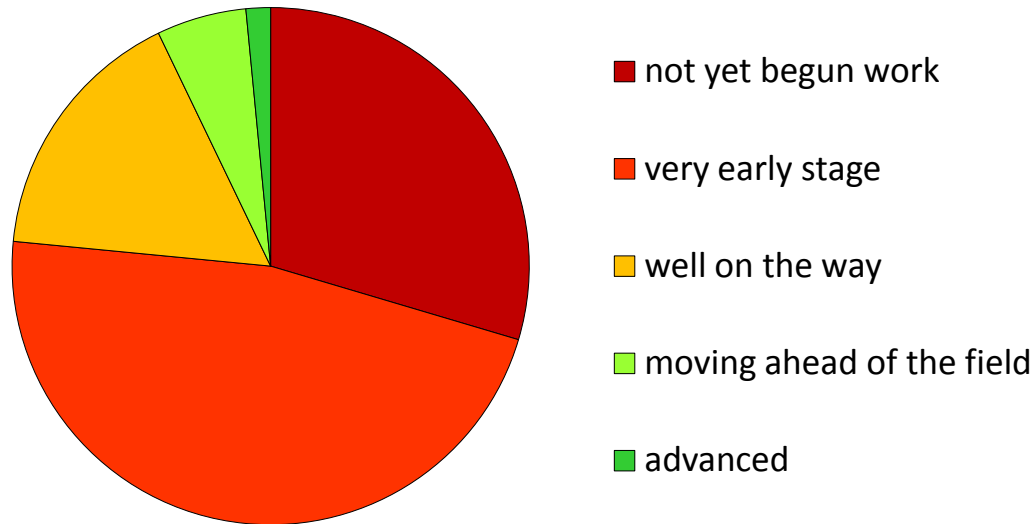
... and most of Europe's economic wealth is generated here



Adaptation needs to be implemented locally and regionally



Cities are frontrunners of adaptation



Preliminary results from a self-assessment of 196 municipalities
in Europe, 2012

<http://eucities-adapt.eu/>

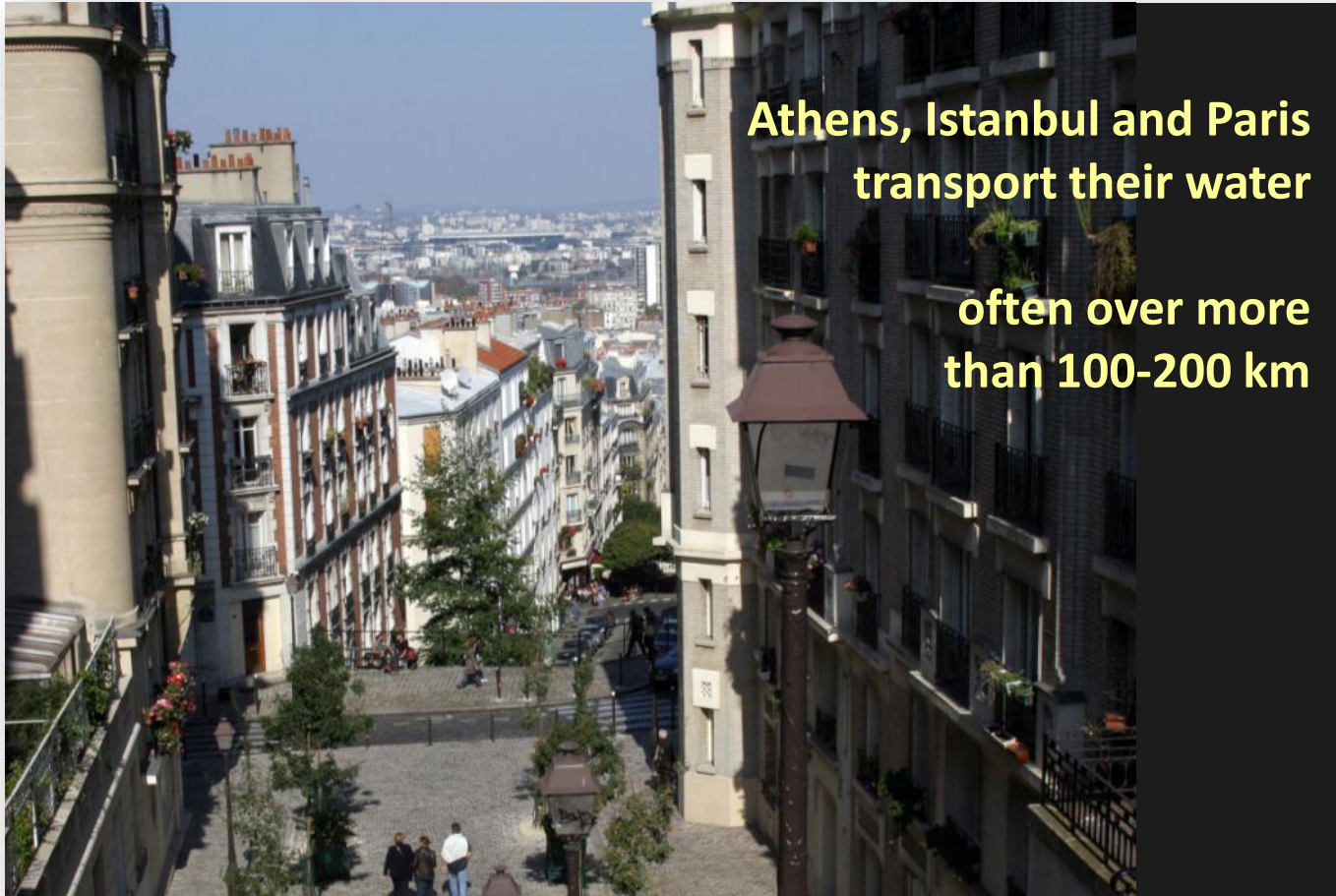
What are the barriers?



E.g.,

- Low awareness by decision-makers;
- Little knowledge at local authorities;
- Limited capacities and resources;
- Challenges stretch beyond borders and competencies of authorities;

Water



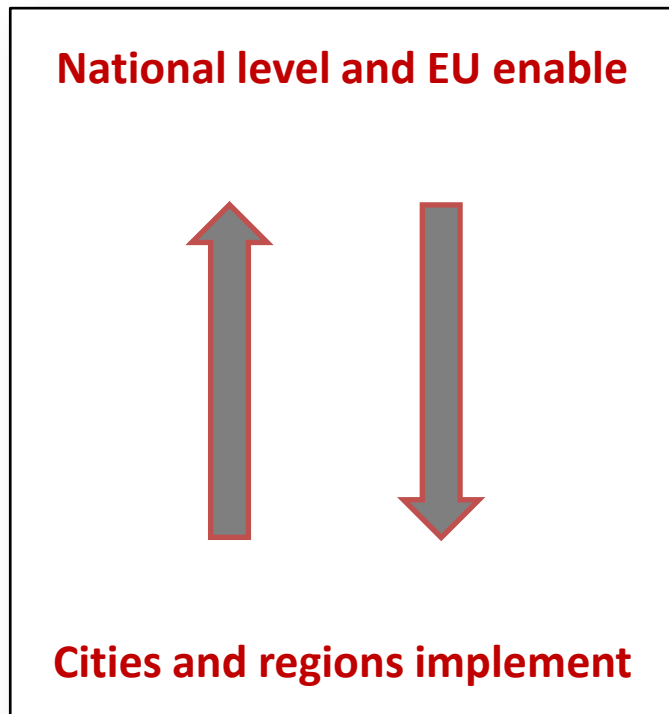
What are the barriers?



E.g.,

- Low awareness by decision-makers;
- Little knowledge at local authorities;
- Limited capacities and resources;
- Challenges stretch beyond borders and competencies of authorities;
- National and European legislation hinders or is not supportive for local action

What do we need?



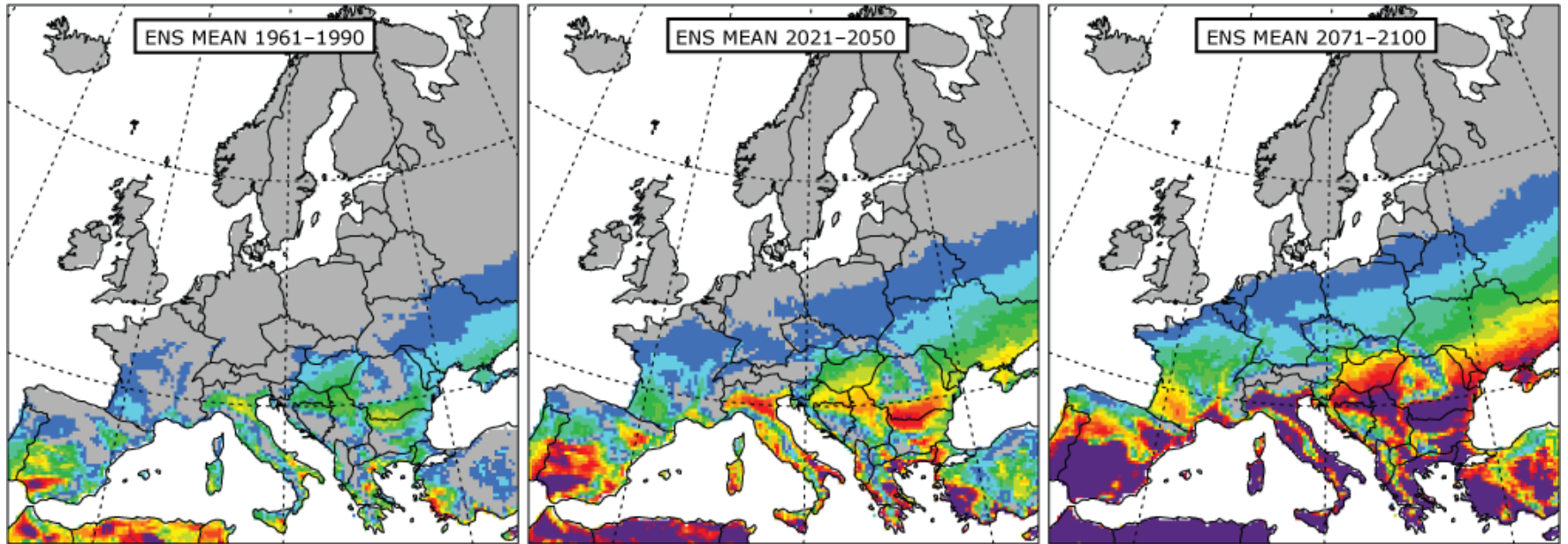
Pillar: Territorial governance



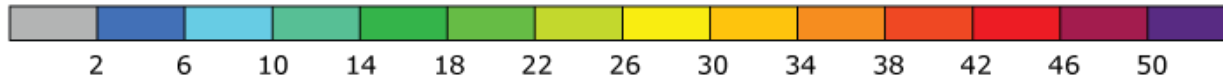
Pillars: Knowledge base



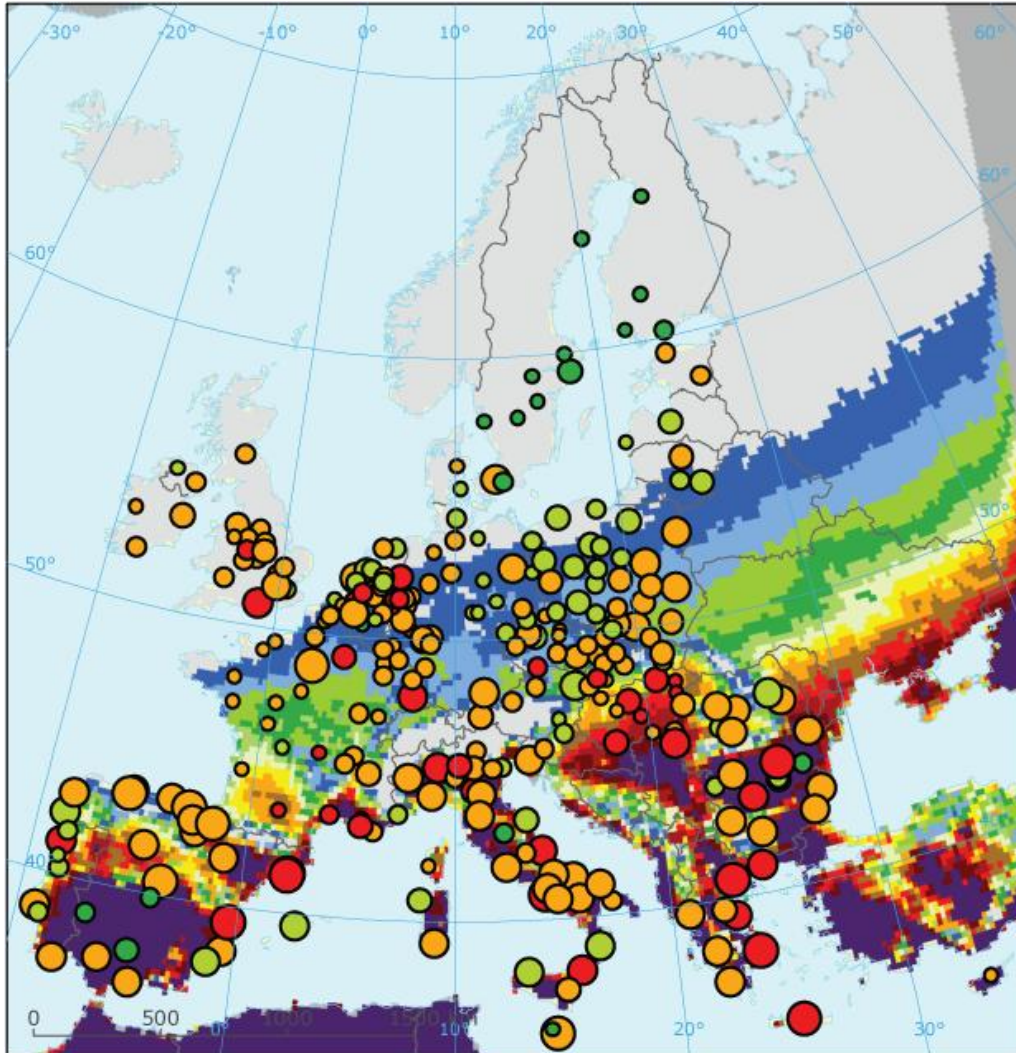
Heat waves in Europe...



Increase in the number of combined tropical nights (minimum temperature exceeding 20°C) and hot days (maximum temperature exceeding 30°) under present and future climate conditions



Heat waves



Heat waves – both a low share of green and blue urban areas and high population densities contribute potentially to the urban heat island in cities.

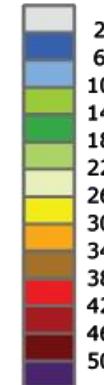
Green/blue areas (UMZ) (%)



Total population density, 2004



Number of combined tropical nights (> 20°C) and hot days (> 35°C)

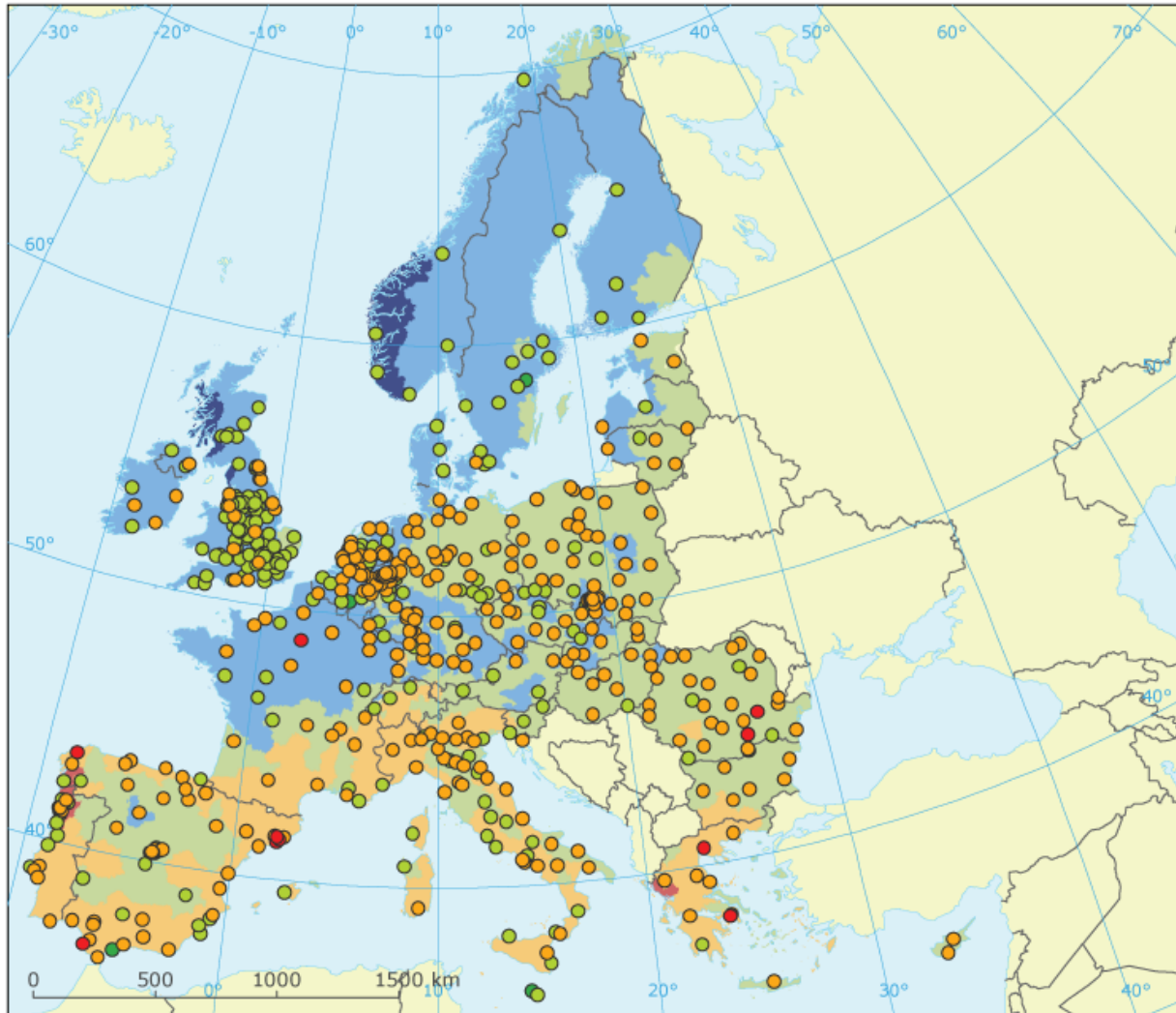


2
6
10
14
18
22
26
30
34
38
42
46
50

Soil sealing increases the risk for urban flooding



Urban Flooding



**Urban flooding –
impervious surfaces
reduce the drainage of
rain water and increase
the risk for urban flooding**

Mean percent soil sealing
inside the UMZ of the
core city

- 7–24
- 25–49
- 50–74
- 75–100

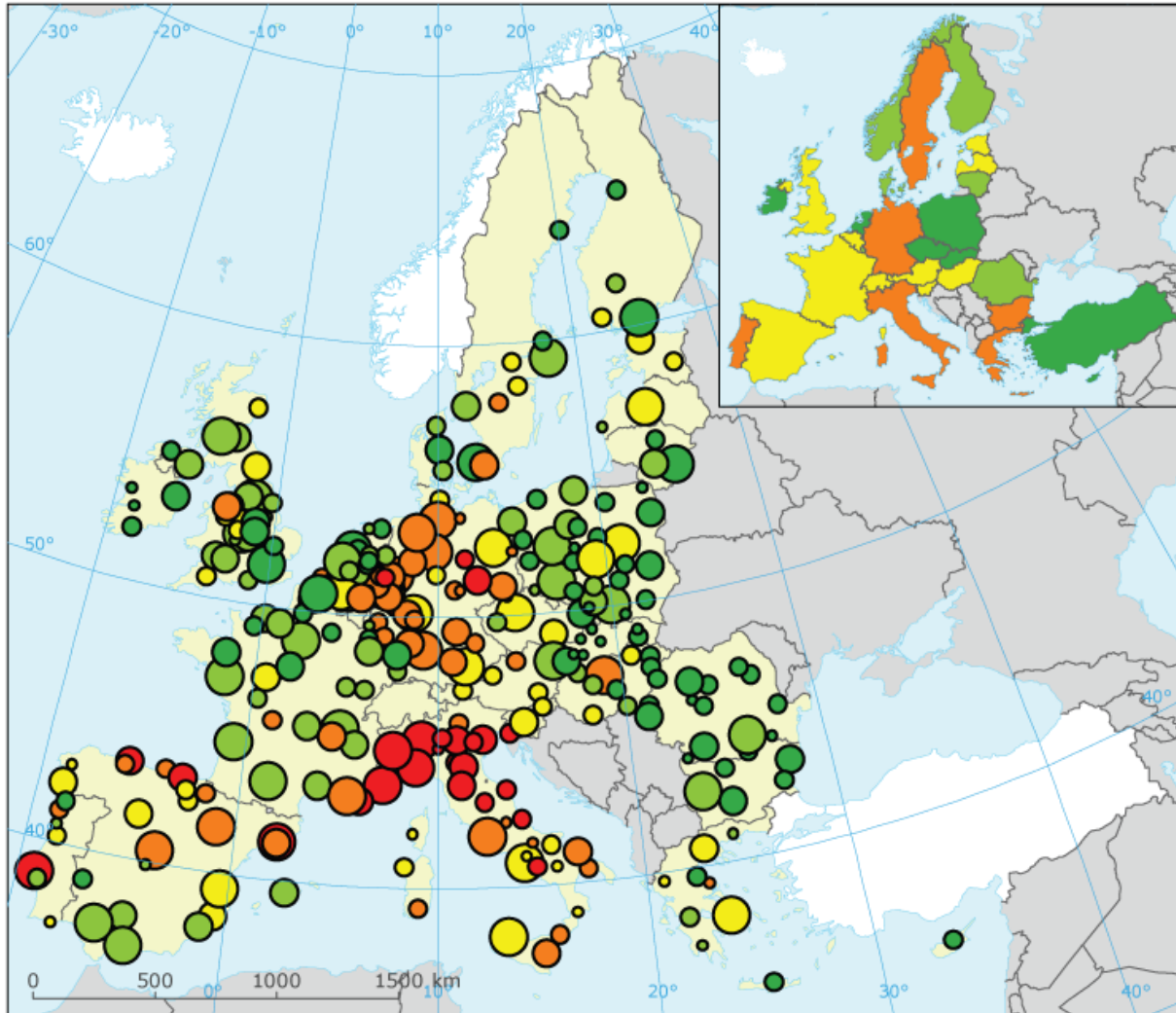
Change in annual mean
number of days with
extreme precipitation
(>20 mm/day)

- - 8.0–(- 5.0)
- - 4.0–(- 1.0)
- - 0.9–1.0
- 1.1–5.0
- 5.1–13.1

Social sensitivity

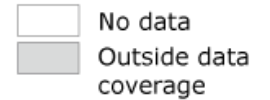
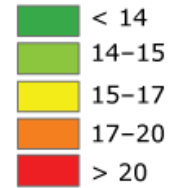


Social sensitivity, e.g. elderly people

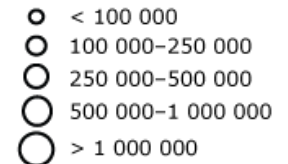


Vulnerable people – elderly people are considered to be a group sensitive to different climate change exposures.

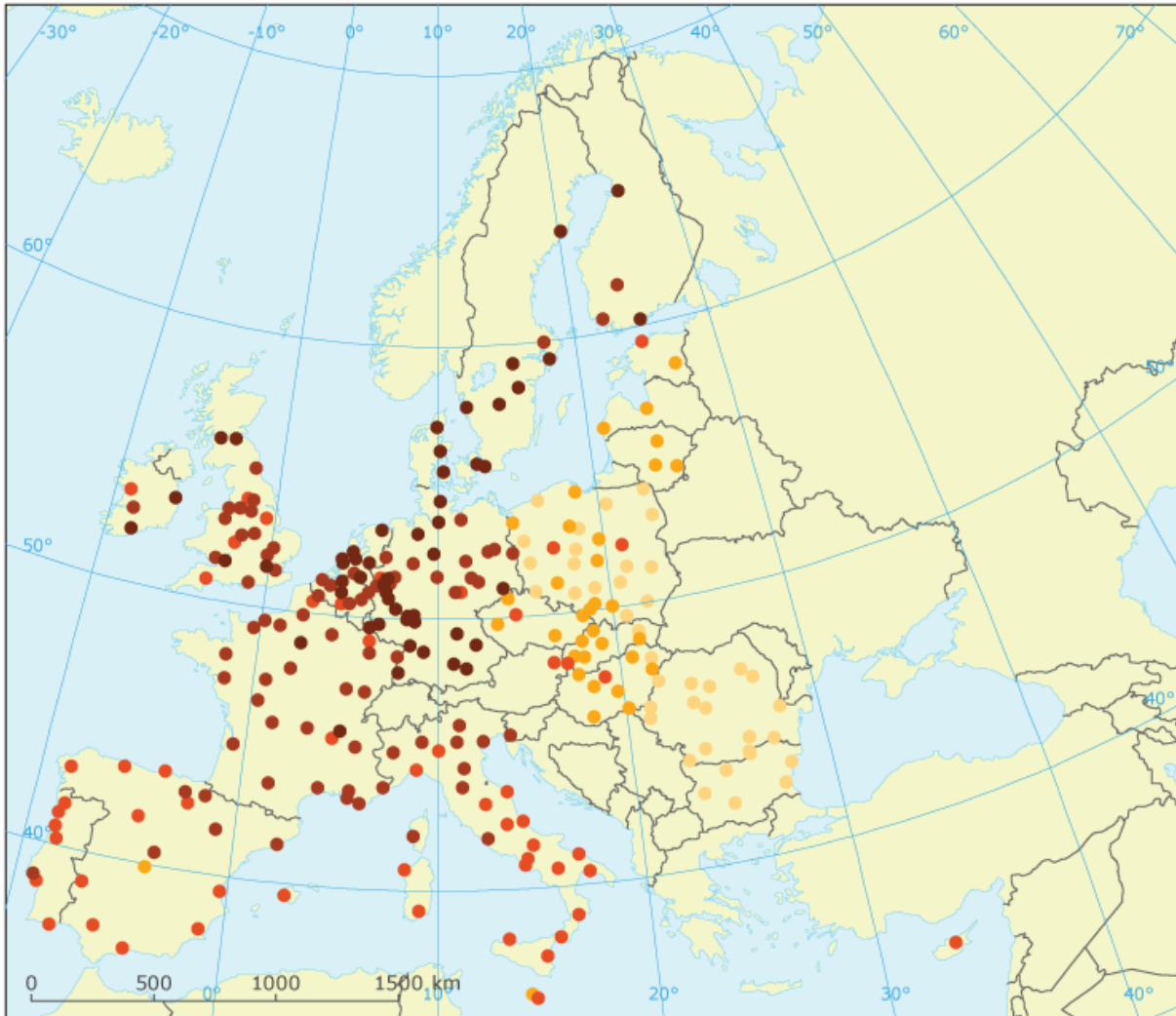
Proportion of aged population ≥ 65 in cities/countries, 2004



Total population in cities, 2004



Adaptive capacity, e.g. economic resources



Economic determinant - GDP per capita figures for European cities

- < 5 000
- 5 000-10 000
- 10 000-20 000
- 20 000-30 000
- > 30 000

Climate-ADAPT – the EU platform

The screenshot shows the homepage of the Climate-ADAPT website. At the top, there is a blue header with the European Union flag and the text "CLIMATE-ADAPT European Climate Adaptation Platform". Navigation links include "Glossary", "Contact", "Sitemap", "Legal notice", and "About". A search bar is located on the right side of the header.

Below the header is a green navigation bar with links: "Home", "Adaptation information", "EU sector policies", "Countries and other areas", "Tools", "Links", and "Search the database".

The main content area features several sections:

- Climate Change Adaptation in Europe:** A central section with a circular diagram labeled "Adaptation support tool" and the text "New to adaptation? Use the Adaptation Support Tool". It includes a list of bullet points: "Expected climate change in Europe", "Current and future vulnerability of regions and sectors", "National and transnational adaptation strategies", "Adaptation case studies and potential adaptation options", and "Tools that support adaptation planning". A "Read more" link is provided.
- Find case studies on adaptation in Europe:** A map of Europe with several location pins.
- What are European countries doing?:** A map of Europe with a dropdown menu for "Choose your country" and a "GO" button.
- Search the database:** A search bar with a magnifying glass icon.
- Share your information:** An icon representing a person sharing information with others.

At the bottom, there are four columns of content:

- News:** A news item dated "25 April 2012" titled "Survey on Adaptation strategies for European Cities - DG Climate Action invites cities to participate in a survey on their".
- Events:** Two event listings: "24 April 2012, First Baltadapt Policy Forum, Berlin, Germany" and "12-15 May 2012, ICLEI, Resilient Cities 2012, 3rd Global Forum on Urban".
- EU sector policies:** Two policy areas: "Agriculture & Forestry" and "Water management", each with a "Read more" link.
- EU information systems:** Two information systems: "WISE Water" (Water Information System for Europe) and "Biodiversity" (Biodiversity Information System for Europe).

<http://climate-adapt.eea.europa.eu>

Urban adaptation to climate change in Europe

Challenges and opportunities for cities
together with supportive national and European policies

ISSN 1725-9177



Download, data and interactive maps

<http://www.eea.europa.eu/publications/urban-adaptation-to-climate-change>

birgit.georgi@eea.europa.eu

