

Climate change adaptation information in Europe

André Jol

Head of group vulnerability and
adaptation, EEA

ECRAN Regional Conference and Seminar on Climate Change
Adaptation

2-3 July 2014, Skopje



This Project is funded by the European Union



Project implemented by Human Dynamics Consortium

EEA member and cooperating countries



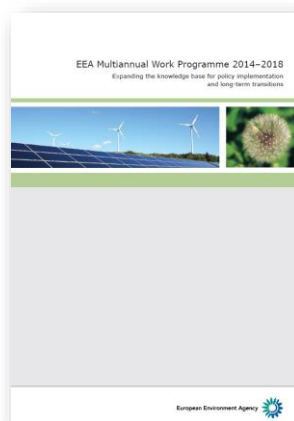
*The EEA is a specialised
agency of the European
Union*

*The EEA aims to
support sustainable
development and to
help achieve significant
and measurable
improvement in
Europe's environment
through the provision of
timely, targeted,
relevant and reliable
information to policy
makers and the public.*



EEA multi annual work programme 2014-2018

- To be the prime source of knowledge at European level **informing the implementation** of European and national **environment and climate policies**;
- To be a leading knowledge centre on the knowledge needed to **support long term transition** challenges and objectives;
- To be the lead organisation at European level facilitating **knowledge-sharing and capacity - building** in the field of environment and climate change.



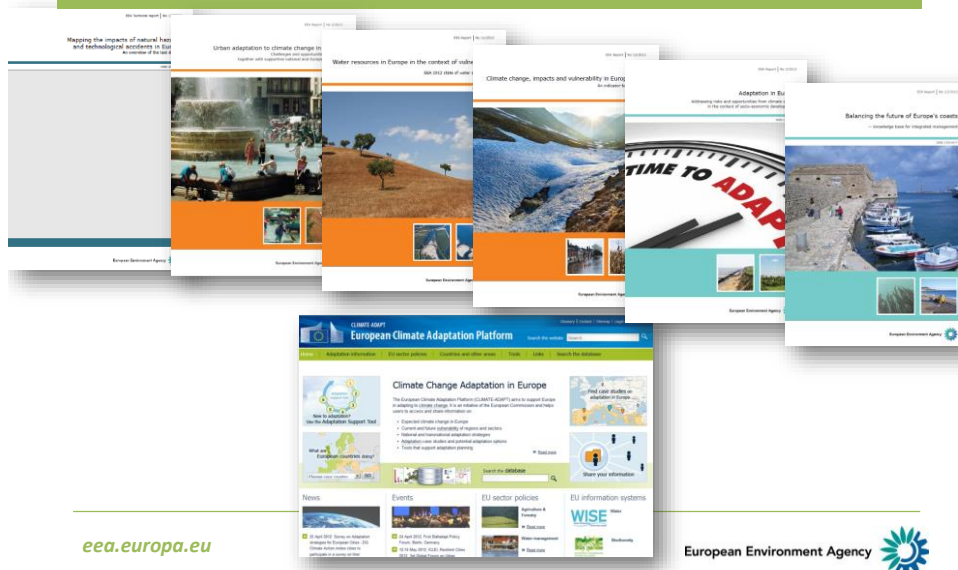
See: <http://www.eea.europa.eu/publications/multiannual-work-programme-2014-2018>

eea.europa.eu

European Environment Agency



EEA activities on CC IVA



eea.europa.eu

European Environment Agency



Climate change impacts, vulnerability and adaptation (2014) (1)

Assessment reports

- Report 'National adaptation policy processes across European countries' (EIONET consultation until 2 July, publication autumn 2014)
- Report 'Adapting Transport Systems to Changes in Climate' (EIONET consultation in July, publication autumn 2014)
- Chapter published in CIRCLE2 book 'Adapting to an Uncertain Climate, Lessons From Practice' (How Is Uncertainty Addressed in the Knowledge Base For National Adaptation Planning?)

Indicators

- Updated on EEA web site (including changes due to IPCC AR5)
- New EEA core set being implemented
- Urban vulnerability maps (publication autumn 2014)

eea.europa.eu

European Environment Agency



Climate change impacts, vulnerability and adaptation (2014) (2)

Workshops/conferences

- Open European Day at the global Resilient Cities conference, with ICLEI (Bonn, 28 May)
- Expert meeting on adaptation platforms and EIONET workshop (Copenhagen, 23/24 June)

Information systems

- Climate-ADAPT continuously being updated

EIONET review

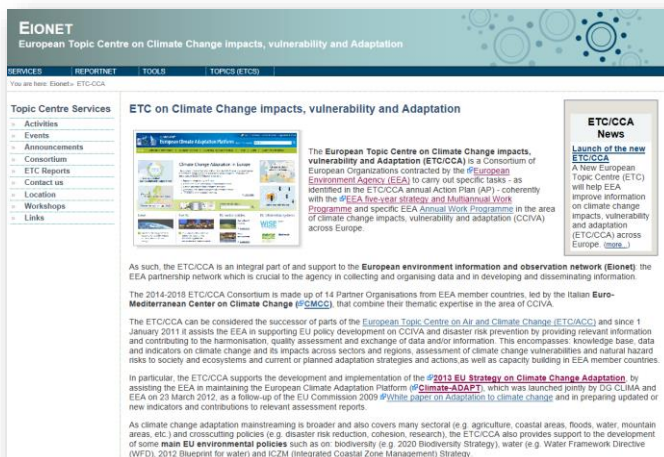
- Roles and tasks for NRCs clarified

eea.europa.eu

European Environment Agency



European Topic Centre on CC IVA



See: <http://cca.eionet.europa.eu/>

eea.europa.eu

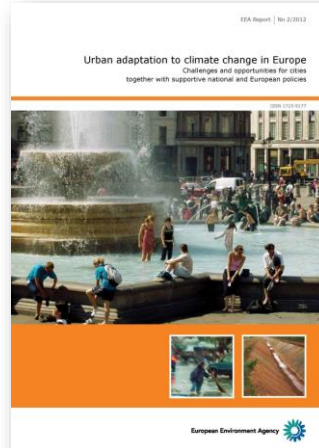
European Environment Agency



Urban adaptation to climate change (EEA report May 2012)

- Heat waves, flooding, water scarcity and droughts
- Planning urban adaptation
- Multi-level governance enabling urban adaptation

More information on cities see *Climate-ADAPT* and the DG CLIMA funded **Mayors adapt project** <http://mayors-adapt.eu/>



eea.europa.eu

European Environment Agency



Climate change, impacts and vulnerability in Europe (EEA indicator report, Nov 2012)

Indicators

Changes in the **climate system**

- Climate variables, Cryosphere (glaciers, snow and ice)

Climate impacts on **environmental systems**

- Marine environment and biodiversity, Coastal zones, Inland waters (quantity and quality, biodiversity, Terrestrial ecosystems and biodiversity, Soil

Climate impacts on **socio-economic systems and health**

- Agriculture, Forestry/forests, Energy, Transport, Fisheries (no indicators), Human health



Vulnerability indices

Preparation: European Topic Centres, WHO, ECDC, JRC (about 90 experts), data from research projects and international databases

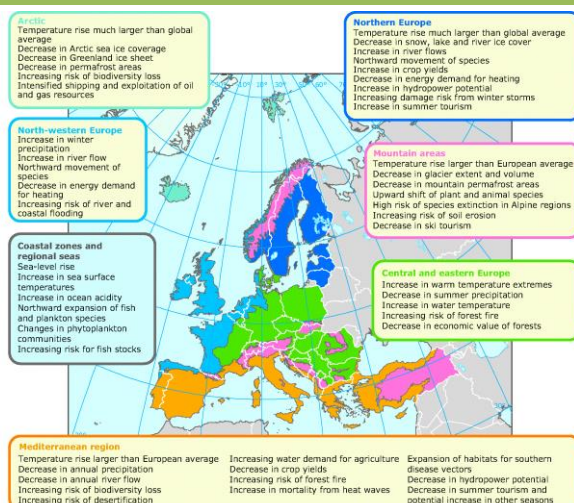
Next steps: Selected indicators on the EEA web site, updated after publication of IPCC WGI/II AR5 reports in 2013/2014

eea.europa.eu

European Environment Agency



Europe's key past and projected impacts and risks/vulnerabilities



eea.europa.eu

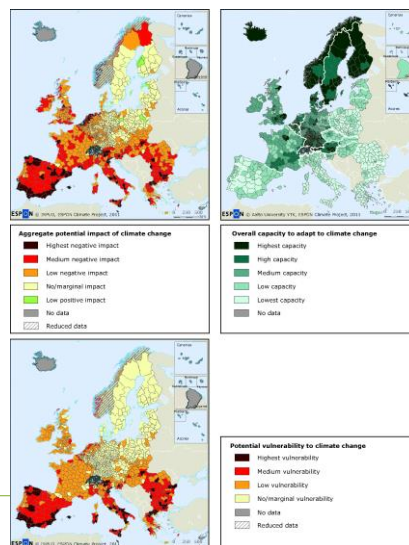
European Environment Agency



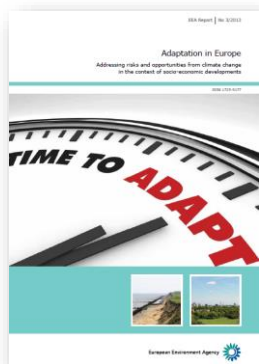
Example: Aggregated vulnerability

- Economic, technical, and institutional capacity to adapt to climate change differs across Europe.
- When impacts of climate change affect regions with low adaptive capacity, the consequences can be severe.
- Territorial cohesion may be negatively affected by deepening existing socio-economic imbalances

eea.europa.eu



Adaptation in Europe (EEA report, April 2013)



- **18 of the 33 EEA member countries have national adaptation strategies**, and some have action plans
- Some **transnational regions** (e.g. the Danube, the Baltic, the Alps and the Pyrenees) and **cities** have developed adaptation strategies
- Actions include : '**grey**' measures using technological and engineering approaches, '**green**' ecosystem-based approaches using nature, and '**soft**' measures such as policies to change governance approaches
- Challenges include the need for **coherent, flexible and participatory approaches**

eea.europa.eu

European Environment Agency 

Adaptation is already happening...



Sand motor' beach replenishment,
Ter Heijde, Netherlands



Campaign to prevent insect-borne
diseases, Emilia-Romagna, Italy



New grape variety research, Spain



Restoration of the Danube,
Kalimok marsh, Bulgaria



Peatland restoration, Lough Boora,
Ireland



Cantonal Insurance Monopolies,
Switzerland

eea.europa.eu

European Environment Agency



European Climate Adaptation Platform Climate-ADAPT

- Supports governmental policy and decision makers developing/implementing climate change adaptation strategies, policies and actions
- Complementary to national and sectoral platforms
- Launched 2012 (DG CLIMA, EEA)
- EEA maintains, with Commission, and supported by ETC CCA



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

eea.europa.eu

European Environment Agency



CLIMATE-ADAPT
European Climate Adaptation Platform

Sign In | Glossary | Contact | Sitemap | Legal notice | About | Mu

Search the website Search...

Home | Adaptation information | EU sector policies | Countries, regions and cities | Tools | Links | Search the database | Newsle

Updated features:

- EU Adaptation policy pages
- Adaptation Support Tool
- Overview of countries' activities
- Information on transnational regions
- Case study search tool
- Database search functionality
- Sharing of information

SEARCH THE CLIMATE ADAPTATION DATABASE

Search Term(s):

Keyword Search

Sectors: Agriculture and Forest
Biodiversity
Coastal areas

Country: Albania
Austria
Belgium

SEARCH

Advanced Sea

Adaptation support tool

New to adaptation?
Use the Adaptation Support Tool

What are European countries doing?

Choose a country GO

Find case studies on adaptation in Europe

Share your information

Improved Adaptation Support Tool

- Aligned with EU Adaptation Strategy's Guidelines on developing adaptation strategies
- Additional information on the use of the tool
- Refined sub-structure of the steps
- City specific guidance highlighted
- Updated resources for each step retrieved from database
- Additional check list on every step
- Dedicated section on funding



Improved case study presentation

- New and more strict criteria for the selection, like only implemented action
- Local contact is obligatory and the case study is quality checked by this contact
- More detailed content description and pictures
- Success factors
- Cost-benefit information
- Links to adaptation option



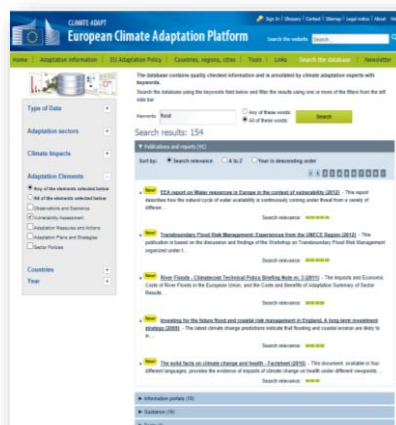
eea.europa.eu

European Environment Agency



Improved search results

- Updated search filters
- Search by year
- Geographical coverage



eea.europa.eu

European Environment Agency



Information on/for countries adaptation strategies



eea.europa.eu



European Commission



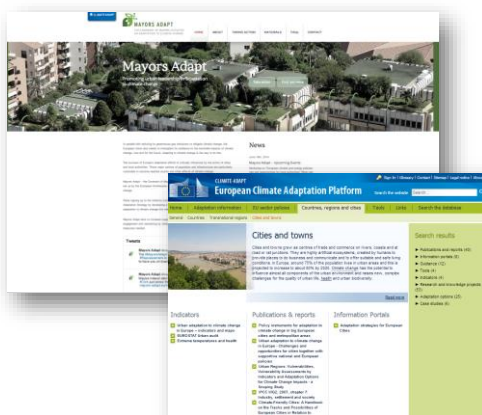
European Environment Agency

European Environment Agency



Information on/for cities

DG CLIMA funded project on CC adaptation in cities launched March 2014 'Mayors adapt'
<http://mayors-adapt.eu/>



Second European cities adapt to climate change, Open European Day at Resilient Cities 2014 (Bonn, 28 May 2014)

<http://resilient-cities.iclei.org/bonn2014/open-european-day/>

eea.europa.eu

European Environment Agency



Workshops

- Annual EEA/EIONET workshop with all 33 (+ 6) member countries experts (environment agencies), **24 June 2014, Copenhagen**
- Expert meeting on climate change adaptation platforms, **23 June 2014, Copenhagen** (follow-up of two expert meetings held in June 2013, EEA and Nov 2013, Vienna, with CIRCLE2)
- Workshops held with West Balkan countries (**April and October 2013, Belgrade, Serbia**)

EEA/ETC CCA Workshop on CC IVA in West Balkan countries, April 2013



eea.europa.eu

European Environment Agency



ETC CCA Technical paper 'Climate change impacts, vulnerability and adaptation in West Balkan countries' (Nov 2013) (1)

- **Review of state of play** on climate change impact and vulnerability assessments and adaptation strategies and measures in the WB countries
- **Summary of activities** by international organisations and programmes
- **Outcomes of two workshops held in 2013** (participants: experts from WB countries (environment agencies, metoffices, researchers), EEA, ETC CCA, UNDP, UNISDR, WHO, UNEP, Austria, Italy, NGOs)

eea.europa.eu

European Environment Agency



ETC CCA Technical paper 'Climate change impacts, vulnerability and adaptation in West Balkan countries' (Nov 2013) (2)

- **Country profiles** prepared, checked by national experts, to be included in Climate-ADAPT in 2014
- **Conclusions** on potential next steps:
 - Enhance coherence and consistency of activities of international organisations
 - Exchange knowledge and build capacity for risk and vulnerability assessments
 - Strengthen networking and communication between information providers (researchers), policy makers and other users
 - Build capacity to develop strategies and systematically identify and assess adaptation options
 - Feed outcomes into the ECRAN project

eea.europa.eu

European Environment Agency



Conclusions (1)

- The **EU Adaptation Strategy** aims to further mainstream adaptation at EU level and support action in countries, regions and cities, review in 2017
- **EU funding** can support research, climate services and implementation projects
- Several **transnational regions** are active on adaptation and many EEA member countries have **national adaptation strategies** and some also national action plans
- A range of **cities** have developed adaptation plans and many are developing these
- Adaptation actions can be **technological, ecosystem-based or behaviour changing; stakeholder involvement** is important

eea.europa.eu

European Environment Agency



Conclusions (2)

- **Indicators** of climate change and **impacts** are available but **further monitoring, research and climate change services** are needed
- **Monitoring and evaluation** of adaptation **actions** is increasingly needed but only few countries have experiences
- **Information and knowledge platforms** can help to find and share information and connect communities across Europe