

# Activities of the European Union on water and climate change

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## Existing relevant EU policies and documents

- The Water Framework Directive
- Flood Risk Management Directive
- Commission Communication on Water Scarcity and Droughts
- Commission White Paper on Adaptation to Climate Change, including annexes:
  - Adapting to Climate Change: the Challenge for European Agriculture and Rural Areas
  - Human, Animal and Plant Health Impacts of Climate Change
  - Climate Change and Water, Coasts and Marine Issues
- River basin management in a changing climate - Guidance Document No 24 under the Common Implementation Strategy of the WFD



## EU Adaptation White Paper

### PILLAR I

Strengthen  
the  
Knowledge/  
Evidence Base

### PILLAR II

Mainstream  
climate  
Adaptation  
into key  
policy areas

### PILLAR III

Employ  
a combination  
of  
policy  
instruments

### PILLAR IV

Advance  
work  
internationally  
on  
Adaptation

#### General message:

Need for increased resilience to adapt to climate change effects

#### Specific actions:

- Develop a European Clearing House Mechanism
- Develop methods, models, data sets and prediction tools
- Develop guidance on river basin management and flood management
- Assess further needs for water efficiency in agriculture and households



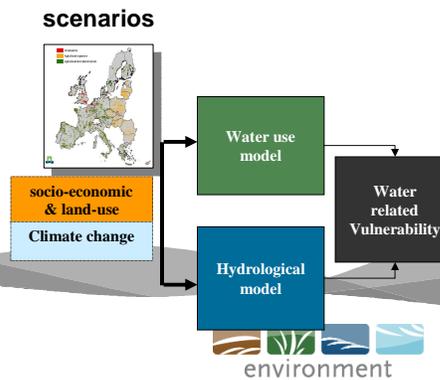
## The European Clearinghouse Mechanism

- **A portal of reliable and fundamental information and tools on climate change impacts, vulnerability and best practices**
- **Information mainly generated by public agencies and research institutes**
- **Focus on exchanging harmonized & quality checked EU wide data at maximal resolution, in a structured way, providing a tool for:**
  - neighbouring countries (impacts and adaptation activities)
  - interregional areas (e.g. mountainous or coastal area)
  - areas in which there is scope for action at EU level: CAP, Water, Coastal, Marine, Natura 2000, TEN, Energy, Health, etc.
- **The EU Clearinghouse will complement but not supersede national and international initiatives** – possible solution for countries with limited resources
- **Timetable:** 2010 – open call for tender, 2011 – prototype available and reviewed, 2012 and beyond – design and implementation. All in close cooperation with possible users.



## Modelling of water vulnerability and adaptation measures

- Assessment of vulnerability to impacts of climate change on water on medium term (2020-2030) and long term (2050->) on a high level of geographical and sectoral detail
- Identification and assessment of adaptation measures to be either promoted or prevented at EU level.
- Consortium of 4 European research institutes (CESR, Alterra, Ecologic, CMCC) started in Jan 2010 – 20 months
- Steering group will validate the assessment framework, scenarios, measures
- Stakeholder Group will give region specific and sector specific input



## European Parliament Preparatory Action Climate of Carpathian Region

### Objective:

- Investigate the detailed weather-related and spatial structure of the Carpathian Region
- Contribute to concrete policy proposals in line with the Commission White Paper on Adapting to Climate Change:
  - National or Regional adaptation strategies
  - Danube Climate Adaptation Strategy.
  - Forthcoming EU Information System on Climate Change Vulnerability and Adaptation (EU Adaptation Clearinghouse).
- Phase 1 (JRC) collection of data and develop information exchange tool
- Phase 2 (DG Environment)
  - Analysis on the vulnerability of the region to climate change impacts and on identifying potential adaptation measures, focusing on impact on ecosystems, and ecosystem-based adaptation approaches
- Open calls for tender to be published in June 2010.



## EU Guidance: RBM in a changing climate - 1

- Produced by the Climate Change and Water Steering Group under Water Framework Directive Common Implementation Strategy
- Based on agreed principles of EU Water Directors (2008)
- Target group: river basin managers
- Practical guidance on how to deal with climate change in EU water legislation (WFD, Floods Directive, Water Scarcity & Droughts policy)
- Both water quality and quantity, both extreme events and gradual climate change
- Focus on coming River Basin Management cycles (not 2100)
- Providing first tools, but further work needed
- Endorsed by EU Water Directors in November 2009



## EU Guidance: RBM in a changing climate - 2

- **WFD logic stays the same:**
  - Climate Change is additional pressure on water bodies
  - Closely monitor CC impacts and, based on robust long-term monitoring, assess whether status assessment changes (not likely until 2027).
  - Measures: in case CC pressures have been identified, consider measures in RBMP. Check if Programme of Measures is 'climate robust'
- **Use Floods Directive for addressing CC impacts**
  - Include climate change in preliminary flood risk assessment, flood risk maps and flood protection measures
  - Favour flood measures that provide 'room to the river' and pay attention to WFD Article 4.7 when defining measures
- **Demonstrate in next RBMPs how cc is incorporated, e.g.:**
  - how cc projections have informed pressures and impacts analysis
  - how monitoring programmes are aligned to detect climate change
  - how choices of measures are as far as possible robust



## Further work EU CIS Expert Group CC&Water

- Further information exchange on ongoing activities
- Follow-up CIS guidance RBM in a changing climate
- Function as stakeholder group for DG ENV modelling study on water vulnerability and measures (workshop 1-2 September)
- Workshops in 2011 – 2012, possible themes:
  - Water, climate change and agriculture
  - Monitoring and assessment of impacts of climate change on water (ecosystems)
  - Tools for climate proofing of measures
  - Approaches and needs from river basin authorities for incorporating climate change in coming river basin management cycles



## 2012: Blueprint to safeguard European waters

**Barroso (22 March 2010):** "Europe has strong water legislation in place, and the challenge now is to see how it is working in practice. Rising demand from competing uses and the impacts of climate change are increasing the pressure on water resources. That's why we have scheduled a number of policy reviews that will help us develop – by 2012 – a **Blueprint to safeguard European waters.**"

- **The Blueprint will include:**
  - Assessment of river basin management plans
  - Review of the Strategy for Water Scarcity and Droughts
  - Review of the vulnerability of water and environmental resources to climate impacts and man-made pressures.
- **It will examine:**
  - Balance between water demand and the supply of clean water, taking into account the needs of both human activities and of natural ecosystems.
  - Effectiveness of current policies
  - Need for further policies or measures necessary to strengthen the resilience of EU water policy



**Thank you for your attention**

More information:

[http://ec.europa.eu/environment/climat/adaptation/index\\_en.htm](http://ec.europa.eu/environment/climat/adaptation/index_en.htm)

[http://ec.europa.eu/environment/water/index\\_en.htm](http://ec.europa.eu/environment/water/index_en.htm)

