

Adapting to Climate Change and Water policies

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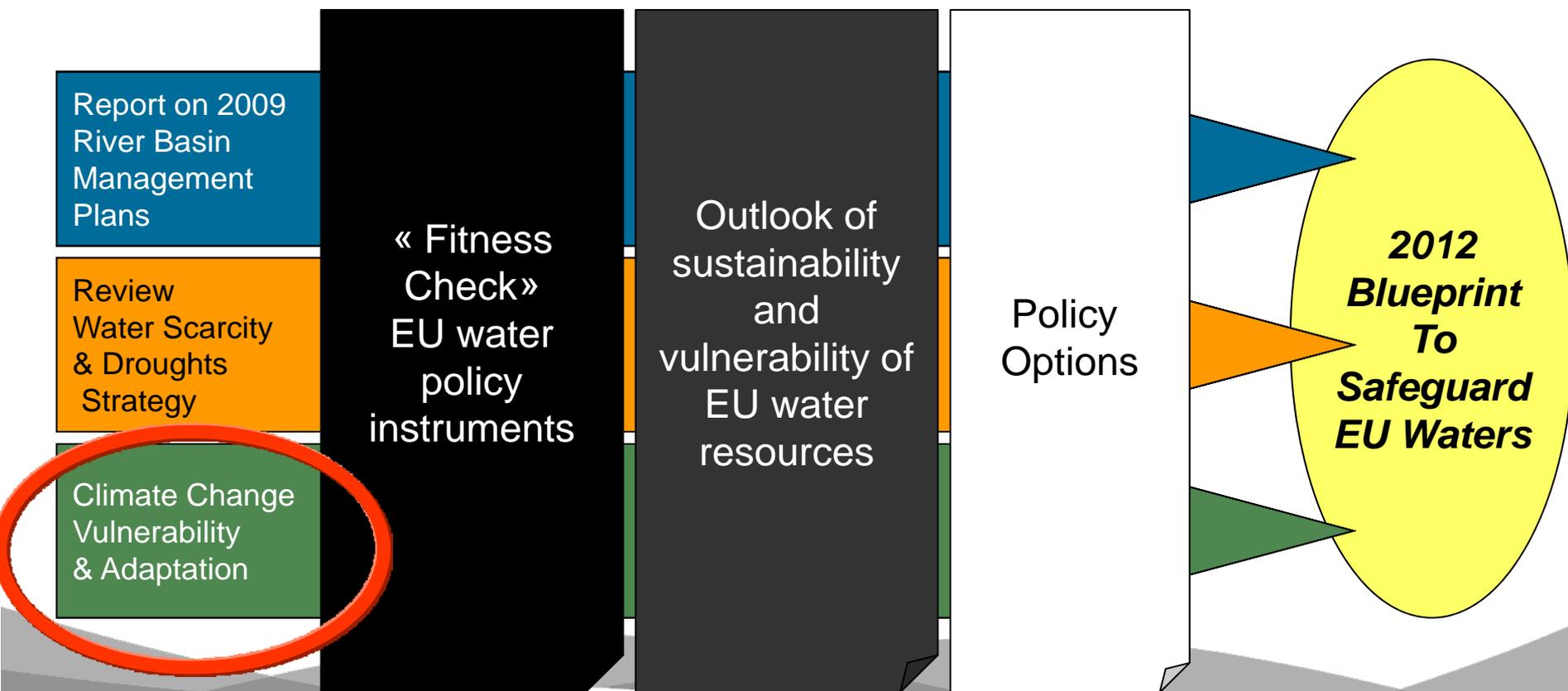


2012: A Blueprint to safeguard EU Waters

- **The Blueprint is the convergence of 3 assessments scheduled for 2012**
 - Assessment of 1st river basin management plans under Water Framework Directive
 - Review of the Strategy for Water Scarcity and Droughts
 - Assessment of the vulnerability of water and environmental resources to climate impacts and man-made pressures.

- **The Blueprint will:**
 - **Look back** and assess the implementation and achievements of policies and measures in place to ensure the protection and availability of EU water resources
 - **Look forward** at the evolving vulnerability of the water environment to assess the sufficiency of existing measures and tools, and evaluate potential new instruments to ensure a sustainable use of good quality water in the EU in the long term.
 - The Blueprint will synthesise **policy recommendations** drawing from the evaluation and impact assessment exercises, and will be accompanied by a number of reports and new initiatives, including of a legislative nature if appropriate.

Impact Assessment



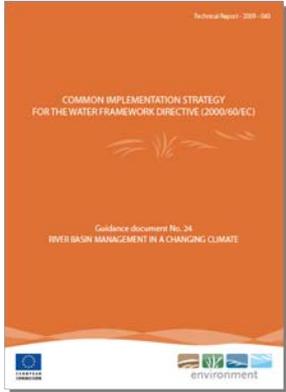
Vulnerability of Water & Environmental Resources and Adaptation (1/2)

■ White Paper on Adaptation: Actions under DG ENV responsibility:

- Guidelines for River Basin Management Plans (delivered in Dec 2009)
- Measures to enhance water efficiency in agriculture, households and buildings
- Natural water retention measures
- Inclusion of climate change in the implementation of the Floods Directive
- European guidelines on adaptation in coastal and marine areas
- Measures to boost soil storage capacity for both carbon and water
- Follow-up Green Paper on Forest Protection
- Integration biodiversity loss and climate change
- Guidelines for the management of Natura 2000 sites
- Adaptation Guidelines for the EIA and SEA Directives

Vulnerability of Water & Environmental Resources and Adaptation (2/2)

■ Adaptation measures



- Provide a concrete follow-up to 2009 guidance document
- EU-wide analysis of potential for implementation, impacts and links with EU policy instruments
- Further work at River Basin level for inclusion in 2015 Management Plans
- Database of measures from ClimWatAdapt project (September 2011)
- Work on natural water retention measures
 - Elements of cost-benefits analysis
 - Modelling at JRC with EU Clue Scanner and LISFLOOD
- Work at regional level (Carpathian Region)
- Link to vulnerability assessment
- Practical tools/databases available in WISE/ACE

[http://circa.europa.eu/Members/irc/env/wfd/library?l=/framework_directive/guidance_documents/management_finalpdf/ EN 1.0 &a=d](http://circa.europa.eu/Members/irc/env/wfd/library?l=/framework_directive/guidance_documents/management_finalpdf/EN_1.0_&a=d)

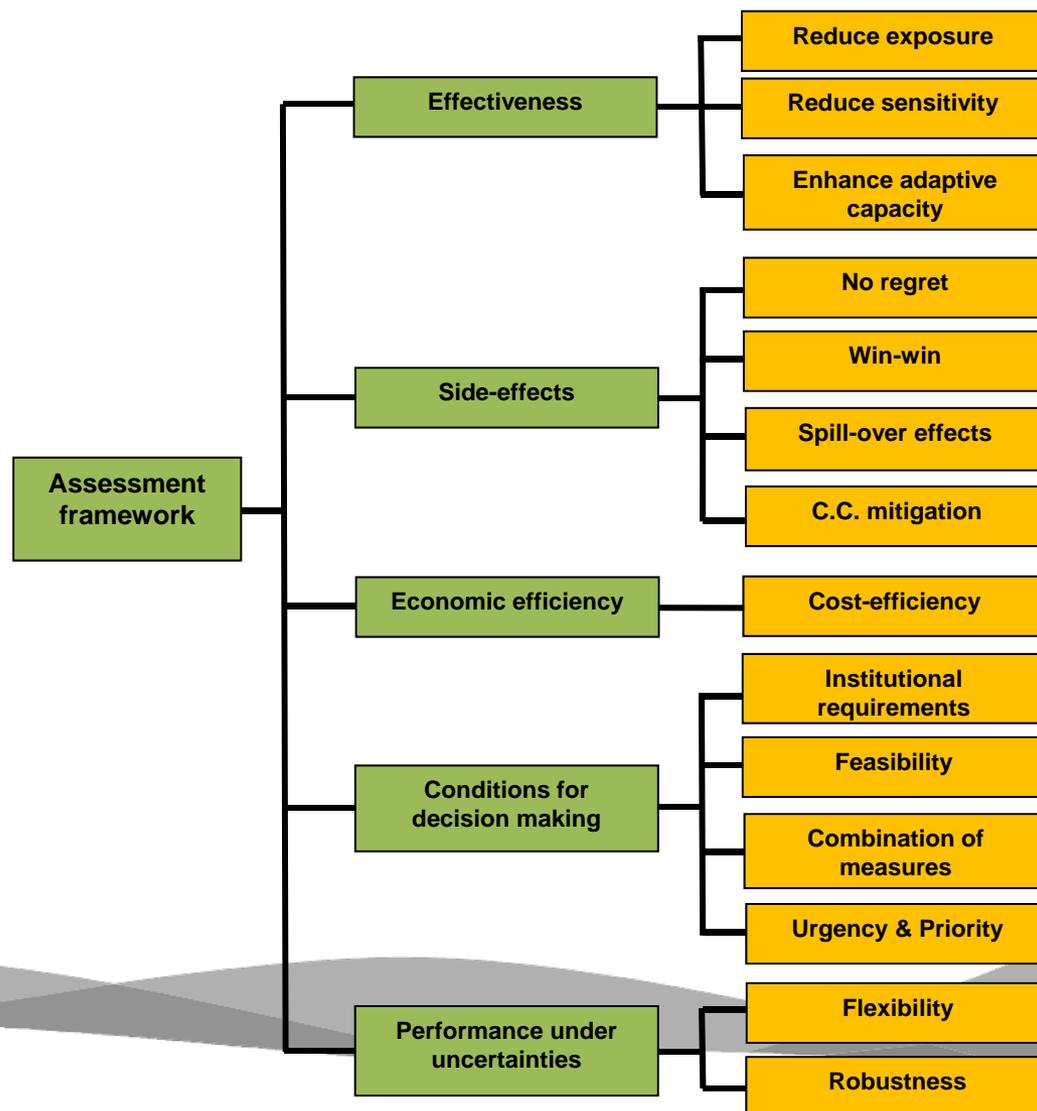
Project 1. - Water and Adaptation Modelling (1/2)

- **“Climate Adaptation – Modelling Water Scenarios and Sectoral Impacts” (ClimWatAdapt)**
- **20 months contract: ends August 2011**
- **Provide analytical basis for assessment of vulnerability of water resources and adaptation measures**
- **Capacity Building**
 - Ad-hoc integrated assessment and modelling framework, making use of JRC outputs.
 - The models and dataset developed in the context of this contract should enable further in-house modelling.
- **Contribute to EU Adaptation Framework**
 - Mainstreaming adaptation into EU Water policy
 - Link with EU Clearinghouse on CC Impacts Vulnerability and Adaptation
- **2 stakeholder meetings (October 2010, March 2011)**
 - to identify and possibly fill knowledge gaps in terms of qualitative information
 - to compile stakeholder knowledge and evaluations on relevant aspects of the individual adaptation measures,
 - to evaluate and consolidate the scientific credibility and policy relevance of the modeling results.
 - to evaluate both the attitudes (for/against) of different stakeholders regarding a particular measure, as well as the intensity of their support for/rejection of a particular measure.
 - Role of WFD-CIS EG Climate Change & Water

Project 1. - Water and Adaptation Modelling (2/2)

■ Outputs:

- Vulnerability assesment at EU level
- Database of adaptation measures
 - Preliminary assessment, mixing quantitative modelling, case studies and expert judgement
- Tools for further mainstreaming of climate change adaptation into River Basin Management Plans



Project 2. - Natural Water Retention Measures

- **Study on costs and benefits of natural water retention measures in rural and urban areas**
 - Linked with other studies on ecosystem-based approach and green infrastructure
- **Link to key DG ENV Initiatives:**
 - Post-2010 Biodiversity Policy and a Strategy on Green Infrastructure.
 - Resource Efficiency (2011)
- **costs and benefits of natural water retention measures**
- **the potential impact of climate change on the need, scope and scale of these measures**
- **natural water retention measures:**
 - restoration of floodplains
 - natural flood defence measures
 - sustainable urban drainage systems
 - natural water retention in upstream parts of river basins by reforestation
 - wetland restoration
 - soil management, etc.

<http://ec.europa.eu/environment/water/adaptation/ecosystemstorage.htm>

Project 3. - European Parliament Preparatory Action Climate of Carpathian region (1/2)

■ Main objectives

- To gather information on vulnerability to climate change impacts in the Carpathian Basin, and on that basis identify and assess potential adaptation measures, with a particular focus on ecosystem based approaches;
- To identify knowledge gaps to be filled in by additional field research or case studies (framework contract, research programmes);
- To contribute to on-going national or regional adaptation strategies or related policy processes, and to the EU Knowledge Base on Climate Vulnerability and Adaptation (among others via the Adaptation Clearinghouse of the EU).

■ Potential users:

- European Commission (ENV, CLIMA, REGIO, JRC, etc.)
- EEA
- ICPDR, Carpathian Convention
- National and regional authorities of the Carpathian Region,

■ 26-27 May: presentation at COP-3 Carpathian convention

■ October: 1st interim report

■ End 2013: final report

Thank you for your attention!

More information:

http://ec.europa.eu/environment/climat/adaptation/index_en.htm

http://ec.europa.eu/environment/water/index_en.htm

