

# Approach of DG Environment to boost research and innovation

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# Main lines for future R&D and innovation

- Europe 2020 strategy aims to turn the EU into a smart, sustainable and inclusive economy, delivering high levels of employment and social innovation
- R&D and innovation policy should be refocused on the challenges facing our society today, such as climate change, energy and resource efficiency, environmentally friendly production methods health and demographic change
- Eco-Innovation Action Plan

# Content

- Existing situation
- Important considerations
- Water in R&D

# LIFE + funding

- **A specific environmental instrument administered by DG ENV to support environmental & nature conservation projects throughout EU**
  - Water theme: to support the implementation of EU water policy, also to raise awareness
  - 177 water related projects between 1992-2007
  - Smaller projects: €1 million on average
  - Can cover up to 75% of project costs
- **Last call for proposals: May 2010 : €243 million for**
  - nature and biodiversity
  - environment policy and governance
    - to contribute to enhanced water quality by developing cost-effective measures to achieve good ecological status in view of developing river basin management plans under the WFD
  - Information and communication
- **The aim is to increase the efficiency and cost effectiveness of the programme**

# Cohesion fund

Three pillars of opportunities in Cohesion Funds:

## 1. Management of water resources

- **2007-2013 finance €8 billion total funding** for reducing leakage rates, connecting to water supply, additional supply and improving infrastructure
- **€14 billion for waste water**

## 2. Prevention of disaster

- **2007-2013 finance €7 billion available (mainly floods, also droughts)**

## 3. Responding to disaster with the EU Solidarity Fund

- The Solidarity Fund (EUSF) provides money for disaster relief in MS, although the aim is to use this money only as a last resort and to avert disasters through proper management and risk prevention measures.
- There is no specific amount of money allocated each year
- Per-country cap on the amount of funding that can be given (proportional to population)

# Other funds and initiatives (1)

- **Framework Programme for research and technological development**
  - 7<sup>th</sup> FP 2007-2013 with a budget of ~ **EUR 50 billion**
  - It represents a **41% budget increase from FP6** at 2004 prices
  - **€ 1,8 billion** for research on environment and climate change in the “Cooperation” Programme
  - FP7 supports research in **selected priority areas**
  
- **Competitiveness and Innovation Framework Programme (CIP):**
  - supports **innovation** activities (including eco-innovation) of SMEs, not research. Promotes the increased use of **renewable energies and energy efficiency** → **ETAP**
  - encourage the **uptake of environmental technologies** through pilot and market replication projects, bridging the gap between the successful demonstration of innovative technologies and the market uptake
  - 2007 to 2013 with an overall budget of **€ 3621 million**

# Other funds and initiatives (2)

- **European Regional Development Fund (ERDF)**
  - The ERDF aims to strengthen **economic and social cohesion** in the European Union by correcting imbalances between its regions
  - Finances e.g. infrastructures linked notably to **research and innovation**, telecommunications, **environment**, energy and transport
  
- **The Interreg IV C programme**
  - enables EU regions to work together
  - ERDF contribution: €321 million.
  - 2 priorities:
    - ‘Innovation and Knowledge economy’
    - ‘Environment and Risk prevention’
  
- **Trans-European transport and energy networks (TEN-T and TEN-E):**
  - 2007 to 2013 EUR 8,168 billion  
(EUR 8,013 billion for TEN-T; EUR 155 million for TEN-E)

# Integration, consistency

- **A coherent package of research and innovation should be established – complementary instruments – DG ENV focus on areas not covered by other funds**
- **Integration of environmental research into other fields and consistency between different actions/policies is crucial – cross sectoral approach - promote activities with a clear impact on the environment (infrastructure, agriculture production, fisheries etc).**
- **Shift from a pure funding mechanism to a gathering all research efforts in the EU - European Research Area, Joint Programming Initiative**
- **Development needs – targeted research and innovation policy may trigger the development of new technologies and innovative solutions**

# Research – policy interactions

- **Research should be based on the existing policy and envisaged policy needs of EU**
- **Implementation of EU legislation should be a core priority – in cooperation with neighbouring countries**
- **Research should give a solid base for the development of new policies**
- **Results should be understandable and usable for policy makers – Science-Policy Interface**

# Co-operation

- **European-wide involvement of multiple stakeholders is crucial**
- **It assists resource efficiency and dissemination of research and innovation achievements**
- **Europe 2020 Innovation Union**
  - Boost cooperation between industry and universities
  - Enhance cross-border cooperation and joint programming
  - Prioritise knowledge expenditure

# Priority setting

- **ENV Commissioner has singled out priorities for his mandate:**

- Biodiversity
- Resource efficiency
- Water

**these should very closely direct the research and funding instruments**

- **Research in general should be driven by policy priorities**

# Blueprint to Safeguard European Waters

Jose Manuel Barroso: "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**." (22 March 2010)

- assessment of the implementation of the WFD and its river basin management plans
- review of the Strategy for Water Scarcity and Droughts
- review of the vulnerability of environmental resources such as water, biodiversity and soil to climate impacts and man-made pressures.

# Diversity of water uses

***Water is more than drinking water and waste water***



# Key ideas of water resources management

- Water is a shared, finite resource
- Water is necessary for human life and health
- Protecting water safeguards biodiversity and ecosystem services
- Clean water resources are an economic good which must be protected
- Protecting water should go hand in hand with sustainable exploitation of its economic potential
- Increasing pressures on water resources due to increased human activities, pollution, climate change

# Key messages for water resources management

- **Improve water quality and keep water resources clean**
- **Reduce water demand**
- **Save water and increase water efficiency**
- **Increase natural water availability/water retention, maintain and boost natural storage capacity for water**
- **Protect against floods and erosion**
- **Land use, water and biodiversity – joined up management**

# Potential research areas in water management

- **Resource efficiency: buildings, products, water distribution networks (leakages), energy efficiency of water systems**
- **Agriculture: different crop production, water saving and pricing, improved irrigation technologies and practices**
- **Land use – chance for improving water demand–supply management**
- **Vulnerability of environmental and water resources to CC and man-made pressures**
- **Resilience of environmental and water resources and ecosystem services to water scarcity and droughts**
- **Promote ecosystem-based adaptation or sustainability measures**
- **Economic assessment of cost-benefits**
- **Market instruments to achieve full cost recovery policy of WFD**
- **Innovative monitoring and early warning systems**
- **...**

# Thank you for your attention!

More information:

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

