

Issue no. 01 – Dec 2011

Editorial

Jaroslav Mysiak

Fondazione Eni Enrico Mattei FPI-WATER Coordinator According to the Chinese Zodiac, 2012 is the year of the Yang Water Dragon; a mighty symbol attributed the skills of making smart decisions based on unbiased assessment of facts. As a matter of fact, 2012 is also the year of a thoughtful assessment of European Water Policies, feeding into the 'Blueprint for Safeguarding Europe's Water Resources' (see page 2). Acknowledging the critical importance of water, the European Commission declared 2012 the European Year of Water.

Access to a secure, safe and sufficient source of fresh water is a fundamental requirement for the survival, well-being and socioeconomic development of all humanity. Yet, we continue to act as if fresh water were a perpetually abundant resource. It is not.

Kofi Annan, Is the World Running Out of Water? Awake! Magazine, June 22, 2001 The EPI-WATER, a European research project, seeks to inform the policy review and underlying decision making. It sets out to assess the effectiveness and the efficiency of Economic Policy Instruments (EPIs) in achieving water policy goals, and to identify the preconditions under which the economic instruments complement or perform better than alternative policy instruments.

A year into the project, we are pleased to present the key research results produced so far. First, we have specified a comprehensive, multi-criteria based policy assessment framework (AF) for the purpose of the project (see page 3). Second, we have completed review of some thirty EPIs - voluntary agreements, charges and taxes, water pricing schemes, subsidies, tradable permits and certificates - in Europe and overseas (see page 4). The ensuing - more than a thousand pages-long - document is one of the most comprehensive reviews of economic policy instruments for water management in Europe. Early in January 2012 we will held a review conference in Berlin (see page 5) at which we will present the synthesis report of the assessment exercise. The conference participants will include the members of the two advisory groups established for the purpose of the project (see page 4).

Issue no. 01 – Dec 2011



Blueprint to Safeguard European Waters

In 2000, the European Union undertook a substantial reform of the Community's water policy and adopted ambitious goal of reaching a healthy ecological state of Europe's water bodies by 2015. The EU Water Framework Directive (WFD, 2000/60/EC) defines mandatory milestones on the roadmap to reach this goal. The review of the river basin management plans and programme of measures, adopted across the EU by 2009, sets to gain information on how Member States have improved their water management.



The mitigation of drought risk in Europe, scantily tackled by the WFD, has been addressed in 2007 by the Communication 'Addressing the challenge of water scarcity and droughts in the European Union' (COM(2007) 414 final). The Communication has identified seven areas of priority actions at the EU level: 1) Putting the right price tag on water; 2) Allocating water and water-related funding more

efficiently; 3) Improving drought risk management; 4) Considering additional water supply infrastructures; 5) Fostering water efficient technologies and practices; 6) Fostering the emergence of a water-saving culture in Europe; and 7) Improve knowledge and data collection.

Water management plays a vital role also in the EU framework for climate adaptation and policy. The 2009 White Paper on adapting to climate change contains a number of actions to be pursued.

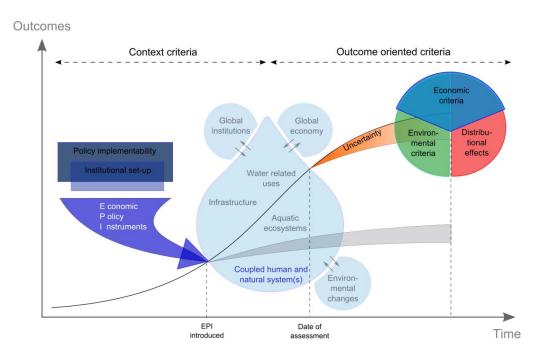
The results of the ongoing review of the above three policy areas will feed into the 'Blueprint to Safeguard European Waters', scheduled for 2012. The Blueprint will focus on land use management, resource efficiency, water governance, research and global dimension of the water resource management. More information about the Water Policy Review can be found at ec.europa.eu/environment/water/blueprint/index_en.htm.

The EPI-Water project will be instrumental for the efforts to internalise the costs from water use and water pollution, design pricing policies compelled by the WFD, and pay way to a more efficient use of water resources in Europe.



EPI-WATER Assessment Framework

The Assessment Framework (AF) devised for the purpose of the EPI-WATER project is a unified conceptual scheme guiding the conduct the ex-post and exante assessments of economic policy instruments (EPIs). The AF distinguishes outcome-oriented and context-oriented criteria. The former describe how EPIs perform, including intended and unintended outcomes, transaction costs from negotiating and enforcing policies, and the distribution of benefits and costs among the affected parties. The latter describe the institutional conditions (legislative, political, cultural, etc.) affecting the formation and operation of EPIs, the robustness of the EPI with respect to uncertain conditions, and process of implementing the EPI.

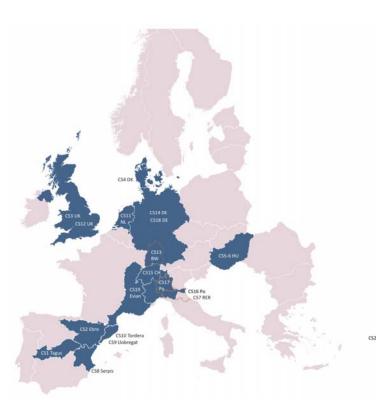


Schematic diagram of the EPI-WATER assessment framework

The assessment framework helps to make the underlying assessment assumptions explicit. The assumptions are necessary to connect policy outputs to outcomes; separate and quantify the impact of the EPI on empirical outputs/outcomes that are affected by other factors; forecast future outputs/outcomes; and estimate what baseline path would have occurred in a counterfactual scenario without the EPI. The full description of the Assessment Framework is available from the EPI-WATER web page (www.epi-water.eu).



Review of existing economic instruments



Geographic coverage of the European review studies

Almost a year into the EPI-WATER project, we have completed an assessment of some thirty policy economic instruments for water management in Europe and overseas. The analysed instruments including voluntary agreements, charges and taxes, water pricing schemes, subsidies, tradable permits certificates. The ensuing document is more than a thousand pages long and represents one of the comprehensive assessment exercises conduced in Europe.

The reviewed EPIs have been chosen according to the type of instrument employed, and economic sectors (or pressures) aimed at. Trying to cover different geographic and geopolitical criteria, we have analysed existing economic instruments in ten EU-Member States: Cyprus, Denmark, Germany, Hungary, France, Italy, Netherland, Spain, Switzerland, and UK. In addition, ten review studies have been conducted in overseas

countries (Australia, Chile, China, Israel, and USA), providing valuable insights about the performance of innovative EPIs in other contexts.



Non-European review studies



Issue no. 01 – Dec 2011

The Policy Think Tank and the 'Inspiration Beyond the EU' groups

The EPI-Water project has established two external advisory bodies guiding the research conduct: the *Policy Think Tank* (PTT) and the *Inspiration Beyond Europe* (IBE).

The **Policy Think-Tank** (PTT) comprises of high-level policy officers and experienced professionals from across Europe. The designated members of the PTT include (in alphabetical order) *Viviane André* (EC Directorate General Environment), *Kevin Andrews* (Department for Environment, Food and Rural Affairs, UK), *Bernard Barraqué* (École Nationale du Génie Rural, des Eaux et des Fôrets, CNRS, France), *Robert Peter Collins* (European Environmental Agency), *Cristina Danes* (Ministry of Environment, Spain), *Jacques Delsalle* (EC Directorate General Environment), *Henriette Faergemann* (EC Directorate General Environment), *Sarah Feuillette* (Agence de l'eau Seine Normandie, France), *Eduard Interwies* (InterSus, Germany), *Xavier Leflaive* (Organisation for Economic Co-operation and Development, OECD), *Mats Ivarsson* (Agency for Marine and Water Management, Sweden), *Lukasz Latala* (EC Directorate General Environment), *Irene Lucius* and *Sergey Moroz* (WWF), Tania Runge (COPA-COGECA), *Cristian Rusu* (Waters National Administration, Romania), *Stefan Ulrich Speck* (European Environmental Agency).

The **Inspiration Beyond Europe** (IBE) group consists of highly-qualified academic experts from overseas that have agreed to put their expertise and experiences to the benefits of the EPI-WATER project. The members of the IBE group have conducted a review of innovative economic policy instruments in their respective countries and will advise to ongoing research conducted in the project. The members of the IBE group include Prof. *Tihomir Ancev* (University of Sydney, Australia), Prof. *Charles Howe* (University of Colorado, USA), Prof. *Ariel Dinar* (University of California, USA), Prof. *Guillermo Donoso Harris* (Pontificia Universidad Católica de Chile), Prof. *Iddo Kan* (Hebrew University of Jerusalem, Israel), Dr. *Mark Kieser* (Kieser & Associates), Dr. *Carolyn Kousky* (Resources for the Future, USA), Prof. *Andrew Yates* (University of Richmond, USA), Prof. *Xiaoliu Yang* (Peking University, China), Prof. *Michel Young* (University of Adelaide, Australia).

Issue no. 01 – Dec 2011



First EPI-Water Conference

Understanding the Application of Economic Policy Instruments (EPIs) in Water Management

Review of Empirical Evidence, Experiences and Lessons Learned from Europe and Elsewhere

The first out of three EPI-Water's international events will take place in **Berlin**, **January 26- 27, 2012**. The conference is meant to review the ex-post assessment exercise and provide early guidance for the ex-ante assessment of innovative policy actions that will be conducted in four European case studies.



The conference is organised around following themes:

- Sustainable development of hydropower
- Flood risk, water scarcity and droughts
- Water quality and pollution
- Innovative water policy instruments not yet applied in European Union.

The Berlin conference will gather some 80 experts from policy and research. The participants to the conference will include the representatives of the EPI-WATER consortium members, the members of the project's Policy Think Tank, the members of the 'Inspiration Beyond Europe' advisory group and representatives of other key European institutions.

The conference will take place at Logenhaus (Emser Strasse 12-13, D-10719 Berlin, www.logenhaus.de).

The next project's event are scheduled for January 2013 (Madrid) and November/December 2013 (Venice). More information about the upcoming events and other information related to the project's activities can be found at: http://www.feem-project.net/epiwater/pages/events/120126/

Issue no. 01 – Dec 2011





About EPI-WATER

Full title: Evaluating Economic Policy Instruments for Sustainable Water Management in Europe **Funding instrument**: FP7 collaborative project (small or medium-scale focused research project)

Total Cost: 4.462.688 € **EC Contribution**: 3.472.438 €

Duration: 36 months (01/01/2011 – 31/12/2013)

Consortium: 11 partners from 9 countries

- 1. Fondazione Eni Enrico Mattei, Italy, http://www.feem.it [Coordinator]
- 2. ACTeon, France, http://www.acteon-environment.eu/
- 3. Ecologic Institute, Germany, http://ecologic.eu/
- 4. Università di Bologna, Italy, http://www.unibo.it/; http://www.deiagra.unibo.it/
- 5. Wageningen University, The Netherlands, http://www.wageningenuniversity.nl/uk/
- 6. National Technical University of Athens, Greece, http://www.ntua.gr/en_index.htm
- 7. Instituto Madrileño de Estudios Avanzados Agua, Spain, http://www.water.imdea.org/
- 8. University of Valencia, Spain, http://www.uv.es/
- 9. Middlesex University, Flood Hazard Research Centre, United Kingdom, http://www.fhrc.mdx.ac.uk
- 10. Aarhus Universitet National Environmental Research Institute, Denmark, http://www.dmu.dk/international/
- 11. Corvinus University of Budapest, Regional Centre for Energy Policy Research, Hungary, http://www.rekk.eu/index.php?lang=en

Key Words: Water management, Economic policy instruments, ecosystem services, water efficiency

Contact: Dr Jaroslav Mysiak, Scientific Coordinator; Mrs Martina Gambaro, Project Manager

Fondazione Eni Enrico Mattei, Isola di San Giorgio Maggiore, 30124 Venice, Italy

phone +39-041-2700.445/472; e-mail: epiwater@feem.it; Website: http://www.epi-water.eu

The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 265213 (EPI-WATER)



