



CEPS Task Force Report « Which economic model for a water efficient Europe ? »

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European Parliament Water Intergroup, January 28th, 2013

A CEPS Task Force

- Representatives of different sectors
 - *water utilities, water users – industries, hydroelectricity, agriculture -, NGOs, experts, policymakers...*
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- « Which economic model for a water-efficient Europe ? »
 - Economic and financial policy instruments to guide investments and other economic choices towards water efficiency
 - Water efficiency strategies in different sectors for competitiveness and green growth ?

Safeguard Europe's water : complementing the policy mix or implementing existing policies ?

- New challenges : climate variability, increasing pressures on resources availability, scarcity situations
 - *Competition among uses + Pressure on ecosystems*
- Other challenges:
 - *Reaching the WFD objectives is still a challenge*
 - *Financing the replacement of ageing infrastructures*
 - *Lack of relevant technical and economic data*
- Improving water efficiency in each sector and across sectors
- Improve investment methods through appropriate cost recovery analysis and mechanisms
- Reach the full potential of the Water Framework Directive
 - *Improve the use of economic analysis and instruments*
 - *Improve the integration with other policies*

Water productivity : a crucial evaluation of water's value

To ensure sustainability and economic viability

- Maximise net social value from a given amount of water
 - Economic, social, environmental value
- For a given resources/territory, what is the current level of benefits produced by water uses ?
- What would be the different options to increase them ? What option leads to the highest productivity ?
 - *Reducing losses in a given water use sector*
 - *Redesigning production processes, shifting to other business models or other types of productions*
 - *Re-allocation of water between uses*
- **Flexibility of allocation** between uses + **Explicit assessment** of the **net social value** of **different allocation options**
- When feasible, **efficient water markets**

Cost recovery : a crucial evaluation for sustainability

- **Water supply systems** : covering at least also investment costs
 - *Tariffs for financial sustainability (+ taxes and transfers)*
 - *Social tariffs*
- **EU transfers**, EIB backed loans, European Water Efficiency Fund...
- **Cost recovery analysis : a very useful tool for policy debate**
 - Transparency : An informed discussion about the distribution among water users of costs and benefits of investments and of water uses
 - What costs should be considered ?
 - *First, Operational and management costs, Full capital costs*
 - *Then, whenever possible, Resource and environmental costs*
 - Reflecting the real costs of water management and the value of resources : Prices for users ? Charges for polluters ? Compensations for externalities ? Payments for ecosystem services ?

Water pricing : what objectives ?

- Cost recovery (water supply services)
- Influencing behaviours to increase water use efficiency (scarcity information)
- Impacting the allocation of water between uses

- Water pricing or allocation decisions
 - Need sound hydrological knowledge and socioeconomic valuation
 - Subject to political pressures
- Water trading schemes and water markets
 - Theoretically, the most efficient; but transaction costs
 - Need to take into account social and environmental trade offs

Sector specific policies

Domestic water use

- **Reducing leakages in public water supply networks**
 - Explicit targets and goals, benchmarking, sharing of best practices, low operating pressure systems,...
 - Cost-benefit analysis of investments, including long term sustainability and viability of the system
- **End use efficiency in households**
 - Information to change domestic users behaviours
 - Education, labelling appliances, water efficient standards
 - Variable pricing / Block tariffs + Metering

Sector specific policies

Agriculture

- Water productivity or water efficiency assessment :
 - Metering and pricing are often lacking
 - The most profitable crop for a farmer does not necessarily correspond to an optimum in water productivity
 - Reducing water use is linked to farming techniques, but also to changes in produce characteristics or changes in markets
- Modern irrigation techniques (training, special support for low income farms...)
- Preparing for scarcity situations and necessary changes in productions

Sector specific policies

Energy production

- Cooling : A large share of water withdrawals, but a very small proportion is consumed
 - Water recirculation systems reduce withdrawals (but increase the consumption proportion), and thermal impact
 - Using alternative water sources (treated waste water, for instance)
- Hydropower : generally not changing water quantity or quality
 - but some impact on ecosystems and hydrology
 - some resource costs / trade off with other water uses when water is scarce in summer
 - Some other benefits
 - A sound analysis of costs and benefits would be useful

Sector specific policies

Manufacturing industry

Industries can be supplied by public systems or have their own abstraction

Many processes are highly dependent on water

But the cost of water is seldom a major part of production process costs

- Water prices nevertheless determine investments in water saving technologies
 - An increase in water prices reduces the payback period
- Expected increase in competition for water among uses
 - Voluntary initiatives to increase water efficiency (Environmental Management Systems)
 - Re-use and recycle are a key component of it

Recommendations (1)

- **Cost recovery assessment** : transparency for the water policy debate
 - *Agreement on methodology necessary for enhanced economic analysis*
 - *High quality hydrological data needed (WISE)*
 - *Volumetric metering, economic data collection*
 - An input for a transparent and informed policy debate (distribution of costs and benefits) : who pays for what ?
 - Informed decisions about financial transfers
 - Transparency on the use of public money and cross subsidies
- Enabling **cost recovery and pricing mechanisms** to be put in place
- Systematic **water productivity assessment of different water allocation options**
 - Common definition of water productivity
 - Explore the variety of options at hand
- **Water trading schemes and water markets** solutions should be explored, and evaluated carefully : reflect the value of the resources

Recommendations (2)

An EU2050 Water Roadmap

- Reducing leakages to an economically efficient level
 - Cost benefit analysis methods further developed
- EU Label for water efficiency for domestic appliances
- CAP more aligned with WFD objectives
- Direct payments in agriculture : include a water efficiency target and metering obligations (in water scarce regions)
- A water productivity strategy in agriculture to :
 - boost agricultural water productivity, enter markets aligned with water productivity objectives
 - anticipate risks for supply chains, if radical changes in water availability
 - prevent unintended incentives to increase irrigated area, ...
- A European Water Efficiency Fund for efficiency investments

Merci pour votre attention

Thank you for your attention !

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