



# Green investments to improve water efficiency\*



## Key messages

Sustainable management of water resources is essential for economic development and poverty alleviation. Progress in the region can build on success stories, which need to be scaled up, and on supportive institutional tools and frameworks.

Investments are required to make water available and fit for use, but a variety of tools can limit their costs. The impact on water of investments in agriculture, energy, transport and urban planning and land use changes should be systematically assessed. National Policy Dialogues have supported water sector reforms in the region. They need to be extended and strengthened in Eastern Europe, the Caucasus and Central Asia countries, in cooperation with other UNECE members.

## Background

Sustainable management of water resources can promote water efficiency and channel water resources where they create most value. It can also contribute to climate change mitigation and adaptation. **Sustainable water management can trigger innovations and investments, which will benefit both the economy and the environment.** The reverse is also true: unsustainable water management can hinder economic development and fuel poverty.

**Integrated Water Resource Management (IWRM)** provides a **framework to manage water in a sustainable manner**. It is **gaining recognition** across the region, in particular **through the Water Framework Directive** developed by the European Commission and promoted in members of the European Union and neighbouring countries. The **UNECE Water Convention** provides another vehicle to promote IWRM.

A variety of mechanisms exist which can, for instance, engage farmers in deploying less water-consuming irrigation techniques, shifting away from water intensive crops in arid regions, using less polluting fertilizers in catchment areas or using reclaimed water where appropriate.

## Key facts

**Implementation of IWRM principles is advancing in EU member States, as river basin organizations and management plans are gradually put in place.** In other parts of Europe, implementation of IWRM principles is often impeded by lack of information and capacity and by political considerations.

Progress towards efficient water uses has been uneven across sectors and subregions. In some countries, progress in the agriculture sector has resulted in reduced water losses, more crop per drop and reduced run-offs. Water consumption per household has decreased in a number of European cities. **Point sources of pollution are under control in EU member States.**

Investments are required to extend access to water-related services (especially to vulnerable populations) and to upgrade existing infrastructure and adapt it to climate change. However, there is a trend to turn to technology-driven options to manage water, which can be detrimental, especially in countries lacking financial, technical and human resources.

**Water policy reforms take time and require a long-lasting coordination of a variety of stakeholders.**



**SAVE WATER, GROW GREEN!**  
**ENVIRONMENT FOR EUROPE**  
7<sup>TH</sup> MINISTERIAL CONFERENCE  
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## The way forward

The EU Water Framework Directive and multilateral environmental agreements, such as the UNECE Water Convention, provide frameworks, mechanisms and incentives to move forward.

**Economic instruments** (e.g. **abstraction charges, pollution charges, water prices, payment for ecosystem services**) **could be used more systematically**. They provide incentives for water efficiency, promote low cost options, allocate water where it is most needed and generate revenues to finance water-related services. **Governments should aim at the removal of water-harmful subsidies**.

Economic instruments are best used in conjunction with other instruments, such as water rights (see different instances in the United States), licences, standards (for water quality or efficiency), and cooperative agreements (e.g., between farmers and utilities in catchment areas).

Water demand management reduces the scale and costs of infrastructure development, and investment needs. The education of citizens and consumers towards water and sustainability can help.

Watershed services (wetlands, forests, etc.) and alternative water sources (rainwater, water reuse) should be valued more systematically, as they provide needed services (flood mitigation, water storage, water supply) and can save costs.

When required, investment in water-related infrastructures should be based on technologies which will limit environmental damages, energy-related costs and health impacts.

Multinational enterprises can spread best available techniques and responsible behaviour which contribute to water efficiency.

The development of water management plans creates opportunities to consult with a variety of stakeholders, a requisite by the WFD, which is acknowledged in the legislation of several non European countries as well.

**Attention should be paid to affordability constraints**, so that low-income groups still have access to basic water needs (for drinking, food and hygiene). **Targeted instruments are usually more effective than general subsidies or low tariffs**.



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