

EWA

Water Manifesto



The sustainable management of Europe's water resources is the main objective for the European Water Association (EWA). It ensures quality of life, a green and circular economy and is fundamental for good environmental protection. Furthermore, the involvement of the water sector in different parts of the economy is vital, although it is often not acknowledged enough.

With its Water Framework Directive and the guidelines related to it, the EU has one of the most ambitious and challenging pieces of water legislation worldwide, thus providing a unique regulatory instrument for innovation in the water sector.

Some of the key issues for the water sector in Europe are:

- The undeniable importance of water for smart, sustainable and inclusive growth has to be considered. Water is a vital and cross-cutting topic for the fundamental research and innovation policies and financing instruments. It needs to be integrated within other EU policies through the water-energy-food nexus.
- The EU water policy has to be based on resource efficiency and recovery, pollution source control via the full implementation of a polluter *pays principle*, and the promotion of sustainable water management as a driving instrument for a green and circular economy, which stimulates an industrial symbiosis.
- Regulations and voluntary incentives on water stewardship need to go hand in hand. EU policies have to ensure that water is considered along the whole product life cycle.

Fresh and clean water is an essential but finite resource and needs to be carefully allocated and used. Recovery of essential elements, nutrients (e.g. phosphorus) and energy from the wastewater have to be an essential task for the research and innovation initiatives. The Commissioner for the Environment has to promote sustainable water management as an instrument for a resource efficient and circular economy.

WATER AND ASSET MANAGEMENT

The value of the urban water network in Europe can be estimated to about 1,300 billion Euros for sewer systems and 600 billion Euros for water supply systems, altogether representing about 75% of all water supply infrastructure asset value in urban public space. Most water networks are designed for a life time of more than 50 years. The threat of ageing infrastructure, extreme weather conditions caused by climate change, depletion of natural resources and miscalculated investments in inaccurately planned systems and unfit materials, are pushing cities towards new strategic choices. Therefore, a new process for decision making needs to be developed, combining the expected performances, the acceptable risk and the affordable costs.

Sustainable asset management of water infrastructure, such as sewer and water supply systems, is of major importance for cities' finances, as well as for water infrastructure performances and reliability, surface and groundwater quality and human and environmental health. Organizational tools need to be used efficiently to ensure high quality and sustainability through the whole asset life cycle. Investment not only in new water infrastructure, but also in the maintenance of the existing facilities is unavoidable. Not only in the developing countries, but also in Europe there is an urgent need for qualified personnel in the water sector. Therefore, an attention should be directed towards the capacity building of skilled water experts.

EWA calls for a close cooperation between the ownership, the management and the services, in order to achieve balanced asset value and a maximum output and quality over the whole asset life cycle. EWA provides and offers a unique platform of constant knowledge exchange based on the experience of all EWA members, including their capacity for training and education.



WATER AND CLIMATE CHANGE ADAPTATION

Climate change is showing an increased impact on the freshwater resources in Europe. Changes in the water availability, such as shortage, excess, poor quality and influence on freshwater ecosystems, have been observed with increasing frequency in different parts of the continent. The existing management, infrastructure and planning strategies are no longer reliable considering the rapidly changing challenges that climate change is providing. Complex changes are expected, which will affect all aspect of the water cycle.

Europe is facing two major challenges:

- the increase of water stress and related droughts, mainly in South-Eastern Europe,
- the increase of flood risks across the whole European continent.

Climate mitigation and climate adaptation need to be considered and integrated more efficiently within the smart cities strategy in order to bring together fragmented initiatives and increase the economic viability and the environmental sustainability of innovative solutions. Actions for the development of smart cities and communities need to be taken for the promotion and adaptation of activities related to municipal water sensitivity in accordance with the Covenant of Mayors initiative, since water is a key component for cities. Climate adaptation policies have to encourage further initiatives addressing water issues in key priority areas such as agriculture and energy, ensuring resilience to extreme water events and domestic water services in changing climate situations.

EWA calls for a more climate-resilient Europe that considers water within climate change mitigation efforts at EU level and climate change adaptation strategies at national level. The scale of the new challenges requires a change in the climate mitigation efforts and climate change adaptation strategies, including improved data collection and access to the data, research into critical uncertainties, better integration between sectors and an increased solidarity between Member States. EWA stands for the integration of water into non-water related policies in the context of adaptation to climate change.

WATER EFFICIENCY AND AGRICULTURE

Safeguarding Europe's water resources has been a priority for the EU since the late 1970s when it started adopting specific legal instruments in the area of water protection and several legal instruments to tackle water pollution. Although some improvement has been achieved, significant challenges still remain.

Agriculture and water management are strongly interacting with each other. By fully implementing the EU's reformed Common Agricultural Policy (CAP), the following water policy objectives shall be met:

- to include the necessary modifications to the current instruments (cross-compliance and rural development) or, where appropriate, new instruments capable of meeting EU water goals and tackling significant water pollution, as well as over abstraction challenges;
- to ensure that the European Commission requires the Member States to implement pollution prevention and control measures at the source. The Member States have to develop a methodology to predict changes in pressure of water resources caused by agricultural practices;
- to combine the regulatory and the voluntary stewardship approaches in order to initiate real changes where the CAP budget secures delivery of public goods.

The European Innovation Partnership on Agriculture offers significant opportunities to further provide innovative technological and governance innovations offering solutions from a water-energy-food nexus perspective. It still needs to emphasize the importance of addressing water challenges. Therefore, synergy of the European Innovation Partnership on Agriculture with the European Innovation Partnership on Water needs to be enhanced.

EWA highlights the importance of the synergy between European Innovation Partnerships on Water and Agriculture in order to maximize their potential as an instrument. Member States have to be encouraged by the Commission to improve their use of rural development funding as to meet the water policy objectives.

WATER AND ENERGY

Both water and energy are essential to society. The International Energy Agency has acknowledged that water has become a pressing issue in the energy production. On the one hand, for example, biofuel production is strongly increasing the impact on water resources both in terms of quality and quantity. Moreover, the emerging fracking technology requires water during shale gas production but, more importantly, fracking may pose a risk to water resources. On the other hand, water management depends heavily on the energy sector (requiring significant amounts of energy e.g. for irrigation, wastewater treatment etc.).

Today's water infrastructure is not energy efficient enough. By replacing and modernizing assets new

opportunities to increase energy savings emerge. Biogas production from waste water treatment or heat recovery from sewage systems may even lead to energy surplus. Aquifer thermal energy storage, wave energy, tidal energy, and blue energy require emerging technologies that can play a major role in increasing Europe's energy resilience. However the current regulatory framework poses a barrier for market development and progress. EU energy policy needs to recognize the interdependence within the energy-water-food nexus.

EWA stresses how important to and how dependent water is on the energy sector and calls for investing in research, development and market uptake of: (a) technologies to reduce the energy use of the water sector; (b) technologies to recover and generate energy from (waste)water and (c) emerging technologies for water-based renewable energies.

THIS WATER MANIFESTO

European Water Association (EWA) is the pan-European, non-governmental, non-profit-making, technical and scientific umbrella organization of and for national member associations bringing together all professionals involved in the water cycle. Simply, it is the voice of water in Europe. It is the platform and turntable for discussion, exchange and transfer of information and know how in the European Water landscape on technical and scientific level, not only between the national member associations and with the corporate members, but also for distribution of information from the EU to the members and from the members to EU.

By means of the Water Manifesto, the European Water Association draws attention to current important water issues in Europe and makes proposals for their resolution by the sustainable management and use of water resources. EWA calls upon the society in general and all relevant stakeholders to strive for the sustainable and responsible use of water.



Published by:

EWA · European Water Association · November 2014
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