

Zero Pollution Action Plan: A First step towards a Blue Deal for a Water-Smart Society

Water Europe (WE) is the voice and promoter of water-related innovation and RTD in Europe. WE is a membership-based multi-stakeholder organisation representing over 200 members from academia, industry, technology providers, water users, water service providers, civil society, and public authorities. WE activities and positions are guided by its Water Vision “The Value of Water: Towards a Future-Proof European Water-Smart Society”.

In its [Water Vision](#), WE has set out a blueprint for a society in which the true value of water is recognised and realised, and all available water sources are managed in such a way that water scarcity and pollution of water are avoided, water and resource loops are largely closed to foster a circular economy and optimal resource efficiency, while the water system is resilient against the impact of climate change events.

[The Zero Pollution Action Plan](#) for air, water, and soil aims to avoid and reduce harmful consequences on human health and biodiversity. Within the European Green Deal objectives, this new initiative intends to set up preventive and curative measures particularly through digital solutions and better monitoring and outlook frameworks.

This initiative should strengthen the development of Digital Water and fill in the weaknesses of the water-related legislations. Research and innovation have demonstrated their importance by already providing innovative solutions or being on the lookout for them. The water sector, in particular, is active on the water-health nexus.

As mentioned in our response to the roadmap, Water Europe welcomes the Zero Pollution Strategy objectives, particularly considering its holistic approach and the importance to “prevent, remedy, restore, and monitor” the pollution in water¹. This initiative should break the silo approach between environment-economy-health. **It must pave the way for a Water Deal that considers the value of water.**

ZERO POLLUTION ACTION PLAN: A STEP TOWARDS A WATER DEAL FOR WATER-SMART MANAGEMENT

¹ [WE position paper on the Post-Covid19 recovery plan](#)

The European Commission must take the opportunity of the Zero-Pollution Strategy to impose a comprehensive water strategy crossed-cutting all DGs' portfolios². After energy efficiency, water efficiency will be the new frontline for Europe. It requires bold and courageous decisions, investment, changes and new types of collaborations for stakeholders at all levels of society, involving citizens, public authorities, industries, farmers and NGOs. We need to remain as much as possible in the preventive approach rather than the curative one, such as the European Green Deal.

In addition to the measures encouraged by Water Europe in its policy-oriented positions on the Water Framework Directive³, the Urban Wastewater Treatment Directive⁴,⁵, and the Industrial Emission Directive, the Zero Pollution Action Plan must support:

1. MOBILISING FINANCE FOR A WATER-SMART EUROPE

The EU Multiannual Financial Framework for the next budgetary period, in addition to the Recovery & Resilience Facility, should be directed towards projects which support the overall ambition towards zero pollution. It means:

- ◆ **Clarify how EU financing mechanisms will be mobilised** in practice to support water efficiency, reuse water and resource recovery from wastewater in terms of research, innovation and deployment of solutions.
- ◆ **Require mandatory assessment of the value of water for each financial mobilisation and industrial process by 2025** which will contribute to canalise the financial flow to water-smart investment.
- ◆ **Strengthen the water pollution market, similarly to the CO2 Emission market** which will reinforce the polluter-pay principles for the water sector.

2. TACKLING THE WEAKNESSES OF THE WATER-RELATED LEGISLATIONS

This action plan must set up new initiatives to tackle the weaknesses of the EU legislations particularly within water-health nexus, industrial pollution and soil strategy which are mainly the consequences of the silo approach.

- ◆ Three challenges remain within the water-health nexus:
 1. **Include wastewater-based monitoring to assess people's health and disease status** (e.g., to support pandemic management) **by 2030**. A European Health Union cannot be built without considering the value of monitoring infectious agents in wastewater through digital solutions.

² [EU Water Alliance Manifesto](#).

³ [Water is everyone's business Manifesto](#)

⁴ [Joint Statement on Access to sanitation](#)

⁵ [WE position paper on the Urban Wastewater Treatment Directive](#)

2. **Consideration on the fate and management of antimicrobial resistance (AMR)** to cover both bacteria (ARB) and genes (ARGs), particularly in the Pharmaceutical Strategy.
 3. **Specific measures and investment are needed to address Contaminants of Emerging Concerns (CECs)** such as Endocrine Disrupting Compounds (EDCs), pharmaceuticals, and microplastics to reach the objectives of the Zero-Pollution Strategy. Between 129 and 206 billion EUR will be needed to mitigate CECs in the EU by 2040⁶. These investments should focus on both upstream and downstream measures.
- ◆ **Overcome the potential barriers between the Soil Strategy and the Circular Economy Action Plans for the water sector**, especially for the utilities. The implementation of the Circular Economy Action Plan in the sewage sludge directive might be blocked by the objectives of the Soil Strategy.

3. FULLY MASTERING WATER EFFICIENCY AND REUSED CHALLENGES BY 2050.

The revision of the Industrial Emissions Directive does not include the full potential of the research and innovation on water efficiency⁷. In particular, the brine management technologies can turn water pollution from several sectors into resources⁸:

- ◆ **Energy neutral water sector by 2030.** The exploitation of the Value in Water, particularly the energy embedded in the wastewater streams can contribute to energy neutrality of the sector.
- ◆ **Establish a Horizontal Best Available Techniques Reference Document on water efficiency in the IED** for a more competitive, autonomous, and sustainable Europe by mastering the Value of Water and exploiting the resources embedded in wastewater.
- ◆ **Strengthen the water pollution market, similarly to the CO2 Emission market.**
- ◆ **Halve the EU water consumption by 2050 through water conservation⁹, water efficiency and reuse of wastewater. EU should aspire to reuse 75 % of the industrial wastewater in the EU by 2040.** This objective will guide the EU society and industry to exploit the Value in Water (energy, raw materials and substance) and significantly contribute to the Green Deal and the EU circular economy.

⁶ <https://www.oecd.org/environment/financing-water-supply-sanitation-and-flood-protection-6893cdac-en.htm>

⁷ Water Europe position paper on the Industrial Emissions Directive (under dev.)

⁸ ZEROBRINE project [policy briefs](#) (H2020 project)

⁹ Recycling water should not be limited to industrial wastewater but also be equally consider for urban wastewater.

4. ACCELERATING THE DEVELOPMENT OF DIGITAL WATER BY 2030¹⁰

The absence of the recognition¹¹ that the water supply sector is a critical infrastructure undermines the strategic approach of this infrastructure in term of investment, security, and digitalisation. Yet, €245 billion additional investments are needed in water supply and sanitation until 2027 for assets and digitalisation of the water sector, according to OECD. A recognition will, therefore, support the need for investment to strengthen the agility and resilience of the water sector.

Additionally, “upscaling investment in water-related infrastructure requires enhancing the attractiveness of the sector by providing systemic stability through regulation, transparency, good governance, and increasing the availability of data and information.”¹² *Digital water* contributes to achieving these specific objectives through:

- ◆ **Better risk control management**, paired with water efficiency and Hybrid Green-Grey Infrastructure, contributes to setting up an early warning mechanism in rural¹³, urban¹⁴, and industrial management by 2030¹⁵.
- ◆ **Improve data disclosure by 2025** for better awareness on water-related challenges, such as leakages, which will reinforce transparency and democratic debate.
- ◆ **Strengthen the Polluter-Pays Principle** through the development of monitoring and outlook framework. Several solutions are under development such as Aqua3S¹⁶.

¹⁰ Digital water is based on the predicted development of a world where all people, “things” and processes are connected through the “Internet of Everything”, leading to capillary networks and sensors, meters and monitoring of the water system all the way along to the individual user, as such generating large amounts of valuable data (big data) for innovative Decision Support and Governance systems. (WE vision)

¹¹ Directive 2008/114/EC on protection of critical infrastructures

¹² Conclusions of Forum on Green Finance and investment 2020, 6-9 October 2020 (online)

¹³ WE public reply to the future of rural areas.

¹⁴ [WE position paper on the Urban Wastewater Treatment Directive](#)

¹⁵ WE position paper on Industrial Emissions Directive (under. dev.)

¹⁶ H2020 Project: [Aqua 3S website](#)