

European Water Resilience Strategy

2025 March

Response to the Call for Evidence

Intro

We welcome the European Commission's initiative to develop a European Water Resilience Strategy, which is set to be published in Q2 2025. Reliable access to water is fundamental for people, nature, and the economy alike. Strengthening water security will not only protect the environment but also safeguard economic stability and the competitiveness of European businesses. We support the Commission's efforts to integrate water resilience across policies, foster collaboration between stakeholders, and create a framework for sustainable and efficient water management.

Contribution of Digitalization

So far, EU regulations on water reuse focus primarily on agriculture and largely overlook the potential of industrial and digital applications. Digital technologies play a crucial role in reducing water consumption and pollution across various sectors. In agriculture, satellite data and plant growth models enable precise fertilization, minimizing groundwater pollution. Smart industrial and building technologies, such as sensors and AI-driven climate and process control, have been shown to significantly reduce water consumption and pollution. Digital twins can improve climate resilience in an urban context, by eliminating silos and enabling better decisions on how infrastructure is designed, built, and maintained across sectors. Cloud-based solutions further enhance water efficiency by enabling real-time leakage- and contamination detection, optimizing industrial processes, and supporting precision and clean irrigation. These innovations highlight the potential of digitalization to strengthen water resilience.

Policy Recommendations

- Standardisation of industrial water reuse: Harmonised EU-wide quality standards and approval processes can create investment security and accelerate the implementation of innovative water solutions. Defined



30%

reduction in water consumption at the Sydney Opera House was achieved through the utilization of digital technologies.

standards for data exchange and interoperability are furthermore key for the establishment of a clear framework for broad adoption of cloud-based water management solutions. Comparable standardisation projects for data exchange in the construction industry can serve as a model. Various data sources and different formats are also converted into consolidated digital twins here, which offer a multi-perspective view of the issue.

- Measuring sustainable and responsible water consumption: We recommend using holistic metrics such as the refined Water Usage Effectiveness (WUE) developed by the Climate Neutral Data Centre Pact which takes into account local climate, stress and water type to assess water use in a more responsible and sustainable way. Smart metering and submetering technologies could also facilitate quicker leak detection.
- Automated systems should be supported in the regulatory and standardization processes. For example, efficiently measuring water pollution (e.g. microplastics) through innovative digital sensors that allow continuous monitoring of contamination and real-time process control to economically react to sudden pollution events.
- Promote alternative water sources: The use of water from various sources – such as recycled water, rainwater or other regionally available water sources – should be examined and promoted. The use of alternative water sources must be simplified in regulatory terms. Modern data centres employ various cooling technologies, including evaporative cooling systems, to achieve water efficiency while maintaining thermal performance. These savings could be enhanced through access to alternative water sources, particularly industrial water reuse. While the EU established minimum requirements for agricultural water reuse in 2017, there is an opportunity to extend this framework to industrial applications. The current EU regulation (2020/741) acknowledges this potential in its recitals and Article 12, granting member states the flexibility to introduce national measures. The treatment and reuse of municipal wastewater for non-potable applications can significantly reduce the demand for freshwater resources—an essential aspect of ensuring an efficient digital infrastructure for a water-conscious and circular economy. The data centre industry has made significant progress in water efficiency, with technology companies developing region-specific water resilience strategies through local partnerships, investing in municipal water infrastructure, and supporting sustainable solutions such as wetland restoration and water recycling programs.
- In the context of the next Multiannual Financial Framework, EU funding frameworks relevant for water infrastructure should provide meaningful incentives for adoption of digital technologies such as the ones listed above, as these will be instrumental to achieve the goals of the Water Resilience Strategy.
- In alignment with the EU INSPIRE Guidelines, we strongly recommend utilizing the EU EEA Reference Grid as a standardized geo-spatial data framework to enhance data-driven processes, ensuring higher efficiency, agility, and sustainability for all stakeholders in the development of new solutions and seamless data exchange.

The European Commission's prioritization of water resilience creates a unique opportunity to align digital growth with sustainable water management. We stand ready to contribute our technological capabilities and innovative strength to this important endeavour. Through strategic collaboration between industry leaders, policymakers, and stakeholders, we can pave the way for a digital transformation that enhances rather than compromises water sustainability.

Bitkom represents more than 2,200 companies from the digital economy. They generate an annual turnover of 200 billion euros in Germany and employ more than 2 million people. Among the members are 1,000 small and medium-sized businesses, over 500 start-ups and almost all global players. These companies provide services in software, IT, telecommunications or the internet, produce hardware and consumer electronics, work in digital media, create content, operate platforms or are in other ways affiliated with the digital economy. 82 percent of the members' headquarters are in Germany, 8 percent in the rest of the EU and 7 percent in the US. 3 percent are from other regions of the world. Bitkom promotes and drives the digital transformation of the German economy and advocates for citizens to participate in and benefit from digitalisation. At the heart of Bitkom's concerns are ensuring a strong European digital policy and a fully integrated digital single market, as well as making Germany a key driver of digital change in Europe and the world.

Published by

Bitkom e.V.

Albrechtstr. 10 | 10117 Berlin

Contact person

Kilian Wagner | Policy Lead for Sustainable Digital Infrastructures

P +49 30 27576-285 | k.wagner@bitkom.org

Responsible Bitkom committee

WG Data Centres; WG Digitalization & Sustainability

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