



EUROPEAN ALLIANCE TO  
**SAVE ENERGY**

Creating an Energy-Efficient Europe

# THE URBAN WASTE WATER TREATMENT DIRECTIVE TO FULLY REALISE WATER AND ENERGY SAVINGS

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## REVISED UWWTD TO BETTER ADDRESS TODAY'S CHALLENGES

Overall, the **Urban Waste Water Treatment Directive** (UWWTD) has played a substantial role in improving the quality of European water resources and reducing pollution levels in water bodies. However, Europe remains some way from full compliance with collection and treatment requirements and has made little progress with water reuse. We believe the 30-year-old Directive should be updated to better address these critical issues and today's challenges including climate change, resource scarcity, increased energy consumption and population growth.

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## DIGITALISATION AS A KEY OPPORTUNITY

**Enhancing Transparency:** The revised Directive shall take full advantage of new opportunities offered by the digital transformation. Indeed, citizens are increasingly demanding a cleaner freshwater environment, and digitalisation offers a unique opportunity to enhance information to the public. Digital technologies should be leveraged to enhance transparency on waste water management. The revised Directives should require operators to disclose their performance on a range of key indicators, including compliance of treated waste water quality, complaints on waste water management, and energy consumption. This would reflect what has already been done in the new Drinking Water Directive.

**Optimising Water Management:** New technologies contribute to drive sustainable water management and help address critical environmental

challenges. Digital tools including artificial intelligence, cloud solutions, advanced software, connected sensors and data analytics, all enable waste water treatment plants to optimise water management and reduce operational costs and risks. The collection and use of real-time data creates stronger insight on the overall operations of wastewater treatment plants (energy consumption, pressure, flows, etc.). The widespread use of smart water technologies would have both environmental and economic benefits. This is why we believe the new Directive should include specific provisions fostering the use of such technologies for the benefits of European citizens.

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## THE BENEFITS OF A KNOWLEDGE BASED APPROACH

Data transparency and advanced data analytics can also enable a holistic management of the wastewater collection and treatment systems bringing significant economic, social, health and environmental benefits. Knowledge based decision making results for example in improving the treatment effectiveness, reducing failure of the infrastructure and limiting overflow of the sewer system and reducing the capital investment plan into unnecessary new infrastructure.

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## PRESERVING NATURAL WATER RESOURCES WITH SMART WATER MANAGEMENT

The Commission predicts that based on growing demand from different sector users (e.g. citizens, farmers, industry), total water abstraction in

the EU will increase by 16% in 2030, increasing competition between users for fresh water resources. Accordingly, the UWWTD should address the issue of water scarcity, particularly in urban environments where demand is particularly high and water is critical to economic life and industrial production. This should include a stated objective in the directive to preserve natural water resources and for industry to employ smart water management.

### **BETTER LEGAL FRAMEWORK FOR URBAN RUNOFF AND STORM WATER MANAGEMENT**

Climate change is causing EU weather patterns to become more extreme with some areas experiencing increased flooding and other areas suffering increased drought. In addition, the increase of impervious surfaces in urban areas reduces the phenomenon of infiltration and evaporation of rainwater, putting further pressure on wastewater infrastructure. The UWWTD should incorporate a better legal framing for urban runoff and storm water management to rebuild the natural water cycle, increase resilience and facilitate collection of storm water. Failure of the sewer network can occur from low rainwater infiltration, failure of the assets to transport wastewater (e.g. blockage of the pumping station, rupture of the wastewater pipe) and/or limited local hydraulic capacity during wet weather events. For example, the introduction of sewer overflow targets could be an appropriate EU wide harmonized approach to incentivise municipalities to exchange good practices for managing storm and sewage infrastructure and prevent sewage overflow.

### **CARBON-NEUTRAL WASTE WATER MANAGEMENT**

The Directive should promote carbon-neutral waste water systems and even incentivise plants to become net energy producers. Waste water treatment systems should reduce their energy consumption and GHG emissions, going beyond national guidance and using EU harmonised metrics and scope definitions.

### **CIRCULAR ECONOMY FOR WATER**

The UWWTD should promote a circular economy for water by fostering urban waste water recovery and promoting water reuse for agricultural, municipal and industrial uses. As Article 12 of the UWWTD provides that “treated waste water shall be reused whenever appropriate”, the revised UWWTD should further promote such use by industry and municipalities, e.g. by mandating an analysis of potential reuse options, or declaring the percentage of water which could be recycled.

### **SUPPORTING INVESTMENTS**

The transition of waste water management towards greater efficiency and climate neutrality will increase the need of investments. In this context, the EU and the Member States should explore all available technologies and organisational settings, and financially support the development of adapted incentives.



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## ABOUT US

The European Alliance to Save Energy (EU-ASE) aims to advance the energy efficiency agenda in the European Union. The Alliance allows world's leading multinational companies to join environmental campaigners and a cross-party group of Members of the European Parliament.

EU-ASE business members have operations across the 27 Member States of the European Union, employ over 340.000 people in Europe and have an aggregated annual turnover of €115 billion.

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