

Greater Water Efficiency for a more Competitive and Sustainable Future

Recommendations for the European Water
Resilience Strategy



EUROPEAN ALLIANCE TO
SAVE ENERGY

Creating an Energy-Efficient Europe



Water is a vital resource for Europe's food, energy, and economic security. With increasing pressures from climate change, population growth, and industrial demands, water resources are under significant strain. In her political guidelines and letters of mandate for the relevant designated Commissioners, the European Commission President Ursula von der Leyen emphasized the need for a European Water Resilience Strategy to address these challenges. This strategy is crucial for managing water resources sustainably, addressing scarcity, and enhancing Europe's competitive edge through a circular economy approach.

The European Alliance to Save Energy (EU-ASE) supports the development of a robust Water Resilience Strategy and has outlined a set of recommendations to ensure a comprehensive and forward-looking framework for water management.

OUR KEY RECOMMENDATIONS

1 Introducing The Water Efficiency First Principle in the European and National regulatory and policy framework

A Water Efficiency First Principle should be adopted at the EU and national level, like the Energy Efficiency First Principle (EE1st). This principle would prioritize water-saving measures in water-stressed locations and encourage a systematic approach to water resource management across all sectors. The development of guidelines, much like those already existing for energy efficiency, would provide a structured approach for industries and local governments to implement water-efficient solutions. Through the application of the water efficiency first principle, water impact should be included in all the impact assessments preceding EU legislation. This would effectively ensure water efficiency to become a cornerstone of European water policy and a driver to address water scarcity across sectors.

Water efficiency will also be improved through empowering consumers with relevant data. For instance, the situation across buildings and Member states varies largely, with water meters often installed for the whole building or floor . A requirement to install smart meters to measure real-time water consumption should be put in place. Such a requirement will also support utilities and operators with more accurate data availability and will help with for the development of digital infrastructure for the sector.

2 Putting Forward Water Efficiency Standards

To promote efficiency across the economy, water efficiency standards must be developed, either sector-specific (such as for agriculture, industry, and urban areas) or for key water-intensive industries. A targeted assessment to identify the most impactful sectors for implementing cost-effective water efficiency measures should be carried out at both the European and national levels

3 Establishing a Water Balance to clearly monitor supply, demand and water scarcity gaps

Accurate water accounting is essential to address water scarcity. Member States and the European Commission should develop detailed water balances at the appropriate spatial level that would consider all water abstractions, including available reserves and the impact on supply by factors like climate change, and all water needs and consumptions across sectors. These balances can be supported by modern and digital monitoring systems. An effective balance between supply and demand would improve water allocation across sectors, preserve ecological flows necessary for restoring biodiversity and enhancing carbon sequestration and reduce the risk of water shortages and related economic downturn.

4 Addressing the Water-Energy Nexus

The agendas of water efficiency and energy efficiency are highly complementary. For example, water availability is an absolute need for energy generation and cooling of data centers; the use of waste heat in district heating plants reduces the need for water for cooling in energy-intensive industries; storm water management systems based on nature-based solutions retain and detain water reducing energy needs of waste water treatment plants. By supporting the deployment and integration of water and energy efficiency solutions, Europe can achieve win-win outcomes in both water and energy use, addressing scarcity in water-stressed areas without exacerbating local water demand and ensuring continuity of economic activities and energy supply.

5 Reducing Demand by tackling water waste

There is a critical need to reduce water demand, particularly by addressing leakage in urban water distribution systems and waste of water in agriculture and industrial processes. Enhancing water reuse practices, especially in agriculture and wastewater treatment plants, can further alleviate demand pressure.

6 Risk Preparedness Plans for Water

Just as the energy sector has risk preparedness plans, the water sector must follow. Risk analysis and resilience plans in the water sector should be based on three main axes: social, economic and environmental impacts. Importantly, these plans should be tied to EU funding support. Member States that develop robust actionable plans, aligned with a Water Efficiency First principle, should qualify for increased financial support, providing an incentive to prioritize water security. This would ensure that water resilience becomes a key criterion for any future infrastructure investment.

7 Digitalization of the Water Sector

The water crisis is fundamentally a quantification problem suggesting that the core challenge of the water crisis is related to how water resources are measured, managed, and allocated. The challenge is to accurately track water resources—such as how much water is available, how much is being used, and how much is needed. In essence, without precise measurement and tracking, managing water resources effectively becomes nearly impossible. Thus, addressing the water crisis requires better systems for quantifying and monitoring water to make informed decisions and implement sustainable practices. Consequently, digital technologies, artificial intelligence, and data analytics can revolutionize water management. These tools can enable real-time monitoring of water usage, predict demand patterns, and improve disaster preparedness. The Commissioner for Water Resilience has a clear mandate to advance digital solutions, and this must be supported through investment in existing technologies.

Having a unified source of data or ‘single source of truth’ is the best way to leverage the capabilities, scale and speed of the private sector in “solving water” in concert with the public sector, NGOs, academic institutions and civil society. This is a key reason why having up-to-date and granular data on water supply and demand at the local aquifer level is so critical in dealing with the paralysis that has long afflicted water stewardship.

8 Increasing Water Storage and Retention

To ensure water availability, it is essential to stabilize the supply through enhanced storage and retention in natural ecosystems, such as wetlands, forests, and soil. Nature-based solutions and green infrastructure, across ecosystems and including urban areas, can play a crucial role in restoring the natural water cycle while mitigating the impact of climate change and increase biodiversity.

9 Water Pricing and Affordability

The principle of efficiency first should be applied to water, ensuring that pricing policies encourage water conservation while maintaining affordability for households. The Water Framework Directive already sets out principles for water pricing, but there is room for improvement. The strategy should aim for greater transparency in water pricing, ensuring that the costs of water services are equitably shared, while applying the polluter pays principle as relevant.



Cross-Cutting and Sufficient Funding for Water Resilience

Dedicated funding mechanisms, for example replicating the RePowerEU model, should be established for water resilience, ensuring that all sectors—municipalities, industries, and buildings—have access to financial support for water efficiency projects. Sufficient resources will be key to the success of the European Water Resilience Strategy, ensuring that innovative solutions and infrastructure improvements are implemented across Europe.

Promoting efficient alternative water supply

Policies must ramp-up industrial water reuse and alternative water resources. On the latter, highly energy-efficient desalination, in particular, should be promoted in any holistic water resilience strategy. Technological advancements, improving the efficiency of facilities, coupled with the continued buildout of renewable capacity, have made desalination an increasingly viable solution as an alternative water supply.

CONCLUSION

The European Water Resilience Strategy represents a unique opportunity to safeguard Europe's water resources, align water and energy efficiency efforts, and ensure long-term sustainability. By implementing these recommendations, the EU can position itself as a global leader in water management, ensuring water security and enhancing competitiveness. The European Alliance to Save Energy stands ready to support the development of an ambitious and well-resourced strategy.

ABOUT THE EUROPEAN ALLIANCE TO SAVE ENERGY (EU-ASE)

Our vision is of a future where energy efficiency is the bedrock of the entire EU energy system and is a fundamental driver of decarbonisation, job creation, sustainable growth, competitiveness, productivity, citizens' empowerment, innovation and energy security.

The European Alliance to Save Energy (EU-ASE) is a business-led, multistakeholder platform allowing leading multinational companies to join environmental campaigners to advance energy efficiency in the European Union. The Alliance's business members have operations across the EU27, employ over 340,000 people in Europe and have an aggregated annual turnover of 115 billion euros. Membership include industry leaders Danfoss, Ecolab, Kingspan, Knauf Insulation, Owens Corning, Saint-Gobain, Schneider Electric, Siemens, Signify, Xylem and leading environmental organisation E3G, ECF and Kyoto Club.





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