

Our position

Water Resilience



AmCham EU speaks for American companies committed to Europe on trade, investment and competitiveness issues. It aims to ensure a growth-orientated business and investment climate in Europe. AmCham EU facilitates the resolution of transatlantic issues that impact business and plays a role in creating better understanding of EU and US positions on business matters. Aggregate US investment in Europe totalled more than €3.7 trillion in 2022, directly supports more than 4.9 million jobs in Europe, and generates billions of euros annually in income, trade and research and development.

Executive summary

Water insecurity in Europe is a growing crisis, marked by severe droughts, floods and increasing scarcity affecting 40% of the population. The EU must take urgent action to combat water insecurity in Europe.

Key Recommendations:

- Integrate water into EU industrial strategies by prioritising water supply for green technologies to meet growing demand.
- Enhance infrastructure resilience and reduce leakages by, for instance, exploring fit-for-use approaches and adopting holistic frameworks.
- Incentivise water stewardship through tax credits and learning platforms.
- Support legislative frameworks for water reuse technologies and explore industrial use of wastewater and harmonised certification schemes.
- Optimise freshwater use through investment.
- Implement artificial intelligence (AI) and Internet of Things (IoT) for an EU-wide water monitoring system and standardise digital monitoring and real-time tracking of water leakage.
- Encourage public-private partnerships for ecosystem restoration.
- Increase funding for water-resilient projects and explore innovative funding options and learn from renewable energy sectors.
- Engage in global initiatives addressing water stress and collaborate with CEO-led initiatives and global standards.

Introduction

Water insecurity is a growing concern in Europe. In 2023, rising temperatures and lack of rain in the southern countries resulted in the most severe droughts since 2018. Today, water scarcity affects 40% of the European population.¹ Additionally, harsher weather conditions have already significantly impacted food quality, production, and other Green Deal objectives. With 46%² of EU territory exposed to worrying drought levels, water availability in soil is decreasing, further exacerbating the symptoms of droughts and floods. The human and economic costs of the recent floods in Slovenia, Greece, Italy and Portugal have been devastating. Over 14,000 areas in the EU are at significant risk of flooding.³ Such extreme weather events are becoming more frequent in the EU and around the world. The situation requires urgent action at the EU and local level.

¹ [Water scarcity conditions in Europe \(Water exploitation index plus\) - 8th EAP \(europa.eu\)](#)

² [Severe drought could cancel out gains in EU food production](#)

³ https://environment.ec.europa.eu/news/commission-publishes-new-flood-risk-areas-viewer-raise-awareness-about-significant-flood-risks-2023-10-13_en

The Water Resilience Initiative announced by President Ursula von der Leyen in her [State of the Union 2023](#) is a coordinated policy framework to reverse the water crisis and make water abundant, affordable and accessible to everyone—no matter where they live.

Ahead of the 2024 European elections, EU policymakers must put water high on the political agenda and adopt the **Water Resilience Initiative**. The public and private sectors must work together to address global water challenges and safeguard this precious resource for current and future generations. This paper provides relevant recommendations to address water scarcity through eight key areas: water access and competitiveness, infrastructure, circularity, water-energy-food nexus, digitalisation, ecosystems, creation of an investment-friendly environment and global partnerships.

Water access, competitiveness and sustainability

Water is a critical resource for all industries and an enabler of a prosperous and sustainable Europe. Securing water access for people, businesses and food production is crucial. In fact, a safe, reliable and secure water supply is the hidden glue that keeps the economy running and secures the EU's competitiveness. Policymakers must address the growing disparity between water supply and demand. Key technologies require significant amounts of water.

Recommendations

- Ensure that everyone has access to water and avoid conflicts over water use.
- Integrate water into the EU industrial and competitiveness strategy.
- Secure the existing industry base's water supply without detracting from residential populations to account for growing demand arising from green and digital technologies such as AI, hydrogen, semiconductors, renewables, and sustainable farming.
- Recognise and promote the importance of healthy soils in ensuring water security and circularity.
- Address water-related risks because of its critical role for the economy, society, and environment. As noted by a recent Organisation for Economic Co-operation and Development [working paper](#), central banks still have a limited understanding of water-related risks and approaches to assessing the risks of financial stability and price stability. In this vein, the EU should prepare for the real financial and economic consequences linked to water risks within the wider discussion on water resilience.

Water-resilient infrastructure

Climate change and extreme weather are impacting the existing water infrastructure in Europe. EU policymakers must increase the infrastructure's resilience to droughts and flooding through strategies like water reuse and diversification as well as leveraging technology.

Recommendations

- Reduce water leakages in drinking water pipes.
- Explore a fit-for-use approach to a multiple waters concept (ie the right quality and quantity of water, for the right purpose and the right user) and adopt a holistic framework including gradual scoring of conservation of water resources in soil needs.

Water circularity

Tackling water scarcity and climate change requires significant improvement in responsibly managing water resources. The private and public sectors can collectively implement water-efficient technologies and products to minimise water consumption and optimise water efficiency.

Corporate water stewardship

Many AmCham member companies have examples of water stewardship programmes and use water models and data for their manufacturing sites to streamline management of actual water balances and conduct impact analysis of current and future water management strategies. These models allow companies to better understand their water footprint, recognise risks and identify water conservation opportunities, enabling effective water management decisions on a site level. Furthermore, some companies calculate the compensation for employees based on the achievement of the corporate sustainability targets, including water stewardship.

Going beyond operations, companies are also developing products with lower water footprint and that help their customers use less water and adapt to new water realities when less water is available. For instance, sustainable farming is shifting to precision irrigation, less water-intensive crops and drought-resilient farming. Furthermore, companies also promote educational opportunities for their employees and exchange best practices between their facilities to enhance water management and efficiency.

Recommendations

- Facilitate a learning platform for the public and private sectors to exchange water management best practices.
- Explore new ways to incentivise corporate water stewardship with tax credits, water loans, other financial incentives and innovative and direct funding options.

Water reuse and recycling

Through the natural cycle, Earth has recycled and reused water for millions of years. By copying this natural cycle, water reuse technologies can greatly enhance water efficiency. An appropriate legislative framework can promote water reuse as a solution for addressing water scarcity. Valuable resources can be recovered from wastewater such as nutrients, minerals, chemicals, metals and critical raw materials. This contributes to Europe's circularity goals and strategic autonomy.

Recommendations

- Explore a horizontal set of Best Available Techniques Reference Documents (BREFs) for sustainable water use.
- Investigate mechanisms for industrial users to use municipal wastewater.
- Propose a harmonised EU certification scheme for treatment technologies and materials, including, for example, a standardisation of drinking water certification.
- Revise the industrial transition pathways to incorporate water efficiency as an integral aspect of the transition.
- Set minimum quality standards for the resources recovered from wastewater and develop recommendations for using raw materials in different, non-highly regulated industries.
- Encourage a network of public and private entities interested in mutually benefitting from such recovered resources.
- Promote and incentivise the use of alternative water sources such as stormwater, rainwater, wastewater, grey water and seawater.

Water-energy-food nexus

Water and energy systems are interdependent; water is used in all phases of energy production and electricity generation, and energy is required to extract, convey and deliver water appropriate for human use and then again to treat wastewater prior to its return to the environment. Water scarcity is already impacting energy production and reliability; further constraints may impede the physical, economic and environmental viability of future energy projects.

Changes in precipitation and temperature patterns will likely lead to more regional variation in water availability for hydropower, bioenergy feedstock production and other energy needs. Rising temperatures have the potential to both increase the demand for electricity for cooling and decrease the efficiency and capacity of thermoelectric generation. These changes and variations pose challenges for energy infrastructure resilience.

The EU needs an integrated approach to energy and water, as the fuels and technologies used to achieve the clean energy transition could, if not properly managed, increase water stress or be limited by it. This should be determined on a case-by-case approach.

The EU and governments should reflect on the following points: how can a range of technologies optimise freshwater use for manufacturing and consumption through waste heat recovery, thermal management, immersion and dry cooling, water conservation, plumbing pipe technology, recycling of waste streams, alternate fluids and process water efficiency? How can water treatment technologies enhance the energy efficiency of water systems and enable the productive and safe use of non-traditional water resources for energy and non-energy applications? **The EU should review those technologies regularly to ensure the best use of water-efficient technologies.**

Additionally, energy and water utilities are characterised by long investment cycles, are subject to a panoply of regulations and operate under stringent performance expectations. This combination

often constrains operator willingness to undertake the risks of investing in new technologies. In some cases, loan guarantees and/or public/private demonstration projects may make such investments more attractive. **Companies need proper incentives and an enabling regulatory framework.**

Water digitalisation

The EU needs digital solutions to ensure sustainable and cost-efficient water management. With equitable access to water quality and quantity data, Member States, science and industry can better prepare for unforeseen water imbalances.

Recommendations

- Use AI, big data and IoT to set up a single EU-wide water quality and quantity monitoring system that collects all kinds of data to alert, mitigate any potential water crisis and avoid conflicts over water use. It should utilise existing topographical data and water maps to delineate catchments and sub-catchments and layer such maps with existing data within the Member States. For example, this could illustrate key abstraction points and total annual precipitation within the catchments and sub-catchments. This holistic overview would help the EU understand the dynamics between supply and demand in addition to distilling local water targets that reflect on-the-ground data.
- Harmonise the measurement of water consumption, withdrawals, and discharges for private and public use.
- Track real-time water leakage data.

Restoring water ecosystems

One third of global wetlands have been lost over the past 50 years.⁴ Initiatives to restore rivers, lakes and wetlands are essential to climate change mitigation and adaptation. Companies are already engaging with local community groups, non-profits and conservation organisations to support wetland restoration projects (eg refilling water into the basins that are mostly affected).

Recommendations

- Promote and incentivise public-private partnerships for ecosystem restoration to support industry's involvement.

Creating an investment-friendly environment

EU is financing water-related research and innovation projects through programmes like Horizon Europe. Investments in water infrastructure are provided via the Cohesion Fund and up to 5%⁵ of the

⁴ <https://www.global-wetland-outlook.ramsar.org/report-1>

⁵ https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/green.html

Recovery and Resilience Facility for projects in sustainable use and protection of water and marine resources.

To mitigate water scarcity and flooding in Europe, however, more funding is needed to support national and local projects on water resilience infrastructure, water reuse technologies, digitalisation and ecosystem restoration.

Recommendations

- Increase funding opportunities in water to support local and national governments in addition to industry.
- Offer tax credits, low-interest loans, other financial incentives, and innovative and creative funding options for water-resilient infrastructure projects.
- Learn from other sectors such as renewable energy, where platforms like T-Rex and SolRiver Capital help facilitate closer and more transparent collaboration between stakeholders and standardise investment.

Conclusion

As Europe faces climate change impacts through water, more collaborative efforts, increased funding and innovative solutions are needed across the board. With the upcoming European elections in 2024, policymakers should prioritise water-related issues and adopt a Water Resilience Initiative. It is a collective responsibility to address global water challenges and ensure the sustainable and equitable management of this precious resource for current and future generations.