POSITION PAPER - Irrigation: the missing link in Europe's Water Resilience Strategy

The European Irrigation Association (EIA) welcomes the European Commission's Water Resilience Strategy (WRS) as a timely and necessary initiative. EIA supports the Strategy's ambitions to enhance both quantity and quality of water resources, and to build a 'Water-Smart' economy based on the 'Water Efficiency Principle'.

However, the Strategy overlooks a key enabler for sustainable water management across all sectors: modern and well-managed **irrigation practices**. **Irrigation is not just about water use: it is central in shaping European sustainable landscapes and resilient societies** and in supporting its economies and natural ecosystems**.** The limited recognition of irrigation risks undermining the EU's ambitions in advancing water resilience, climate adaptation, and food security objectives.

The irrigation sector drives its own sustainable transition and that of the markets it serves

With an estimated market value of over €2 billion in Europe, the irrigation sector constitutes an integrated system of **technologies, practices, and economic activities that collectively support sustainable and efficient water management**, and energy use within agricultural, landscaping, and urban environments. This includes the manufacturing and distribution of components such as pumps, pipes, valves, sprinklers, emitters, and digital monitoring tools; the design, installation, and maintenance of irrigation systems; and services like consulting, training, communication; and scientific research[1].

It is estimated that agriculture today accounts for approximately 30% of total freshwater withdrawals in the EU (over 73 billion m^3 annually), rising sharply to 80% momentously in southern Member States. In urban areas, irrigation of parks, private gardens, green spaces and sports facilities can represent up to 10% of municipal water demand. **Irrigation is therefore a key enabler of the green transition, despite being underrepresented in current EU sustainability frameworks.**

The irrigation sector stands ready to support the Water Resilience Strategy's ambitions

Our sector brings evidence-based knowledge, innovation and technological solutions that can contribute significantly to reducing water use while increasing productivity across all economic sectors. Water-smart technologies offer significant potential for optimising irrigation practices, with an estimated average water efficiency increase of 30% when moving from traditional less-efficient to modern precision irrigation systems. The transition towards high-efficiency irrigation systems, together with adapted practices, demonstrates that our sector has significant potential to contribute to the European target of achieving 10% water efficiency gain by 2030.

EIA calls on the European Commission to consider and engage with the irrigation sector for a sound implementation of the WRS ambitions. It is essential that the sector be clearly identified and acknowledged, as it offers solutions not only for future-oriented resilience, but also for tackling today's challenges, such food autonomy and mitigation of extreme weather events. Without this engagement, efforts to implement the Water Resilience Strategy risk remaining fragmented and less effective.

[1] For a comprehensive analysis and study on irrigation's impact, see EIA's Position Paper "*Sustainable Irrigation: Focus on the Framework of the European Taxonomy*" (2024).

- ***Europe must strongly support modern and technology-driven irrigation systems***

Precision irrigation systems and sensors, such as drip and subsurface drip, and low-pressure sprinklers, with real-time monitoring tools and smart scheduling are proven solutions that reduce water losses thus withdrawal, prevent soil and groundwater depletion and protect yields. Europe must accelerate the uptake of modern irrigation systems, via the promotion of technologies that are not only efficient, but also interoperable and easy to use. EIA urges the EU to mandate and target instruments for the deployment of modern irrigation systems and digitalized innovative irrigation technologies, while maintaining performance of systems that already meet modern and efficient standards. Clearer efficiency and performance indicators should be introduced and monitored to guide national implementation and support the water sector in this journey.

- ***Clear the path for innovation: reduce administrative barriers***

Innovation dissemination in irrigation is being slowed by administrative complexity and barriers to funding. Unclear eligibility criteria prevent stakeholders from accessing existing EU and national instruments to support those prepared to invest in and maintain efficient water systems. Harmonised rules across Member States, and tailored support for pilot projects and demonstration sites are expected by our sector. Streamlined processes would accelerate the uptake of modern systems and promote scalable innovation across the EU.

- ***'Set the standard': the need for benchmarking and certification for efficient irrigation***

To ensure consistent progress across the EU, common technical frameworks for irrigation are essential. Currently, there are no harmonised EU benchmarks for irrigation efficiency, and no standardised certification schemes to assess or compare irrigation technologies and practices. Establishing EU-wide certification and efficiency standards – in concertation with all relevant stakeholders (from manufacturers to end-users) would not only support transparency and foster innovation: it will significantly reduce water waste and allow for constant progress in achieving a water-resilient economy.

- ***Tailored water and irrigation policy must consider diverse regional realities***

The WRS acknowledges the geographic variability of water stress in Europe, but offers little in terms of concrete regional differentiation in its guidance. National implementation of the WRS will have to reflect these differences (e.g. between Mediterranean and more continental areas). Local diagnostics, tailored adaptation plans, and targeted investment strategies are needed to ensure that irrigation measures are effective, proportionate, and resilient to long-term climate pressures. EIA advises that Member States be required to develop region-specific irrigation strategies, supported by EU funding and technical assistance, to ensure that water resilience is built from the ground up, accounting for end-users needs and constraints, thus reducing potential conflicts in water management and use.

- ***Circular solutions must be front and center of water efficiency efforts***

The potential of circular water use in irrigation remains underexploited. Practices such as greywater reuse, closed-loop irrigation systems, and wastewater recycling offer high-impact, low-footprint solutions to water scarcity and resource efficiency. EIA welcomes the forthcoming review of the Water Reuse Regulation, expecting more ambitious measures and broader scope beyond agricultural applications, along with adapted financial and educational support. We also call on the EU to embed circular irrigation models and smart water-pricing into national implementation frameworks, providing both policy and economic support to transition to sustainable irrigation.

European Irrigation Association

To deliver on the Water Resilience Strategy's ambitions, the European Commission must recognize irrigation as a fundamental component of water resilience. This means embedding it into strategic planning, funding frameworks, technical guidance and national implementation processes. Europe's ability to adapt to climate change, safeguard its food systems, scenic landscapes and green cities, or biodiversity, and to promote efficient water use depends on how effectively it supports smarter and reactive irrigation systems.

The European Irrigation Association stands ready to contribute to this effort by sharing expertise, identifying best practices, proposing efficiency indicators, and supporting the rollout of innovative irrigation solutions across the EU.

ABOUT EIA:

Established in 1996 and headquartered in Brussels, the European Irrigation Association (EIA) is a non-profit- organization that represents irrigation professionals from the agricultural and landscape sectors operating in the EU. In Europe, the sector accounts for over €2 billion, of which 70% serve agricultural productions and the remaining 30% serve landscaping.

EIA's mission is to promote best practices and the transfer of know-how on sustainable irrigation methods, and digital technologies, to monitor and manage water resources effectively, and to act as the leading voice of the irrigation sector at the European and national Institutions.

To date, EIA counts over 75 members from 16 EU countries and 8 non-EU countries that include manufacturers, installers, contractors, distributors, researchers, designers and consultants. The Association is supported by a structure of 6 Working Groups consisting of expert members who focus on, respectively, Sustainability in agriculture, Urban landscape, Standardization, Training & transfer of knowledge, Wastewater reuse, Communication.


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