AWARD
Alternative Water Resources and Deliberation processes to renew water supply strategic planning

Funded by the European Union

ENABLING PUBLIC TRUST IN WATER INNOVATION: A PATHWAY TOWARDS ALTERNATIVE WATER RESOURCES ADOPTION IN THE EUROPEAN WATER RESILIENCE STRATEGY CONTEXT

HIGHLIGHTS

- Limited adoption of Alternative Water Resources (AWR) stems from both information gaps and poor communication, leading to low public acceptability.
- The European Water Resilience Strategy (EWRS) stresses that the EU cannot rely solely on conventional freshwater and aims to improve water efficiency by 10% by 2030, achievable through mainstreaming AWR.
- To achieve this mainstreaming, the public must first be made aware of AWR's benefits and then come to accept these solutions as part of the norm.
- Based on a study involving over 400 citizens and some experts, aimed at strengthening the role of AWR in implementing the EWRS and increasing its social awareness and acceptability, AWARD advises policymakers to:

Embed water literacy into climate and environmental education

Empower communities by building trust and designing local and regional awareness campaigns

Develop accessible and citizen-friendly communication platforms

Promote local demo projects in Local Water Forums fostering citizen dialogue and support for AWRs.

EUROPEAN WATER RESILIENCE STRATEGY (EWRS)

On 4th June 2025, the EC presented the EWRS, a policy designed to tackle increasing water scarcity, water pollution, and climate-driven weather extremes (such as droughts). Its goal is to ensure that all European citizens have access to clean, affordable, and reliable water supply, while helping ecosystems and economies adapt to a rapidly changing environment – also in the future. To accomplish this, the EWRS has **three major objectives**, or "pillars":

1. **Restoring the water cycle** – by protecting rivers, wetlands, and floodplains, deploying nature-based solutions (NbS) and transforming cities into "sponge cities" to reduce flood and drought risks.

2. **Creating a water-smart economy** – by promoting efficiency across all sectors, reducing leakage, upgrading infrastructure, and, crucially, expanding the safe use of AWRs such as treated wastewater and rain-/stormwater.

3. **Guaranteeing clean and affordable water for all** – by strengthening water governance, improving pricing and awareness, and reinforcing Europe's role in global water cooperation.

A key strength of the EWRS is recognizing that the EU cannot depend solely on surface and groundwater. With droughts expected to intensify, the EU targets a 10% water efficiency gain by 2030 — achievable only if AWR become mainstream. The EWRS allocates over €15 billion (2025–2027) for flagship actions and prioritizes tackling water pollution, including emerging threats like PFAS, which challenge safe water reuse.

AWARD DEMO CASES' ADVICE TO STRENGTHEN THE ROLE OF AWR IN EWRS OPERATIONALIZATION

Bucharest Demo Case

Through the Bucharest Demo Case, AWARD contributes to the European Water Resilience Strategy (EWRS) by demonstrating how integrated urban water management and accurate water balance assessments can guide resilient planning and design. The demo case supports EWRS by promoting the reuse of local water, helping restore the urban water cycle, and demonstrating innovative, replicable solutions for a more climate-resilient city.

Increasing recharge of top groundwater layer, naturally treating and then infiltrating rainwater and stormwater; support Municipalities and water utility to use groundwater stored in the top layer for not potable use (public garden irrigation, street cleaning, etc.).

Milan Demo Case

Cyprus Demo Case

The Cyprus Demo Case demonstrates how, safe reclaimed water use combined with strong monitoring and transparent reporting, improves water efficiency and reduces dependence on desalination and groundwater. In Cyprus, reclaimed water currently meets about 15% of irrigation demand, with a target of 40% by 2025, strengthening regional water security and resilience (supporting the EWRS goal of a 10% water-use reduction by 2030).

Promotes organized stormwater reuse to improve water availability while reducing potable water consumption. Stakeholder engagement incentives from local to European levels demonstrate how participatory AWR management strengthens water resilience and supports EWRS implementation through collaborative governance.

Santiago de Compostela Demo Case

LIMITED PUBLIC AWARENESS AND ACCEPTABILITY

Despite rising pressure from climate change, population growth, and resource scarcity, AWR adoption remains low due to **limited public awareness and poor communication**. Many citizens struggle to understand AWR risks, costs, and benefits, leading to confusion and low trust.

SOCIAL AWARENESS AND ACCEPTABILITY SURVEY FINDINGS IN AWARD

Most respondents show moderate to high awareness of global water issues but lack deeper understanding, highlighting the **need for better education—especially in less water-stressed countries**. Awareness of AWR is much lower, even in stressed regions like Italy, Spain, and Cyprus, though **strong public willingness to support AWR** suggests high potential if information and visibility improve.

Poor communication from utilities and authorities about AWRs fuels confusion, low trust, and missed engagement. Though public awareness is limited, **demand for clear information** and participation is strong. Future success depends on transparency and inclusive tools like Local or Climate Forums.

While basic water services have moderate satisfaction, innovative solutions score low due to limited visibility and public involvement. Citizens want to engage in local water governance but need accessible information, institutional trust, and **clear participation pathways**. Success requires combining digital tools and climate-smart strategies with citizen-focused communication.

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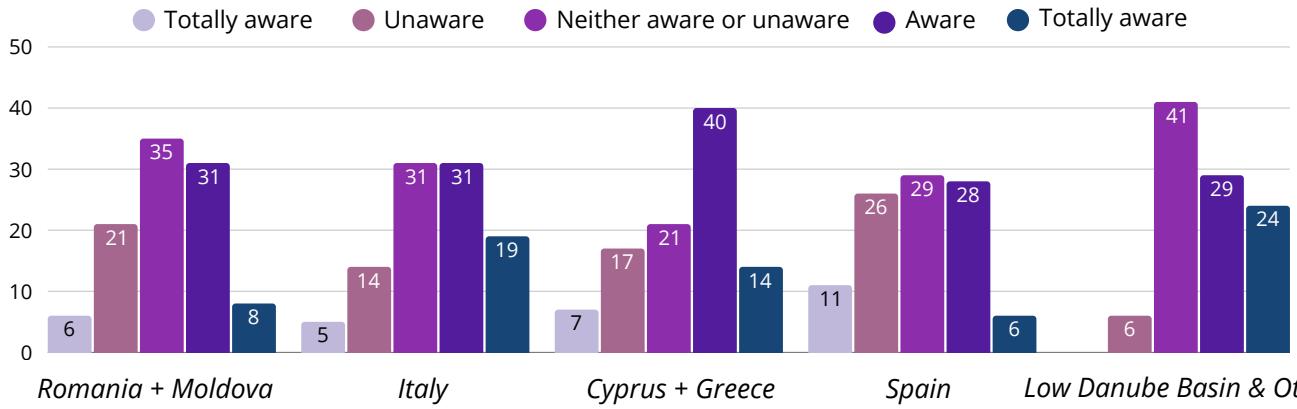
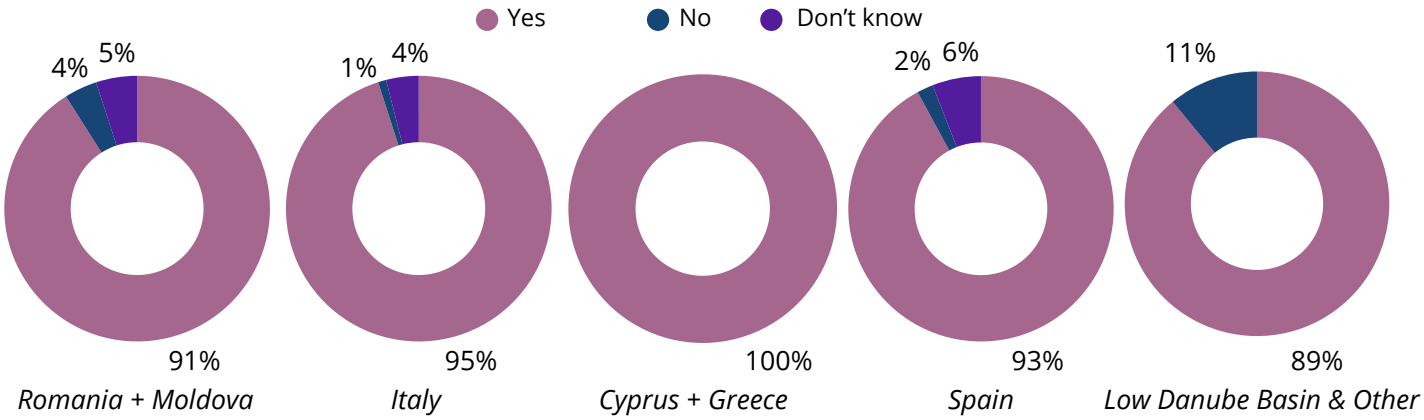
SOCIAL AWARENESS AND ACCEPTABILITY SURVEY

Extracted for Policy Brief#2 deliverable, for more information, please scan the **QR code on page 4**.

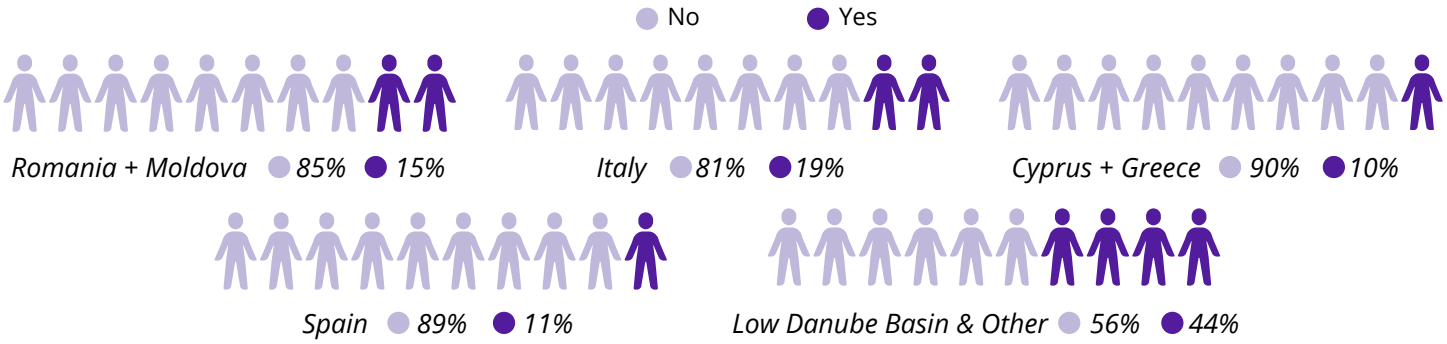
Awareness on Alternative Water Resources



Need for More Information about Water-Based Services



Participation in Local Decision-Making Processes in the Water Sector



AWARD POLICY RECOMMENDATIONS ON INCREASING SOCIAL AWARENESS AND ACCEPTABILITY OF AWR

EMBED WATER LITERACY INTO CLIMATE AND ENVIRONMENTAL EDUCATION

Incorporating water issues into education at all levels is crucial to raise awareness of global challenges that influence the local challenges. Using **real-world examples** and **interactive formats** links water, climate, and behaviour, showing impacts on health, economy, and resilience. Strengthening water literacy supports informed decisions and builds confidence in innovation.

DEVELOP ACCESSIBLE AND CITIZEN-FRIENDLY COMMUNICATION PLATFORMS

Promote user-friendly platforms—**digital apps**, utility **dashboards**, and municipal **bulletin boards**—to provide clear updates on AWR use and water quality. Inclusive, intuitive design ensures all citizens, including those with limited digital access, can engage, fostering trust and transparency.

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EMPOWER COMMUNITIES BY BUILDING TRUST AND DESIGNING LOCAL AND REGIONAL AWARENESS CAMPAIGNS

Supporting civil society is key to linking experts and citizens in sustainable water management and AWR. Inclusive platforms—forums, **workshops**, and pilot sites—build trust and understanding. Local **campaigns** should counter misinformation, highlight benefits, and use trusted messengers and local languages. Emphasizing water scarcity's human and environmental impacts and promoting rainwater harvesting fosters shared responsibility, while **digital and in-person tools** enable meaningful, lasting engagement.

PROMOTE LOCAL DEMONSTRATION PROJECTS WITH CITIZEN INVOLVEMENT FOR LOCAL COMMUNITY BENEFITS

Equitable access to AWR requires affordable, **community-based** pilots that demonstrate social and environmental benefits. Visible projects like rainwater harvesting at schools or farms, supported by open days and NGO partnerships, build trust and awareness. **Shifting from consultation to co-creation** involves citizens in planning and monitoring, aligning innovation with local needs. Integrating these participatory methods into regional planning strengthens community ownership and links AWR to local benefits such as savings and green jobs. Strengthened Local Water Forums—co-designed and **co-led with citizens**—are vital for trust, inclusiveness, and lasting support.

METHODOLOGY

The AWARD Policy Brief was developed based on an extensive cross - country report on social awareness and acceptability survey, elaborated under Task 2.2. (see Annex 1). It involved surveying a total of **439 citizens from all demo case countries and other countries from the Lower Danube Basin**. The survey was conducted both online (429) and with direct interviews (10). Data collection lasted from March 2024 until December 2024. Each AWARD partner translated the survey to local language. Respondents were randomly selected, representing the citizens without prior knowledge or awareness of AWR. The conversion of the results into a study was done based on a comparative analysis, where key similarities were highlighted and trends were identified. The social barriers listed in Table 1, together with the findings from the cross-country report justify the need for the AWARD recommendations included in this Policy Brief.

ABOUT AWARD

AWARD is funded by the European Commission through Horizon Europe, and coordinated by OiEau, running from 2024 to 2027. AWARD acknowledges the urgency of addressing water scarcity and the impacts of climate change while recognizing the need for an integrated approach that engages society, science, and policy in the development of knowledge and strategic water planning.

AWARD's overarching objective is to generate evidence-based knowledge and lessons learned on how to effectively integrate affordable, acceptable, and reliable AWR solutions into strategic water supply planning and implementation while accounting for the effects of global change.

This will contribute to recommendations for the broader implementation of AWRs, considering the four dimensions of social innovation: technology, capacity development, governance & policy, and economic assessment.

REFERENCES AND ANNEXES

Sources

Annex 1. AWARD Cross-Country Report on Social Acceptability of Alternative Water Resources

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