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List of acronyms

- **AWR**: Alternative Water Resources
- **DC**: Demo Case
- **DST-TSD**: Deliberation Support Tool for Territorial Sustainable Development
- **INBO**: International Network of Basin Organizations
- **LWF**: Local Water Forum
- **NBS**: Nature-Based Solutions
- **SUDs**: Sustainable Urban Drainage Systems
- **TIG**: Transversal Interest Groups
- **WWQA**: World Water Quality Alliance

ABOUT AWARD

AWARD is a 36-month Horizon Europe project coordinated by the International Office for Water. Bringing together 16 partners from 7 countries. Its objective is to strengthen water resilience and sustainability by mainstreaming Alternative Water Resources into planning and policy processes.



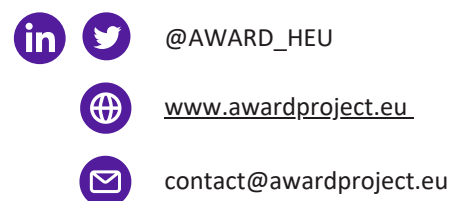
AWARD ACTIVITIES

AWARD combines demonstration, digital tools, capacity building and stakeholder engagement to deliver systemic impacts. The project's legacy will include tested AWR technologies, transferable governance models, and integrated knowledge tools to guide the future of strategic water supply planning in Europe.

REALISATION

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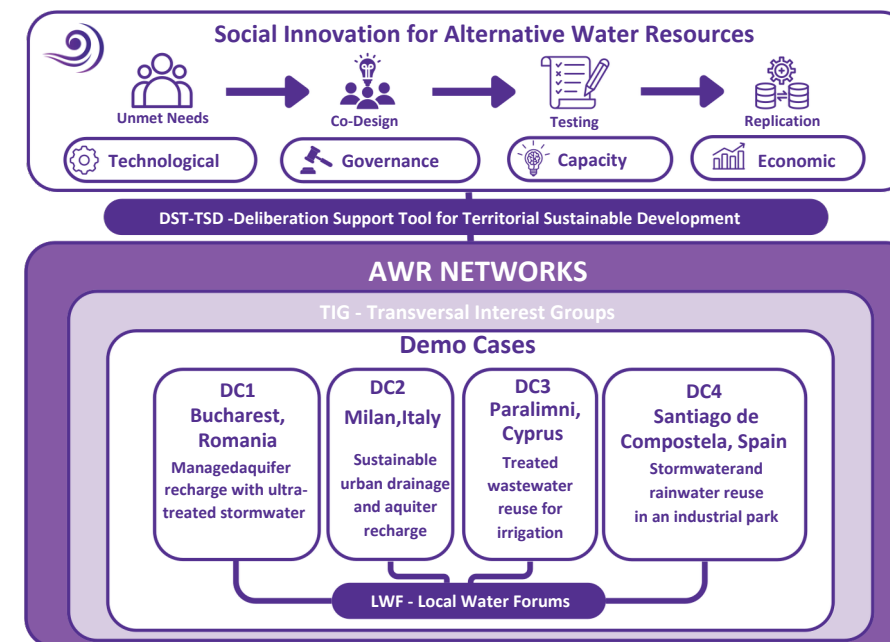


Testing and monitoring of Alternative Water Resources solutions

DESCRIPTION

AWARD responds to urgent water-related challenges across Europe, such as increasing water scarcity, the need for climate change adaptation, and the evolving regulatory environment, by promoting the integration of Alternative Water Resources (AWRs) into water supply strategic planning. These AWRs include rainwater harvesting, stormwater reuse, treated wastewater reuse, and managed aquifer recharge. The project aligns with key European strategies including the Water Framework Directive (2000/60/EC) and the Water Reuse Regulation (EU 2020/741), as well as the objectives of the Green Deal and the Climate Adaptation Strategy.

AWARD mobilises four demonstration cases across Europe: Romania, Italy, Cyprus, and Spain. Each testing AWRs in real-world contexts to address local vulnerabilities, water stress, and institutional needs. In addition, AWARD develops a digital Deliberation Support Tool for Territorial Sustainable Development (DST-TSD) to support multi-stakeholder co-decision-making. It provides a harmonised platform for co-evaluating technical, environmental, social, and economic dimensions of AWR scenarios. This factsheet presents the social innovation approach in AWARD, highlighting how social, technological, governance and economic dimensions interact to support systemic, inclusive and sustainable change.



FOCUS ON ALTERNATIVE WATER SOLUTIONS

AWARD technical approach focuses on deploying and testing decentralized, nature-based, and hybrid water technologies, carefully tailored to address specific contextual challenges and real-world needs within our four demonstration cases (DC). Examples include developing an accurate urban water balance taking account surface and groundwater flows, stormwater sustainable management through NBs, treatment of wastewater to produce high-quality reclaimed water for non-potable uses, rainwater harvesting and aquifer recharge.



Social Innovation Factsheet #1

SOCIAL INNOVATION

Social innovation goes beyond technology uptake, it's a lever for systemic change. Aligned with the European Commission's definition, it involves new ways to meet social needs through collaboration and co-design. AWARD applies this via shared governance, stakeholder-led design, and support for viable business models.

The process unfolds in four phases: identifying local needs, co-designing solutions, real-world testing, and scaling up. Key tools include Local Water Forums (trust-building and co-production), Transversal Interest Groups (legal, financial, environmental focus), and a Deliberation Support Tool (evidence-based planning).

Examples of Social Innovation in Water Management

Citizen Participation & Collaborative Governance:

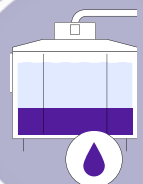
- **Circus Lake (Bucharest)**: LWF builds trust and addresses groundwater depletion through stakeholder engagement.

Nature-Based Solutions (NBS) & Urban Co-design:

- **Milan**: Stormwater systems redesigned with NBS via municipal and citizen collaboration.
- **Santiago de Compostela**: Rainwater reuse in industry with NBS and local stakeholder involvement to boost AWR acceptance.

Water Reuse & Cross-Sectoral Collaboration:

- **Paralimni-Agia Napa (Cyprus)**: Reclaimed water used for agriculture and urban greenspaces through coordinated efforts across public, farming, and tourism sectors.



TECHNOLOGICAL SOLUTIONS

Decentralised, nature-based and digital water solutions tailored to local challenges.

AWARD is committed to advancing water resilience and sustainability by strategically integrating a diverse range of AWRs into water supply strategic planning across Europe. Our approach focuses on deploying and testing **decentralized, nature-based, and hybrid water technologies**, carefully tailored to address specific contextual challenges and real-world needs within our four demonstration cases

- Technology Benefits of Bucharest-Romania (DC1): developing an accurate urban water balance by applying AWR solutions for **shallow aquifer recharge, sewer relief, and urban ecosystem preservation** responding to the decline in **groundwater levels and the degradation of local ecosystem**.
- Technology Benefits of Milan-Italy (DC2) : **Flood and drought resilience through SuDS - reduced flood risk, enhanced aquifer recharge, improved urban biodiversity and water quality**.
- Technology Benefits of Paralimni-Cyprus (DC3) advanced **wastewater treatment for reclaimed water** (Class A) for **irrigation**. Combats **water scarcity**, reduces algal growth/energy, boosts public **acceptance** of reuse.
- Technology Benefits of The Santiago de Compostela (DC4). NBS provide **reliable water, reduce pressure on resources**, and support **irrigation/industrial processes**. Aims to enhance AWR acceptance and shift water culture.



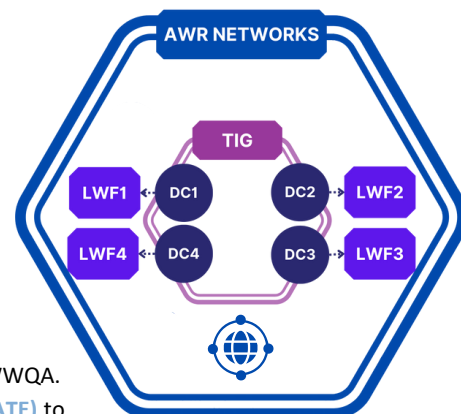
SOCIAL INNOVATION

GOVERNANCE STRUCTURES

Inclusive governance to co-design, deliberate and institutionalise AWR strategies.

AWARD uses a **participatory governance model** for inclusive, transparent, and locally adapted **Alternative Water Resources** (AWRs) planning/implementation. This combines **vertical coordination** (local to EU) and **horizontal collaboration** (across sectors/stakeholders).

- Local Water Forums (LWFs)**: Multi-actor spaces for participatory diagnosis and strategy co-creation, fostering deliberation and feedback on local water challenges.
 - Bucharest**: LWF in District 2 engages citizens, water utilities (ApaNova), municipal services, community groups (Tei), and national stakeholders (Romanian Waters) for knowledge co-production, trust, and AWR decision legitimacy. **Addresses citizen mistrust**.
 - Milan**: LWFs, supported by the local community, promote dialogue and joint comprehension on **NbS** for urban stormwater system management and **climate change adaptation**.
 - Cyprus**: brought together key stakeholders to discuss the challenges and opportunities of **reclaimed water reuse**, fostering dialogue on technical performance, policy, and local acceptance.
- Transversal Interest Groups (TIGs)**: these working groups address **cross-cutting topics** such as legal frameworks, **NbS**, and finance, fostering deeper dives into specific areas relevant across different contexts. TIGs bring together **AWARD DC leaders**, local project partners from the four demo cases, and, when possible, local stakeholders speaking English. Their goal is to strengthen both **inter-DC collaboration** and connections with the broader AWARD work packages.
- AWR networks**:
 - The third community of AWARD aims at extending impact **beyond demo cases**.
 - Active at **local, national, and international levels** to leverage results of the project and raise awareness about AWR-related challenges.
 - Builds **strategic connections** with external initiatives and networks.
 - Current collaborations**: INBO, 3S Water Smart Territories, and a forthcoming link with WWQA.
 - The AWR4Climate cluster activities with our two sister projects (**MARCLAIMED, RECREATE**) to foster **EU-level knowledge exchange and visibility**.



CAPACITY DEVELOPMENT

Empowering stakeholders through targeted training, awareness and peer learning.

AWARD is dedicated to **capacity building** for the long-term adoption of **AWRs**, integrating technical knowledge, soft skills, and institutional strengthening. Our **"360° approach"** reaches all stakeholders fostering ownership and systemic learning via **workshops, training, e-learning, and site visits**. We develop **user guides** and **learning materials** (AWR tech, governance, finance on DST-TSD) and conduct **awareness campaigns** for citizens/SMEs. Strategic support for **policy makers** ensures AWRs integration into existing frameworks, equipping stakeholders with necessary knowledge, skills, and tools.

Our demo cases practically illustrate capacity development, ensuring **AWR technical feasibility** and **societal acceptance**:

- Bucharest (DC1): Promotes **long-term AWR adoption** via stakeholder **workshops** for officials, utilities, communities, and NGOs. Supports **urban planners** in integrating AWRs into climate plans.
- Milan (DC2): Emphasizes **institutional empowerment** and **technical training** for **SuDS/aquifer recharge** design/operation. Conducts **municipal staff workshops**, develops **user guides/toolkits** (SuDS, DST-TSD), and runs **public awareness/citizen science** initiatives. Engages **policy makers** for AWR integration into climate/urban plans.
- Cyprus (DC3): Focuses on **wastewater treatment plant operational optimization** (tertiary unit), **training operators** to **reduce energy use** and **monitor water quality** for **high-quality reclaimed water** production. Conducts **awareness campaigns** for farmers, hotel operators, and municipalities on **safe treated water reuse**.
- Santiago de Compostela (DC4): **Trains stakeholders in NbS-based stormwater treatment system** use/maintenance and **monitors water quality** (microplastics, turbidity, nutrients, pathogens). Prioritizes **awareness raising** among **public/private entities** on AWR benefits. Supports **decision-makers** in integrating AWRs into climate/urban planning, showcasing a **decentralized stormwater reuse** model.



Awareness

Training

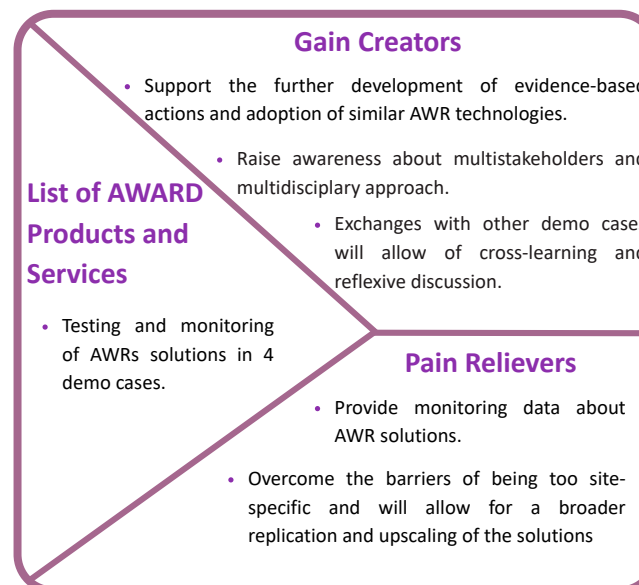
Field Testing

Policy Integration

BUSINESS ROADMAP

From demonstration to replication: turning technical results into market-ready solutions

Demo → Value Proposition → Business Model → Policy Integration



AWARD's **business roadmap** aims to foster long-term uptake and scaling of its solutions, highlighting market potential and policy purpose. The initial step is the **AWARD Value Proposition**, which aligns project results with end-users' needs and objectives.

A key expected result is **"Testing and monitoring of AWRs solutions in 4 demo cases"**. The Value Proposition Map details how this provides benefits and addresses challenges for demo case stakeholders, **including water managers, SMEs, associations, and researchers**, improving their understanding of AWRs.

Gain Creators from AWR solution testing include supporting evidence-based actions, raising awareness for multi-stakeholder approaches, and facilitating cross-learning. **Pain Relievers** involve providing monitoring data and overcoming site-specificity, enabling broader replication. The **Business Canvas** and **Exploitation Plan** will be developed later in the project.

