

PROJECT

H2020
Adaptation
Cities
Climate
Digitalization
Education
Governance
Sustainability
Water

Digital Water City - Leading urban water management to its digital future (DWC)



[1]

European cities face major challenges to achieve the desired level of sustainability in the management of urban water systems. Digital technologies such as mobile devices, sensor network, real-time monitoring, machine learning, and modeling tools have the potential to improve the management of water infrastructures significantly. In addition, they can improve the quality of services provided to citizens as well as awareness and cooperation between utilities, public authorities, and citizens in urban water management. The main objective of the project is to boost the integrated management of water systems in five major European cities, Berlin, Milan, Copenhagen, Paris, and Sofia, by leveraging the potential of data and smart digital technologies.

DWC will develop and demonstrate 18 advanced digital solutions to address current and future water-related challenges. These include protecting human health, improving the performance and cost-effectiveness of water infrastructures and involving citizens in urban water management. Areas of application of DWC digital solutions range from groundwater management, sewer maintenance

and operation, wastewater treatment and reuse to urban bathing water management. The Project integrates the development of digital solutions in a guiding protocol to cover existing gaps in the governance of information and communication technologies (ICT) as well as regarding interoperability, ontology and cybersecurity.

Ultimately, DWC will provide an interoperable free flow of information among stakeholders and across the water value chain. DWC will generate the necessary conditions for co-creation and open innovation by establishing Community of Practices that aim at integrating stakeholder knowledge. They will also ensure transferability of digital solutions in other European or international contexts, support of knowledge transfer beyond DWC and create durable ties between European cities. The large-scale assessment and communication of the benefits provided by the digital solutions in five major cities will serve as lighthouse, raising awareness of European cities for a necessary digital transformation, and opening new market opportunities for DWC partners and European providers of digital solutions.

Ecologic Institute leads a work package of the project, which focuses on boosting decision-making and increasing citizens' life quality as well as environmental awareness by using ICT and digital solutions. The work package also aims at introducing innovative and innovation-friendly modes of ICT governance, policy and public involvement. Moreover, Ecologic Institute will be responsible for an assessment of the market for digital water solutions.

Related Articles

- Governance Regime Factors Conducive to Innovation Uptake in Urban Water Management
- Recommendations for Water Management Authorities within Europe and Beyond
- Governance Regime Factors Conducive to Innovation Uptake in Urban Water Management
- Defining and Assessing Economic Policy Instruments for Sustainable Water Management
- Public Participation: Contributing to Better Water Management

Further Links

- European Research at Ecologic Institute

Funding

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European Commission, Executive Agency for Small and Medium-sized Enterprises (EASME)

Partner

Berlin Centre of Competence for Water (KWB), Germany

Partner

ADC Infraestructuras Y Sistemas (ADC), Spain
ARCTIK, Belgium
Berliner Wasserbetriebe (BWB), Germany
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Links

[1] https://www.ecologic.eu/sites/files/project/2019/fotoliacjfl_photography-xs.jpg