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

### Project

### Research Program

[Horizon 2020](#)

### Duration

Jun 2019 - Nov 2022

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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.

## **Funding**

European Commission, [Directorate-General Research & Innovation](#) (DG Research & Innovation), International  
European Commission, [Executive Agency for Small and Medium-sized Enterprises](#) (EASME), International

## **Partner**

[Berlin Centre of Competence for Water](#) (KWB), Germany  
[ADC Infraestructuras Y Sistemas](#) (ADC), Spain  
[ARCTIK](#), Belgium  
[Berliner Wasserbetriebe](#) (BWB), Germany  
[BIOFOS](#), Denmark  
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[Ecologic Institute](#), Germany  
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[Icatalist](#), Spain  
[iPEK International](#), Austria  
[French National Institute for Environmental and Agricultural Science and Research](#) (irstea), France  
[Istituto Superiore di Sanit ](#) (ISS), Italy  
[Kando](#), Israel  
[Partners4UrbanWater](#), Netherlands  
[SINTEF](#), Norway  
[Sofiyiska voda](#), Bulgaria  
Sorbonne University, [Faculty of Arts and Humanities](#), France  
[Strane Innovation](#), France  
[Greater Paris Sanitation Authority](#) (SIAAP), France  
[The University of Milan](#) (Unimi), Italy  
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Berlin, Milan, Copenhagen, Paris, Sofia, Germany, Italy, Denmark, France, Bulgaria, Europe

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