



ZeroPollution4Water
CLUSTER

Call for new projects Application Form

REA



Join the ZeroPollution4Water Cluster

The ZeroPollution4Water (ZP4W) Cluster is dedicated to advancing our understanding of water systems and infrastructure, including clean water systems, wastewater systems, irrigation systems, and the management of both surface and groundwater. These systems have become crucial components of urban and rural environments, evolving rapidly in response to urbanization. However, increasing anthropogenic activities have led to the pollution of water bodies and a decline in water quality – issues not fully anticipated during their development. As uncertainty in climatic conditions looms over several regions of Europe, securing a reliable water supply and management has become a pressing priority.

This initiative supports advanced water quality monitoring (e.g., hard and soft sensors), risk management techniques, novel treatment technologies (e.g., membrane-based systems), and stakeholder engagement. These efforts aim to enhance scientific support for policymaking, facilitate the implementation of the European Green Deal, and support the water resilience initiative.

The cluster facilitates collaboration among projects funded under the HORIZON Europe framework, focusing on contamination research across diverse water sources. It aims to generate shared policy recommendations and white papers and engage a broader stakeholder audience in addressing water pollution and creating a water-smart society. Currently comprising seven projects, the cluster is strategically expanding to incorporate additional relevant initiatives. As of 2024, these sister projects primarily focus on drinking water and groundwater, with working groups addressing various facets of water system management (e.g., data management, research innovation, market uptake).

Water reclamation has been identified as a critical area for inclusion in the Cluster's scope. This focus not only addresses a pressing environmental need but also aligns with the European Commission's (EC) initiatives, mirroring numerous projects funded under the zero-pollution for water Calls for Proposals

The selection criteria for projects within the Cluster include:

- **Water source** (need not necessarily focus only on drinking water and groundwater but alternative sources like e.g., wastewater and surface water)
- **Target pollutants** (e.g., microplastics in surface water, pathogens in reclaimed wastewater)
- **Identification and characterization of pollutants** (hard sensor devices, analytical method, grab sample techniques)
- **Decision tools** (Soft sensors for mapping, decision support and prediction, model-driven, and data-driven, Digital twin, machine learning models, flow and diffuse pollutant modeling, AI neural networks)
- **Treatment technological innovation** (such as treatment chain design and optimization, novel treatment technologies, nature-based solutions)
 - **Impact on drinking water quality** (all projects must assess the effect of their research outcomes on drinking water quality)
 - **Contaminant/treatment monitoring techniques**, solutions, and approaches
- **Demonstration of technology** (through case studies and pilot sites)
 - **Risk assessment and life cycle analysis** of recommended solutions
 - Type of funding (EU-(co)funded project/partnership, Interreg, Horizon, LIFE grant, FWO grants)
- In line with EC's **Open science communication** ^[1]

[1]E. Commission, D.-G. for Research, and Innovation, *Horizon Europe, open science – Early knowledge and data sharing, and open collaboration*. Publications Office of the European Union, 2021. doi: doi/10.2777/18252.

APPLICATION FORM

Project Information

Acronym of the project	
Full title	
Call and Project ID	
Website	
Social media links	
Coordinator, name, email, affiliation	
Contact point name, email, affiliation role in the project	(if different than the coordinator)
Project Abstract	
Project Logo	Please attach the project logo (min 200x300px)
Project start date	
Project duration	

Relevance to Cluster Themes

Please describe how the project aligns with the ZP4W cluster's endeavours and themes. Specify work areas and/or project results. Provide 3-4 lines for each, highlighting its significance.

Contribution to Major Activities

Please review the major activities outlined in our [strategic plan](#). Identify those where your project can make a significant impact and describe how you intend to contribute, referencing specific project deliverables.

Contribution to Working Group Activities

Please specify to which working group of the ZP4W cluster your project intends to contribute and how.

Financial contribution to Clustering Activities

Please specify if your project budget allows for monetary contribution to support ZP4W cluster activities such as events, dissemination materials and publications. This is subject to discussion in the later stage of selection process between the cluster's management team and the applicant

Declaration of intent

I hereby ask for the project _____ to join the ZeroPollution4Water Cluster and declare that the project intends to support the cluster activities.

Signed (Name, organization, position/relation to the project):

Date: