

## The problem

Diffuse pollution is still a significant pressure that affects 35% of the area of groundwater bodies, while quality standards (pesticides, herbicides, etc.) were exceeded in 15% of the groundwater bodies studied. Climate change and increasing water demand will exert significant pressures on groundwater quality.

Furthermore, detrimental effects of natural/human-made disasters and increasing water temperatures due to climate change could deteriorate the quality of drinking water sources by favouring the conditions for enhanced eutrophication leading to algal and cyanobacterial outbreaks as well as pathogen development or the spread of invasive species. Emerging concerns are also rising at the level of drinking water treatment and distribution, notably in relation to disinfection operations, materials and products, ageing infrastructure, biofilm growth and possible harmful effects of unintentionally formed by-products and metabolites.

## ZP4WC Objectives



Capitalisation of R&I achievements and future needs assessment.



Production of common policy briefs or policy recommendations, based on the evidence.



Demonstration of effective water management practises via case studies.

## Working groups

The Cluster Work is currently organised in six Working Groups covering the variety and potential of the cluster members.

### ZP4W Cluster Management and Coordination

Responsible for the cluster's internal and external action planning. It will prepare, validate and review the cluster's strategy and action plan on annual basis.

### Communication

It will develop and implement a comprehensive communication and outreach action plan for the ZeroPollution4Water Cluster.

### Technology and Innovation

This group will identify and develop innovative methods and technologies for reducing and managing water pollution.

### Policy Advisory

It will analyse the EU's policy and regulatory landscape for water pollution and management and find potential for the ZeroPollution4Water Cluster.

### Data Management and Sharing

This group will identify and discuss existing frameworks for drinking and groundwater, and will establish links with the ICT4Water Action Group on data sharing to align common contributions to European green dataspace.

### From R&I to Impact

They will facilitate the deployment of a cutting edge competitive technologies, governance models and best practices in the field of zero pollution for drinking water and groundwater.



**Joining forces to accelerate the transition  
to a zero-pollution future for water**

## The cluster

The ZeroPollution4Water Cluster is an initiative originated from the coalition of seven different projects funded from two Horizon Europe 2022 calls aiming at:

- Preventing groundwater contamination and protecting its quality against harmful impacts of global and climate change.
- Securing drinking water quality by protecting water sources against pollution, providing innovative monitoring and treatment solutions, and ensuring safe distribution.

## Aims

Focused on the European Union's Zero Pollution ambition and the European Green Deal, the cluster aims to improve water quality, safeguard drinking water sources, and protect groundwater against the harmful impacts of global and climate change. By leveraging the collaboration and synergies between the collaborative projects funded through Horizon Europe, the cluster aims to develop advanced preventive and mitigating strategies, effective risk assessment and management systems, and innovative monitoring and treatment solutions for drinking water and groundwater.

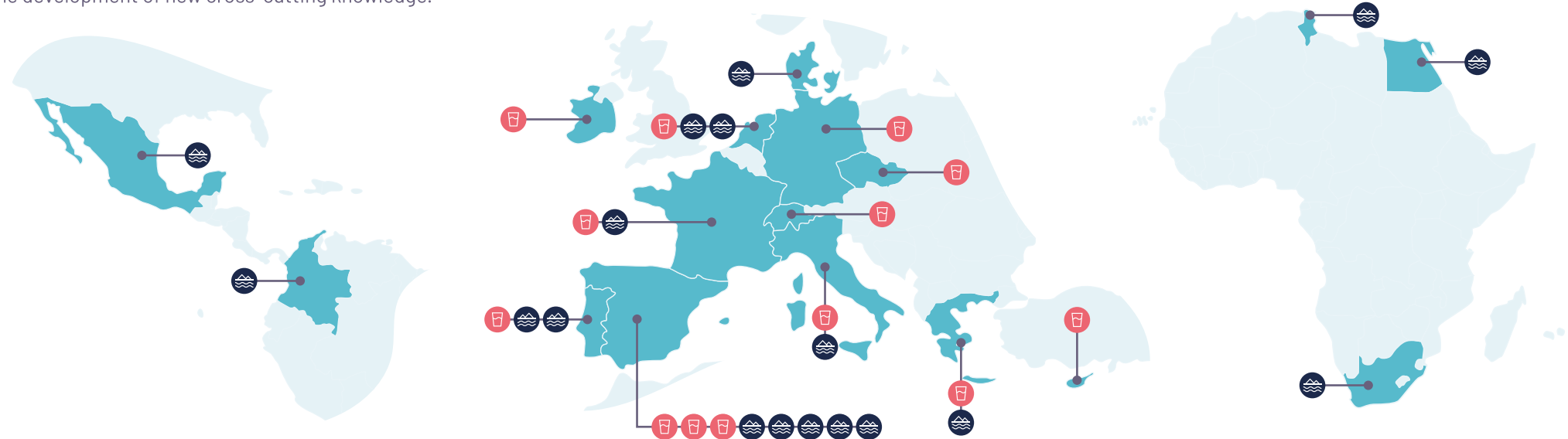
## A Collaborative Effort

Each project includes a set of case studies at different locations and focused on specific challenges related to drinking water or groundwater management.

This map displays the case studies located across three different continents: America, Europe, and Africa. The ZP4WC will strive to connect these studies in order to promote the development of new cross-cutting knowledge."

13  Drinking water

18  Groundwater management



## Projects

Seven projects create the ZeroPollution4Water Cluster.

