SafeCREW

is funded by the EU's Framework Programme for Research and Innovation Horizon Europe Call "Securing drinking water quality by protecting water sources against pollution, providing innovative monitoring and treatment solutions and ensuring safe distribution" (HORIZON-CL6-2022-ZEROPOLLUTION-01-04). The project brings together 12 research institutes and industry partners from Germany, Italy, the Netherlands, Spain, UK and the Ukraine.

- DVGW Research Centre at Hamburg University of Technology Germany
- Politecnico di Milano Italy
- **Kompetenzzentrum Wasser Berlin**Germany
- **BioDetection Systems B. V.**The Netherlands
- **EURECAT** Spain
- **Umweltbundesamt**Germany
- Helmholtz Zentrum für Umweltforschung Germany
- ♦ Consorci d'Aigües de Tarragona Spain
- **Tutech Innovation GmbH**Germany
- Metropolitana Milanese Spa Italy
- Multisensor Systems Ltd. United Kingdom
- NUWEE National University of water and environmental engineering Ukraine Ukraine



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CLIMATE-RESILIENT
MANAGEMENT FOR SAFE
DISINFECTED AND NONDISINFECTED WATER
SUPPLY SYSTEMS



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CLIMATE-RESILIENT MANAGEMENT FOR SAFE DISINFECTED AND NON-DISINFECTED WATER SUPPLY SYSTEMS

The safe and affordable supply of drinking water in the EU under the pressure of climate change is a key priority. Despite long-term experience with the reliable operation of disinfected and non-disinfected drinking water supply systems (DWSS), climate change impacts such as increasing water temperature and higher levels of natural organic matter (NOM), will lead to challenges. These are linked to microbial stability and the (future) need for disinfection; and the consequences of disinfection by-product (DBP) formation for human health remain open.

SafeCREW aims to support the novel EU Drinking Water Directive (DWD) by developing tools and guidelines for disinfected and non-disinfected drinking water supply systems.

Four case studies, located in northern Germany, Italy, Spain and the Ukraine, will create novel data sets on the occurrence and concentration of as yet unknown disinfection by-products, as well as comprehensive water quality characterisation, including chemical and microbiological parameters. These data, together with newly developed treatment solutions, will lead to better management of water distribution networks to maintain high drinking water quality. Commercial actors will be stimulated to further develop tools for disinfection by-product quantification and mitigation. This will include all processes from source via treatment to distribution.

SafeCREW will increase the preparedness of the EU water sector for challenges arising from climate change and will support the EU's leading position in science-based policymaking for drinking water consumer protection.

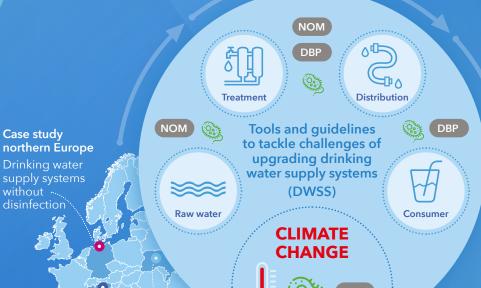
Transferable tools will be provided to water utilities, national and EU regulators, researchers and enterprises, including:

New monitoring tools for comprehensive water quality characterisation

New processes for reducing disinfection by-products (DBPs) and their precursors

Strategies for safe drinking water distribution

Integrated risk assessment framework to guide future interventions that sustain safe drinking water supply in the face of climate change



Case study

eastern Europe

Drinking water

supply systems

with disinfection

Case studies

southern Europe

Drinking water

supply systems

with disinfection