



**Interreg**  
CENTRAL EUROPE

**boDEREC-CE**

Three years long activities on establishing the transnational strategy for attenuating the emerging contaminants in drinking water are getting to an end

The boDEREC-CE project was aimed to define an integrated management strategy for waterworks that guarantees the increased quality of drinking water.

The boDEREC-CE project is dedicated to water suppliers and water administration and will support their daily operation by providing tools and guidelines for the detection and assessment of the pharmaceuticals and personal care products (PPCP) problem in drinking water.

### **Investigations of PPCP behaviour in water resources**

During three years of the project realisation, project partners from Poland, the Czech Republic, Austria, Slovenia, Croatia, Italy, and Germany carried out the monitoring activities and transport modelling of PPCPs within 8 pilot action sites.

During the monitoring programme, 302 samples were taken for the analysis of PPCP compounds. Up to 114 emerging contaminants (EC) substances, especially PPCPs, were analysed. The samples were taken not only in catchment areas but also on the water treatment plants to assess treatment efficiency. The results showed that the most common PPCP in European rivers is DEET, an active compound of repellents commonly used, especially in the summertime. It was observed in each of the 8 pilot sites during the monitoring programme.

To define the possible transport path of the pollution from its source to water intake as well as indicate factors influencing the PPCP concentration in water, the pilot sites partners have carried out modelling studies. *“Since each pilot site has different natural characteristics, available and measured data, and frameworks for water extraction, partners decide to apply different tools for modelling. This gives a chance to assess the difference between implemented approaches and establishing a recommendation for future PPCPs’ modelling activities”*, pointed prof. Gabriele Chiogna from the Technical University of Munich - the Leader of WPT3 Modelling. The models considered hydrological conditions, potential sources of pollution, as well as a chemical characteristic of selected PPCPs.

### **Engagement of stakeholders and general public**

*“From the very beginning the project consortium put special attention to raise awareness and increase knowledge of stakeholders,”* says the Communication Manager of the boDEREC-CE - Joanna Czekaj from the Silesian Waterworks PLC. *“This task was not easy, since most of the project was carried out in Covid-19 pandemic time. Nevertheless, several engagement activities were set up, both online and onsite”*. This includes two series of stakeholders’ workshops and the knowledge transfer to end-user meetings, thank to which national level project partners recognised stakeholders' needs and built the capacity for tools developed under boDEREC-CE. *“Moreover, we have also organised meetings with the general public to raise awareness on PPCPs occurrence in water resources and to share the boDEREC-CE findings”*. One of the latest meetings was the Final Conference organised online and streamed live on YouTube. The conference gathered more than 100 people from 7 countries. During the conference, boDEREC-CE partners and guest lecturers shared their knowledge on emerging contaminants in water resources. The recording of the conference is available on the boDEREC-CE YouTube channel.

#### **Tools and strategy - a base for further activities**

Under the framework of the boDEREC-CE project, two decision-supporting tools were established. The first one is a tool supporting the decision on modelling activities - modePROCON. The second one is wwDEMAST - a tool for managing PPCPs’ data and for supporting the choice of the proper attenuation method. Both tools are dedicated to water managers and water suppliers. The realisation of the project resulted in the preparation of recommendations - Transnational strategy for PPCP mitigation in drinking water - TRAST-PPCP. *“The strategy is a soft document, which gives recommendations for enabling a better adaptation for future changes of legislation”*, says Boris Bulović from VIK Split - the Leader of WPT4. *“It includes two types of actions - preventive/passive measures and curative/active measures. The first group of measures includes recommendations for PPCP monitoring and the organisation of a system for the collection of unused drugs. The second group focuses on the selection of optimal technology for drinking water purification”*. To ensure the implementation of the boDEREC-CE results, a Board of Experts was established. The Board consists of 17 experts from Central Europe representing mainly research institutions, as well as waterworks. In the end, all members of the Board of Experts have signed the agenda for future activities to ensure capacity for project results after the project lifetime.