



Perfluorinated compounds
HOListic ENVironmental
Interinstitutional eXperience

LIFE PHOENIX Project

An integrated approach for the effective
management of water pollution risks from
emerging contaminants

LIFE16ENV/IT/000488 - LIFE PHOENIX



WITH THE CONTRIBUTION OF THE LIFE FINANCIAL
INSTRUMENT OF THE EUROPEAN UNION

Budget

2.176.493 €
EU co-financing: 1.264.369 €

Duration

from 01/09/2017
to 31/03/2021

Guiding principles that inspire the LIFE PHOENIX Project

Active involvement of stakeholders, experts, citizens and school districts in the area of environmental protection and health safeguard.



Preventing

in an effective and timely
manner the risks associated
with the spread of emerging
contaminants in the
environment



Ensuring

systematically the safety of a
drinking water system, the
quality of the water supplied
and the protection of
consumer health



Promoting

at all levels a sustainable and
aware use of water, in line
with the European objective
of water resources
preservation



Bacchiglione



Ca' di Mezzo



Brenta



Guà

Sampling sites
of the
LIFE PHOENIX
Project



Monselice



Monastero



Fratta



Frassine



Adige



Bisatto

Innovative aspects and expected results of the LIFE PHOENIX Project

- A **new model of inter-institutional governance**, supported by expert working groups and accurate forecasting systems, to promptly and effectively manage the problems arising from water contamination caused by mobile and persistent organic substances (PMOC), such as perfluoroalkyl compounds (PFAS).
- A **long-term action plan** (policy measures, prevention protocols, guidelines, recommendations) complemented by the use of innovative technologies, able to assist public decision makers in the process of assessing, preventing and mitigating risks for the environment and for human health.
- A **smooth information and statistical system** (data warehouse and web portal), integrated with numerous databases from various local, regional and national institutions, and organized in different thematic topics to facilitate specialists in the necessary technical and scientific elaborations.
- An **effective testing process** supported by pilot plants for water purification, with *upscaling* to real-scale for irrigation water in three wet areas identified in the project zone between the provinces of Vicenza, Verona and Padua (about 930 km²) in the Veneto Region.
- A **series of fast and integrated tools**, supported by methods based on risk analysis (mathematical models and bio-indicators), to estimate the diffusion of contaminants (PMOC) in the different environmental matrices and to set biological and eco-toxicological early warning systems.
- A **replicable work methodology**, based on the *know-how* and results deriving from the multidisciplinary approach, that can be transferred and adapted in other European geographical contexts or nearby areas characterized by similar environmental contaminations.



Pollution of water resource occurs when contaminants are discharged into the surrounding environment without adequate removal treatment, leading to **potential dangers to human health and the ecosystem**.

Facing and managing an **environmental emergency** of water resource pollution is very complex, particularly if environmental contaminants are evaluated as emerging, i.e. not regulated by legislation, because they are not

considered alarming at the moment. A **timely and effective intervention**, aimed and well coordinated at once, is of fundamental importance for **protecting the environment and the health of the citizens**. It is necessary to predict how the

pollutant already introduced is propagating in order to **act in a specific way** even in territorial areas not yet affected. The **LIFE PHOENIX project** (co-financed by the EU through the LIFE Programme) proposes an **innovative and**

multidisciplinary approach to the management of environmental contamination, at the same time involving institutional bodies and the world of scientific research in decision-making actions.



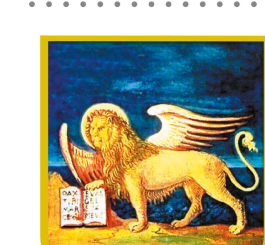
COORDINATOR



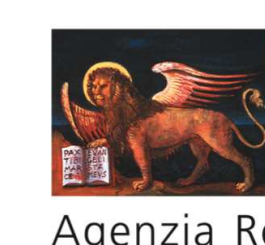
REGIONE DEL VENETO

PARTNERS

REGIONE DEL VENETO



AZIENDA
ZERO



arpav
Agenzia Regionale per la Prevenzione
e Protezione Ambientale del Veneto



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

lifephoenix.eu