

The project

The presence of pollution in water and soil poses multiple risks to human, animal, and ecosystem health, contributing to diseases and biodiversity loss.

The EU-funded SYMBIOREM project (Symbiotic, circular bioremediation systems and biotechnology solutions for improved environmental, economic and social sustainability in pollution control) aims to use the **bioremediation** capabilities of microorganisms, microbiomes, proteins, plants and animals to remove pollution from the environment.

What is
bioremediation?

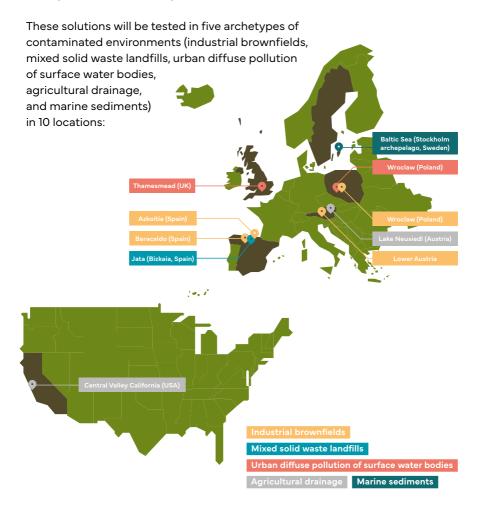
Bioremediation is the use of either naturally occurring or deliberately introduced biological organisms (e.g., microorganisms, microbiomes, proteins, plants and animals) to consume and break down environmental pollutants, in order to clean a polluted site.

In addition, SYMBIOREM will:

- Develop new circular business models to turn residues and contaminants from polluted environments into valuable resources.
- Increase the safety of bioremediation and revitalization strategies, mitigating the risks of pollutants' remobilization.
- Increase the acceptance of bioremediation solutions by **engaging citizens** in participatory research, collaborative modelling, and collaborative management of bioremediation technologies.

12 novel bio-based technologies and strategies

To contribute to the EU Zero Pollution Action Plan, SYMBIOREM will develop 12 innovative nature-based solutions to target the four most common pollutants in soil and water in Europe: heavy metals, mineral oil, Polycyclic Aromatic Hydrocarbons (PAH) and Volatile Aromatic Hydrocarbons (VAH). The project will also focus on mixed contamination, eutrophication, organic micropollutants and microplastic.



SYMBIOREM is a project funded by the European Union, running from September 2022 to August 2026. The project is coordinated by the University of the Basque Country (UPV/EHU) and includes 17 partners from 10 countries.



































Contact us:





Project Coordinators:

Dr. Leire Ruiz Rubio

University of the Basque Country -UPV/EHU

leire.ruiz@ehu.eus

Dr. José Luis Vilas Vilela

University of the Basque Country -UPV/EHU

joseluis.vilas@ehu.eus

Dr. Mónica Loyo-Menoyo

University of the Basque Country -UPV/EHU

monica.loyo@ehu.eus

Communications:

Piero Valmassoi

Project Manager, Greenovate! Europe p.valmassoi@greenovate-europe.eu



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor REA can be held responsible for them.