

# Our Ambition



- Achieve energy savings of at least 25-30% in treatment operations through an advanced Decision Support System.
- Recover over 50% of nutrients from produced biomass, efficiently valorising it for energy or soil amendment.
- Develop a cutting-edge digital twin model equipped with predictive analytics to monitor and optimise system performance in real-time.
- Foster social acceptance and active citizen participation in decentralised water solutions through an inclusive, co-creation methodology.
- Deliver high-quality, fit-for-purpose treated water with minimal energy consumption and environmental impact, adaptable to various global contexts.



## ABOUT NAMOR

**START DATE**  01 June 2025

**DURATION**  48 months

**BUDGET**  4 950 237.50 €

**PROJECT COORDINATOR**  International Hellenic University



IMPERIAL



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OPERON



UNIVERZA V LJUBLJANI  
University of Ljubljana



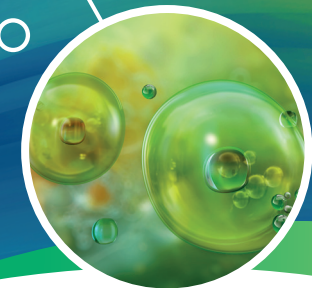
 **CONTACT US**  
NAMOR project



Funded by  
the European Union

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**Harnessing the power of  
microalgae-bacteria systems  
and advanced membrane filtration  
to deliver the next generation  
of localised, sustainable  
water treatment**



**NAMOR**  
Advancing Decentralized Water  
and Wastewater Systems

# Why NAMOR



NAMOR is an EU-funded project pioneering a next-generation water treatment solution. By combining the co-cultivation of microalgae and bacteria with advanced membrane filtration in a modular fully automated system, NAMOR enables decentralised, site-specific treatment of diverse water streams including sewage, to septic tank effluents, and stormwater. In addition, a smart AI driven system allows the optimisation of system performance and its integration to existing central treatment systems. This innovative approach is designed to support a resilient and sustainable urban water cycle, improve urban water management, and pave the way for a circular economy.



# NAMOR Methodology



Combine the co-cultivation of locally adapted microalgae and activated sludge bacteria in a unique bioreactor system, with advanced membrane filtration for robust water treatment.



Examine innovative approaches for treatment of a broad spectrum of water and effluents, under extreme temperature regimes and utilizing advanced media for mixed cultures cultivation.



Utilise a Digital Twin and a Decision Support System to monitor, predict, and optimise performance, energy use, and resource recovery.



Engage citizens and stakeholders in a participatory approach, from planning to implementation, to assess public opinion and co-design solutions.



Implement strategies for the valorisation of produced biomass, integrating it into existing plants for energy generation or nutrient recovery.



# 3 Demo sites

## Demo Site 1

Advanced Expandable Algae-Bacteria System (EABS) for efficient decentralized treatment of high flowrate wastewater

Slovenia



## Demo Site 2

Enhanced growth Microalgae-Bacteria consortia through immobilization carriers

Finland



## Demo Site 3

Low Temperature Algae-Bacteria System (LTABS) for decentralized treatment

Greece

