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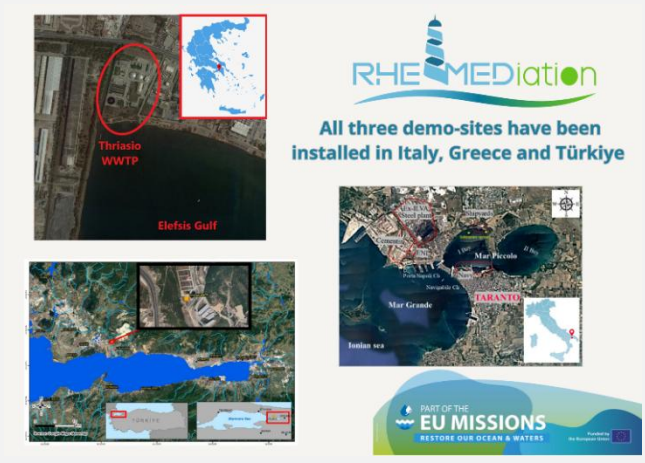
Newsletter RHE-MEDiation project

All Demonstration Sites Operational in Italy, Greece, and Turkey!



All **three demonstration sites**, Thriasio in Greece, Mar Piccolo in Italy, and Dilovası in Turkey, **are fully operational**, implementing advanced tertiary wastewater treatment technologies.
In the three demo sites, **microalgae photobioreactor systems** enhance the removal of emerging micropollutants, supported by **fixed monitoring stations and mobile drifters** ensuring continuous data transmission.
With all sites active, the project is now focused on collecting operational data, analyzing real-world performance, and preparing for large-scale deployment across the Mediterranean.

RHE-MEDiation 4th General Assembly in Gebze, Türkiye

The RHE-MEDiation consortium gathered at TÜBİTAK in Gebze, Türkiye, for its **fourth General Assembly**. Over two days, partners shared progress on the project hub, pilot deployments, early validation, and stakeholder engagement.
The event included a **visit to the Turkish demo site**, showcasing the algae-based treatment in action, and featured technical workshops on monitoring, sensors, and upcoming sea trials.
The meeting reinforced the consortium's commitment to delivering nature-based solutions for reducing pollution in the Mediterranean.

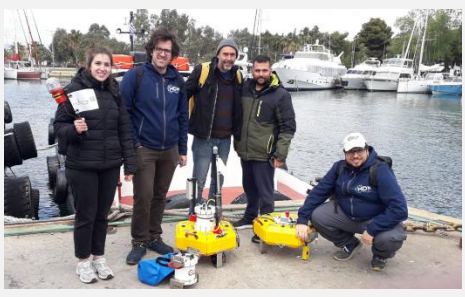
RHE-MEDiation Completes the Demo Site in Italy

The RHE-MEDiation project has successfully installed its third and **final demonstration site in Taranto**, Italy, **along the Galeso River.** Also this site features the GREEN DUNE® photobioreactor system designed to remove chemical contaminants using algae-based treatment. Fully equipped with CO_2 injection, nutrient dosing, biomass collection, and remote monitoring, the system offers a nature-based, scalable solution to improve water quality.
This milestone marks the completion of all pilot installations, advancing the project's mission for sustainable water remediation in the Mediterranean.

Ongoing Monitoring Campaign in Türkiye

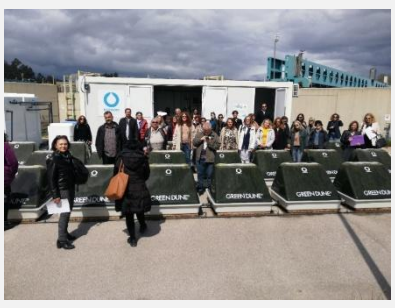
Since April 2025, a comprehensive **monitoring campaign has been underway in Türkiye** to evaluate the pilot system's performance and environmental impact. Weekly sampling at both the inlet and outlet, as well as across all photobioreactor (PBR) lines, includes chemical analyses (PFAS, PAHs, PCBs, phenols, pesticides, heavy metals) conducted by TÜBİTAK MAM's accredited labs.
Twice a week, nutrient levels (Total Nitrogen, Total Phosphorus), COD, TOC, Suspended Solids, chlorophyll-a, and key physicochemical parameters (temperature, pH, conductivity) are monitored to track system dynamics. Biomass samples are also collected weekly and sent to CCMR for further analysis.

Real-Time Chemical Pollution Monitoring Milestone Achieved in Greece



In April 2025 **real-time chemical pollution monitoring campaigns** took place in Elefsis Bay, marking the launch of key physicochemical parameters measurement in marine environments, by using the autonomous robotic buoys Scylla and Carridi, equipped with advanced sensor systems developed by MDM. The campaigns were also **supported by HCMR's R/V AEGAEO** and contributed to both introducing the deployed technologies and data platforms to Greek researchers and to the long-term vision of building a Digital Twin of the Ocean."

Educators Explore Sustainable Wastewater Management at Thriassio WWTP.



Over 50 primary and secondary school teachers from West Attica participated in a hands-on workshop titled "**Sustainable Management of Urban Wastewater**" on April 5th. Organized by the Educational Directorates of West Attica in collaboration with EYDAP and HCMR, the event focused on wastewater reuse, treatment processes, and innovative solutions for marine decontamination.
A site visit to the pilot unit offered participants a close look at the process, sparking discussions and raising awareness on environmental protection. The workshop empowered educators to bring these insights into their classrooms, fostering environmental responsibility among students.

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