



# EU MISSIONS

RESTORE OUR OCEAN AND WATERS



## SeaClear2.0 gives us 500.000 reasons to tackle marine litter

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Today's oceans contain roughly 25 million tons of plastic waste, approximately 94% of which is located on the seafloor. Every year, 150,000-500,000 tons of macroplastics and 70,000-130,000 tons of microplastics enter European waters and seas.

### **SeaClear2.0's Associated Regions – Who are they?**

To tackle this common challenge, SeaClear2.0 is working with five selected strategic partners, so called Associated Regions, to showcase the feasibility, replicability, and scale-up of SeaClear2.0's pioneering solutions for identifying, collecting, and valorising ML. Site-specific solutions and citizen engagement activities aim to prevent and minimise ML and foster an ocean literate society in their regions.

These ARs are subprojects linked to the SeaClear2.0 project, financed through a cascade funding mechanism from an open call inviting public entities from EU Member States and Horizon Europe Associated Countries to apply. After a thorough selection process, five subprojects were awarded with €100,000 each. Each region developed its approach to tackle ML pollution in different EU sea basins, tailored to their regional challenges, while collaborating closely with SeaClear2.0.

### **The SeaClear2.0 Associated Regions – insights on the regions**

**A Collaborative Approach for Marine Litter Mitigation:** Marine litter is a complex issue requiring diverse strategies for effective management. Our ARs show a range of solutions, for prevention, monitoring, clean-up, recycling, sustainable policy-making and multi-stakeholder collaboration to create long-term solutions for marine pollution while strengthening environmental awareness.

**Collaborative Community Engagement:** Community involvement is central to the ARs, fostering environmental responsibility and active participation. In Norway, the RECLAIM project emphasizes citizen science and public engagement to combat marine litter along the Møre and Romsdal County coastline. In Greece, the MERMAID project focuses on environmental democracy, empowering local stakeholders in marine preservation through education, research, and evidence-based policymaking. The Plastic Litter Prevention Georgia project on the Georgian Black Sea Coast mobilizes citizens for plastic capture barrier assembly and data collection, raising awareness and fostering ownership in tackling plastic pollution. The Ghost Net Hunters in Hatay, Turkey, use a coalition-based approach for roadmap development and participatory events, involving municipalities, NGOs, academia, fishery cooperatives, and the local community. The SYMBIOSIS project in the Sotenäs municipality follows a multi-stakeholder approach, with a special focus on fishermen, industry, and the art sector in value chains and outreach work. By involving a broad spectrum of stakeholders, all projects aim to create a more informed and engaged society capable of sustaining long-term environmental change.

**Technological Innovation and Marine Debris Removal:** Advanced technologies are crucial for detecting, retrieving, and preventing marine litter. In Greece, the MERMAID project uses ROV, Sonar, and Drone images to locate abandoned fishing gear, classify the collected materials and create a GIS database of polluted zones. In Turkey, the Ghost Net Hunters use underwater robots, AI litter mapping, a WWF app, and databases to locate and collect ghost nets. Sweden's SYMBIOSIS project

builds on the country's first and only marine recycling centre, developing a testbed for upcycling, reusing, and recycling marine waste, combining high-tech solutions with traditional knowledge from professional fishermen and divers. The RECLAIM project in Norway employs and further develops an application to manage marine waste from fishing and aquaculture industries. The Plastic Litter Prevention Georgia initiative pilots litter capture techniques and engages citizens in data collection, aiming to install three distinct capturing techniques, an Estuarine Trap, End of Pipe Trap and Recycled Plastic Bottle Barrier. Our Associated Regions collectively demonstrate the power of technological innovation in addressing the complex issue of marine litter tailored to their regional needs.

**Circular Economy and Waste Upcycling:** Sustainable waste management is a key focus of these projects, ensuring that collected marine litter is repurposed rather than discarded. In Sotenäs, the marine recycling center, works on upcycling and reusing marine waste. The AR is developing circular business models and engaging the creative sector to maximize the value of recovered materials. The Ghost Net Hunters adopt a similar approach by transforming ghost nets into useful local products such as citrus nets, soil protection materials, and waste collection nets. The RECLAIM project involves marine industry stakeholders to discuss local upcycling and reusing possibilities. By aligning environmental goals with economic benefits, these initiatives demonstrate how sustainability and innovation can coexist to create practical, scalable solutions in a circular economy.

**Policy Development and Regional Cooperation:** Collaboration among municipalities, industries, and research institutions is essential for strengthening policy frameworks that support long-term marine sustainability. MERMAID is establishing a holistic model for marine protection, integrating municipal authorities into prevention, monitoring, and collection strategies, and providing training for municipality employees. In Norway, training activities aim to scale up beach clean-ups. RECLAIM seeks to develop a regional marine litter management strategy and integrate it into municipal waste policies. SYMBIOSIS contributes to national and regional networks by developing standardized protocols for ghost gear retrieval and fostering collaborations across multiple sectors. In Georgia and Turkey, events like roundtables and conferences collect insights for policy and regulatory changes, improved waste management infrastructure, and policy white paper development. These coordinated efforts involve diverse stakeholders, creating a more structured and effective approach to ML mitigation.

#### **What we have learned and our next steps**

SeaClear2.0's ARs illustrate a comprehensive approach to ML mitigation, combining community engagement, technological advancements, circular economy models, and policy development. By fostering cross-regional cooperation, they contribute to cleaner and healthier marine ecosystems while promoting long-term environmental sustainability. Through their diverse strategies, our ARs offer scalable solutions that can be replicated in other regions, ensuring a more resilient and sustainable future for marine environments and the communities that depend on them.

The Hamburg Port Authority (HPA) is coordinating the implementation of the Associated Regions and acts as the linking partner between the ARs and the consortium. During the first months of the implementation of the SeaClear2.0 ARs, three key learnings can be highlighted. The ARs illustrate the importance of tailored approaches to tackle universal problems like marine litter pollution. Each region devises solutions that address their unique ecological and socio-economic contexts while benefiting from shared knowledge and resources. Further, the collaborative model fostered by the SeaClear2.0 project emphasizes the value of partnerships. By working closely with the core project, each AR benefits from technical support and contributes its own innovative ideas and methodologies that can be scaled and adapted across various regions. The ARs also show the need for building local capacity to implement and sustain innovative solutions. Empowering regions to address pollution through EU Mission Ocean funding, technical guidance, and continuous knowledge exchange ensures that these solutions are effectively implemented and sustainable in the long run.

Moving forward, the SeaClear2.0 project and our ARs will focus on engaging with local communities and raising awareness about ML pollution and the importance of the project's initiatives. Each AR has

a list of activities and deliverables to be implemented in the coming months. The collaborative approach will be fostered through co-organized meetings, knowledge exchange sessions, and workshops to share insights, challenges, and success stories. Individual articles on each of the Associated Regions and their projects will follow.