



The role of policy in driving technological innovations for healthy oceans

How do current and future policies impact the development and use of cutting-edge technologies, like those developed by [SeaClear2.0](#), aimed at improving the health of our oceans? Are policies today helping or hindering these innovations? And how do EU-wide policies compare to national regulations in this space?

These are some of the key questions that SeaClear2.0 is addressing through its work on policy analysis. Within the project, we are examining the European and regional policy landscape to identify opportunities and challenges for SeaClear2.0 both during the project's lifetime and later during commercialization.

A big part of this effort involves mapping and analysing policies that could influence the operation of SeaClear2.0. For instance, the Marine Strategy Framework Directive (MSFD) is an important policy that applies across all EU Member States. Its goal is to ensure that Good Environmental Status is achieved and maintained in the marine environment. There are 11 Descriptors that define Good Environmental Status. Two descriptors stand out in relevance to SeaClear2.0's work:

- Descriptor 10: Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
- Descriptor 11: Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

These Descriptors present both opportunities and potential challenges. On the one hand, SeaClear2.0 can support Member States in the implementation of their monitoring programmes specifically as it concerns marine litter and microplastics at sea. On the other hand, the SeaClear2.0 system could potentially contribute to underwater noise. If so, its use could be restricted. Further analysis of the system's potential impact suggests that SeaClear2.0's contribution to underwater noise would be negligible since the system only operates in an area over a short period of time and only in coastal locations without affecting pelagic marine organisms.

This type of policy analysis is essential for understanding how SeaClear2.0 can navigate regulatory frameworks. To date, the project has identified and studied over 20 relevant EU and regional policies.

In addition to EU policies, national policies are also being analysed. For example, Member States have their own rules for the deployment of unmanned aerial vehicles (UAVs), which could limit the use of certain SeaClear2.0 technologies in specific areas. Project partners have already reviewed these rules in preparation for the project's [public demonstrations and pilots](#). Beyond policy considerations directly related to SeaClear2.0's operations, the project is also

conducting a broader analysis to identify policy opportunities and obstacles for marine litter prevention and minimization.

The project's policy analysis will be concluded in the summer of 2025. Key findings will then be shared and discussed with stakeholders at the pilot and demo sites through dedicated workshops, and with wider policy stakeholders through a Policy Roundtable. The outputs from these consultations will feed into a Policy White Paper that will be ready by the end of the project.

For more details or collaboration opportunities, you can contact SeaClear2.0's policy lead partner, [ISOTECH Ltd.](#)

