



Healthy oceans, seas, coastal and inland waters

Mission Starfish 2030: Restore our ocean and waters

WHY A MISSION ON OCEANS?

Unsustainable human footprint

- **Pollution**
Eutrophication, contaminants, micro pollutants, Marine litter, underwater noise
- **Unsustainable exploitation of sea and water resources**
Living resources, extraction of non-living resources, production of renewable energy, maritime transport, tourism and leisure, public sector

Climate Change

- **Cumulative impacts of climate change**
Oceans and seas: raise of sea level, increasing acidification
Fresh waters: raise of temperature, flow of rivers rapidly and frequently changes, lower precipitation or frequent droughts
- **Role of ocean in decarbonisation**

Lack of understanding, connection and investment

- **Out of sight, out of mind**
Need to create an “ocean literate” society, where all segments of society understand the value of oceans and waters for our well-being
- **No measurement, no prediction, no management**
marine information in the EU remains highly fragmented
- **Political and financial underinvestment**
insufficient political action to protect and manage sustainably the ocean and waters

Inadequate governance

- **Multisector and multilevel segmentation of the instruments, policy frameworks and institutional arrangements**
weak international governance, overlaps and gaps between jurisdictions that unsustainable and illegal practices can exploit, weak transparency, accountability and compliance of the members of the organisations and parties to the agreements.

MISSION | Starfish 2030: Restore Our Ocean and Waters

MISSION PORTFOLIO

Filling the knowledge and emotional gaps

- **A pan-European education programme on ocean**, including youth engagement by launching a European blue regeneration voluntary corps and a Blue ERASMUS-like programme for university students.
- **Generating a new blue workforce** by reviewing training and education provision for people of all ages, including a diversified skill and competences framework focusing on the blue jobs of the future.
- **European Strategy for Marine Science** to overcome the current fragmentation of studies and research, avoid duplication, enable transitioning science and innovation into sustained services
- **Streamlining existing data, models and services** to supplement ocean data with coastal and freshwater data provided on a national or local scale, in order to reach a sufficient resolution and reduce the level of uncertainty
- **Digital Twin of the Ocean simulator** to test scenarios that deal with different evolutions of the ocean environment according to climate scenarios, anthropogenic stressors or Green Deal policy strategies

Regenerating marine and water ecosystems

- Increasing the protection of EU waters through the **expansion of marine protected areas** and **invest in local communities** to become co-managers of marine protected areas
- **An EU Blue Parks Programme**, consisting of blue reforestation, rewilding and other ecological engineering as well as full ecosystem-based management of local activities
- Developing **methodologies for defining and assessing ecosystem-based services** and nature based solutions
- **Stopping the most destructive human practices** come from fishing, seabed extraction, offshore installations, telecommunication and energy cables, pipelines, coastal development or tourism
- **Regenerating European rivers** by removing obstacles to sediments flow and migration of diadromous species, reducing pressures on water bodies and improving biodiversity
- Reducing water abstraction and preserve the most valuable water sources for drinking supply by **looking for alternative sources for other sectors**, especially for agriculture;
- **New digital tools** will be essential for policy makers to access relevant and new, timely scientific knowledge on policy recommendations and developments and reforms.

Zero Pollution

- Designing and experimenting solutions and demonstration projects following a systemic approach to **prevent the release of harmful substances** (plastics, contaminants and nutrients)
- Achieving **zero litter generation** through a vigorous action on plastics and micro plastics
- **Halting eutrophication** of European seas and waters means focusing primarily on the reduction of the use of fertilisers and of diffuse sources of nutrients from farming
- **Reaching zero spill of persistent organic and non-organic pollutants** through updating wastewater treatment to treat important contaminants (such as pharmaceuticals), reduce polluted storm water spillages to, vigorous action in ports and vessels to halt discharge of fuels and lubricants, combat the introduction of invasive alien species;
- **Reducing underwater acoustic emissions** by at least 50 percent by optimising all possibilities for limiting marine noise.

Decarbonising our ocean, seas and waters

- **An EU Green Shipping Strategy** by developing and spreading carbon neutral propulsion systems, new eco-design of ships, integration of circular economy concepts and spearheading the incorporation of on-board advanced IT technologies
- **A Green Port Strategy** by fostering major investments and innovations of ports and marinas to provide the necessary installations and services for industry and travellers
- **Upscaling offshore renewable energy** by building industrial capacities to the scale needed, integrating production efficiently in the future energy system, making space for offshore energy
- **Innovative aquaculture** promoting the use of feed ingredients, optimising the discharge management in processing plants, boosting algae and seaweed production for human consumption, cultivating other seaweed and macro- and microalgae in fish feed
- **Blue low carbon renovation for coastal tourism** by embracing energy efficiency, waste and wastewater treatment and new patterns for the food system, supporting decarbonisation and a transition to sustainable and efficient eco-tourism.

Revamping governance

- An **Integrated Ocean and Water Plan for Europe** (2022-2030) will be prepared by the end of 2021
- A **European Blue Citizens' Forum** will be arranged, composed of all segments of society
- The **EU Ocean and Water Agency** will be created to service the implementation of the Mission
- **Circular economy partnership with Mediterranean** riparian countries will be concluded to ban reuse and recycle plastics
- Ensuring that all aquatic ecosystems will be assessed and managed on the basis of the **ecosystem approach**