



Mission Starfish 2030: Restore our Ocean and Waters*



What are EU Missions?

Partly inspired by the Apollo 11 mission to put a man on the moon, EU missions are a commitment to solve major societal challenges like:

- Fighting cancer;
- Adapting to climate change;
- Living in greener cities;
- Ensuring soil health for healthy food, people, nature and climate;
- Cleaning and restoring our ocean, seas, coasts and rivers*.

Each EU mission will have a specific timeframe and budget depending on the challenge. They will go beyond classic research and innovation, and will spark innovation across sectors to deliver effective solutions. Moreover, missions will play a crucial role in achieving EU priorities such as the European Green Deal and Europe's Beating Cancer Action Plan.

Your participation counts

We need you to make these missions happen. So far, Mission Boards, a broad mix of experts from innovation, research, policy making, civil society and practitioner organisations, have been providing input to the European Commission to specify possible missions. Now is the time to engage with Europeans like you to make sure missions are relevant and make a real difference for all EU countries. By working together we can achieve much more.

* Mission Healthy oceans, seas, coastal and inland waters.

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A healthy blue planet is crucial for our future. The ocean, seas, coastal and inland waters form a single system, which covers around 75 percent of the Earth's surface. It is the richest source of biodiversity, it supports unique habitats and is interconnected with other components of the climate system through global exchange of water, energy and carbon. Our ocean and waters are public goods. We are all responsible, individually and collectively, for their protection and health. This requires changing our perspective and being aware that our ocean and waters have a value that needs constant replenishing, not depleting.

All people on Earth depend directly or indirectly on the ocean, seas and inland waters. Without healthy ocean and waters, there is simply no life on earth.



By cleaning our marine and fresh waters, restoring their rich biodiversity and making our blue economy sustainable and climate-friendly, this mission aims at the full discovery and restoration of European marine and freshwater ecosystems by 2030.

This is why knowing, protecting and restoring our ocean, seas, and waters is one of the defining endeavours of our time. The connected water system is the **origin of all life on Earth**, and human existence on this planet depends on it. The ocean and waters **provide us with the water we drink and the air we breathe**, producing 50% of the oxygen on our planet. They cover around three quarters of the Earth's surface and are the essential **reason why humanity still enjoys a stable, life-sustaining climate**. They are home to **rich biodiversity** and unique species. They provide us with **food, clean energy and novel medicines and sustain the livelihoods** of many in our communities. They also hold many **unknown wonders** that we are yet to discover.

However, we are leaving an **ever increasing footprint** on the ocean and waters which is rapidly degrading their health and threatening their ability to provide many essential services:

- **Pollution** is degrading all parts of the water cycle from the snow and ice on the top of the Alps to the bottom of the ocean.
- **Human actions** such as overfishing, unsustainable tourism and land uses threaten more species with extinction now than ever before.
- The **human-induced climate emergency** is altering the state of the ocean and waters and the critical functions they fulfil. The ocean absorbs around a quarter of all our CO₂ emissions from the air, making the ocean more acidic and therefore less habitable for many species.



- Increased temperatures and melting polar ice are **changing ocean currents** and slowing down the Gulf Stream, which is largely contributing to Europe's mild climate, sufficient rainfall for reliable agriculture and high yields of fisheries.
- We can already feel the consequences with rising **sea levels, more severe floods and extreme weather** such as long droughts which are threatening our livelihoods and are starting to displace many communities.



To reverse this trend, the European Union is proposing to launch a Mission. A Mission to know, restore and protect our ocean and waters by 2030, celebrating our planet's most precious resource – its life-giving waters.

Let's create a sense of awe and wonder around Europe's rivers, lakes, coastlines, seas and ocean; champion new exploration through science, research and innovation, excite through the surprise of new discoveries and solutions. Help us to protect what we still have, and to recover what has been lost. Lead us towards meaningful actions, demonstrating how small everyday choices can make big impacts. We must understand the water cycle as a system – from source to sink.

Inspired by the shape of a starfish, the Mission will address five overarching objectives. The mission seeks to **discover the unknown** secrets our ocean and waters are still holding. Its aim is to **stop the pollution** in our ocean and waters, preventing plastic waste, chemicals and other contaminants from reaching rivers and the sea. It will **restore nature, its biodiversity** and degraded ecosystems through increased protection as well as active reforestation, rewilding and other nature-based solutions. The mission will help to **make the blue economy more sustainable and climate-friendly**, by promoting renewable and carbon-neutral technologies, reducing emissions from existing sectors and developing innovative solutions to reduce the environmental footprint of human activities. To fulfil this mission, the European Union will build on its policies and programmes. It will support **new ideas, research and innovation** to develop and scale up solutions that can transform the way we care for our blue environment. The Mission will also propose **new governance models** and build partnerships with governments, businesses, universities, civil society and with many others to work towards this common goal.

But we cannot do this without you. We need you to work with us to shape the future of our ocean, seas, coasts, rivers and lakes and ensure a better future. We want you to become part of the solution, to better understand the ocean and waters, change the way we act, consume and do business and make policy. We need your help to develop solutions that will reduce our ecological footprint and sustainably unlock the potential of our blue economy. Become an actor for change in your community. Help us restore the health of our blue planet for a more sustainable and bluer future.

For more information: <http://ec.europa.eu/mission-ocean> or follow #MissionOcean #EUmissions #HorizonEU on social media.