

Message from the European Marine Board

This is message from the Europe Marine Board to the wider society represented by the participants of EurOCEAN 2019. It describes how we should work together during the next decade (2021-2030), in light of the forthcoming IPCC report on the Ocean and Cryosphere, to achieve the future we want for the ocean and the role we envisage for the European marine science community in contributing to achieving the United Nations Sustainable Development Goals.

Ocean awareness is increasing: from the concern of plastic litter in the ocean¹, to the multiple impacts of climate change, including on human health, and the willingness of citizens to take action. This provides an opportunity to gain a better understanding of the ocean and its close relationship with the land, atmosphere and humans; to describe possible solutions to global challenges; and to promote the human behavioural changes needed for a sustainable ocean.

Recent ocean-focussed conferences all have a common message: to better understand the ocean through marine science and ensure that marine research is relevant to wider society and can inform decision-making at all levels. The current and upcoming European Union Framework Programmes for Research and Innovation will provide opportunities to set and implement the European Union's objectives to achieve sustainable use of the marine environment. The UN Decade of Ocean Science for Sustainable Development (2021-2030)², the Ocean Decade, will generate the scientific knowledge and build the underpinning infrastructures and partnerships needed for sustainable development of the ocean. The Ocean Decade will provide ocean science, data and information to inform policies for a well-functioning ocean in support of all Sustainable Development Goals of the 2030 UN Agenda and the Paris Agreement³.

EurOCEAN 2019 is one of the first steps from the European scientific community to prepare for the Ocean Decade and ensuring that it aligns with the EU Framework Programmes. Whilst strategic frameworks, such as the Ocean Decade, are in place, it is now imperative that we take decisive and urgent action to address the growing and combined impacts of climate change and human pressures on our marine environment.

Europe's marine science contribution to a sustainable future

The European Marine Board reiterates the commitments of its 6th EMB Forum Message "Marine science to support the UN2030 Sustainable Development Goals"⁴. However, to achieve sustainable development we need to realise the goals of the EurOCEAN 2014 Rome Declaration⁵ and address the Call to Action on "Evolving European Ocean Observing"⁶. We therefore call on the United Nations, European countries, the European Union⁷, the European Investment Bank, and the private sector to support the marine scientific community in working towards the Ocean Decade goals.

¹ <http://oceanliteracy.wp2.coexploration.org/>

² <https://en.unesco.org/ocean-decade>

³ <https://unfccc.int/process-and-meetings/the-paris-agreement/d2hhdC1pcy>

⁴ http://www.marineboard.eu/sites/marineboard.eu/files/public/EMB%206th%20Forum/EMB_6th_Forum_Message.pdf

⁵ http://marineboard.eu/sites/marineboard.eu/files/public/publication/Rome%20Declaration-249_0.pdf

⁶ <https://eoosconference2018.eu/sites/default/files/EOO%20Conference%20Call%20to%20Action%20FINAL.pdf>

⁷ Including the European Commission, Parliament and Council, in view of the ongoing initiatives supported by Horizon 2020 and the forthcoming Horizon Europe programme

As suggested in Navigating the Future V⁸, to achieve these goals we need to:

- Ensure that Horizon Europe, its proposed Mission “Healthy oceans, seas, coastal and inland waters”, and the Ocean Decade promote a holistic vision of the ocean, through a sea-basin approach, and by applying transdisciplinary sustainability science that includes scientists, users of the marine environment and civil society. It is particularly important to ensure that the Horizon Europe Mission “Healthy oceans, seas, coastal and inland waters” includes all sources of pollution harming the marine environment, increases our knowledge of the land-ocean-atmosphere interfaces, and is in line with the Ocean Decade goals.
- Promote marine research and innovation as pivotal for cooperation between countries at sea basin (including across-basins), European and international levels, and towards international ocean governance, that ensures conservation and sustainable use of sea and ocean resources.
- Support fundamental research as the foundation of science. Knowledge of the essential processes of the ocean governed by geology, physics, chemistry and biology and fundamental research techniques, such as taxonomy, set the basis for applied science to generate societal impacts.
- Build a better-coordinated European Ocean Observing System, which includes sustained *in-situ* ocean observations, aligns with the GOOS 2030 Strategy⁹, and ensures an Integrated Ecosystem Approach. This will help to establish an early-response system to gain a better understanding of the short- and long-term impacts of extreme events and multiple stressors on the marine environment and the ecosystem services it provides.
- Ensure a knowledge-based circular blue economy¹⁰, including organizing the different uses of the ocean space across time, to balance conservation efforts, food and energy production, and harness ocean resources in a sustainable and equitable manner, while minimizing the human impact on the environment.
- Go beyond the marine science community to re-inforce that the ocean is a common good whose health is crucial for humanity. Current science and new technologies have a role in stimulating a fascination for discovery in our seas and oceans, together with the identification of common priorities through collaboration with all stakeholders. An ocean aware society will, in return, see the added value of investing in marine science and expanding the understanding of planet ocean.

⁸ <http://www.marineboard.eu/navigating-future-v>

⁹ GOOS 2019. *The Global Ocean Observing System 2030 Strategy*. IOC, Paris, 2019, IOC Brochure 2019-5 (IOC/BRO/2019/5) https://www.goosocean.org/components/com_oa/oa.php?task=download&id=42315&version=1.0&lang=1&format=1

¹⁰ https://ec.europa.eu/research/bioeconomy/pdf/ec_bioeconomy_strategy_2018.pdf#view=fit&pagemode=none