

Feedback from European Marine Board to European Commission's Roadmap on the European Green Deal Strategy for Adaptation to Climate Change (29 June 2020)

We welcome the holistic approach of the proposed strategy, as climate change is already affecting the daily lives of the European citizens and the decisions we all make. We also welcome that that strategy will support the resilience of natural ecosystems through better conservation, management and restoration. This will be key, as adaptation should go hand with hand with mitigation measures, and nature remains the biggest ally to store carbon from the atmosphere.

One third of the EU population lives within 50 km of the coast. Adaptation to climate change for vulnerable coastal and marine areas will be key, also in line with the 'leaving no one behind' ambition of the President of the European Commission. But high coastal human population density and excessive exploitation of natural resources puts enormous pressure on our coastal ecosystems. The health of humans are intricately linked to the health of the ocean, not just at the coast but also inland, through sustainable seafood provision, health and wellbeing through coastal tourism, and marine biodiversity and biotechnology providing future medicines. In line with the One Health concept, the health of the ocean and of humans are fully interlinked and inter-dependent. This means that it will be vital to adapt the management of these and other sectors in an appropriate manner to make them more resilient. However, these adaptation measures should not negatively affect the health of either the ocean or humans. In line with "building back better", this will also provide an opportunity to explore and implement eco-friendly solutions.

Restoration of vegetated coastal ecosystems, such as tidal marshes and seagrass meadows (coastal 'blue carbon' ecosystems), could provide climate change mitigation through increased carbon uptake and storage of around 0.5% of current global emissions annually (IPCC). The paper by Duarte *et al.* (2020) shows the key opportunities of saltmarsh, seagrass, kelp and oyster reef restoration all pointing to the importance of Blue Carbon and coastal defences as well as water quality improvement and coastal protection, which will be important in the future. The current voluntary guidelines on how to include coastal wetlands in a country's greenhouse gas inventory (Guidelines on The 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (Wetlands Supplement)) should be considered for future actions in line with this strategy.

Duarte, C.M., Agusti, S., Barbier, E. *et al.* Rebuilding marine life. *Nature* **580,** 39–51 (2020). https://doi.org/10.1038/s41586-020-2146-7