

## Memorandum of Understanding between the Ministry of Environment, Climate Change and Technology of the Maldives and University of Milano-Bicocca on Cooperation and Coordination to Undertake Ecological and Socio-Economic Assessments of Existing Protected Areas and Potential Protected Areas in the Maldives

Lisbon, 28 June 2022 – On the second day of the United Nations Ocean Conference, the Government of the Maldives (Ministry of Environment, Climate Change and Technology) and University of Milano-Bicocca (Milan, Italy) signed a **Memorandum of Understanding** (MoU) aimed at providing an innovation tool for coordination and cooperation in protecting one among the most emblematic marine and coastal sites of the world for what concerns the current global environmental threats deriving from climate change, including sea-level rise and ocean acidification: the central Maldivian atolls of Meemu, Faafu, Dhaalu and Thaa, in the earth of the Indian Ocean.

The objective of the MoU is pursued through the implementation of the "*Vertical Ocean*" project, which revolutionizes the approach to ocean protection through consideration of all three marine dimensions regulated by the law of the sea: the seabed and subsoil, the water column, and the airspace above the marine surface.

*"Vertical Ocean"* moves from the premise that the relationship between man and the ocean has been long since influenced by the viewpoint of a subject that walks on land. Inherently, man does not dive, nor fly. His point of view has always been the one of a man that becomes seaman and, as such, crosses the ocean horizontally, sailing all over the world. Ocean depth exploration is only for a few, and the sky is mostly looked at as a separate part of the ecosystem. *"Vertical Ocean"* aims, instead, at recognizing the low-lying Maldivian land features and the surrounding natural elements – namely, the marine waters and the atmosphere – as a single unit of the same ecosystem.

Accordingly, each of the three marine dimensions, regulated by a specific legal regime in the context of the jurisdictional divisions established by international law, must be included in any consideration aiming at pursuing an ecosystem approach to environmental preservation and protection of marine and coastal areas. A "vertical" approach is thus needed, as the rise of ocean level has somehow changed our original perspective.

The fact that the International Law Commission has elected 'Sea-level Rise in Relation to International Law' as a topic that deserves in-depth study is emblematic of the urgency of the matter also for what concerns the certainty of international relations, since the rules on the measurement of maritime baselines are destined to be challenged by a changing coastal environment. "*Vertical Ocean*" would offer a privileged point of view in assessing the potential changes of the maritime inner limits.

Besides the legal issues raised by sea-level rise, environmental preservation of pristine sites proves particularly challenging in the era of climate change, as the physical and ecological conditions of the same ecosystem are being subject to abrupt transformations. A "vertical" approach is deemed more appropriate with a view not to forgetting the degree of the reciprocal influences of the three different elements of the ocean space, as well as their associated species, in relation to climate change. Sea-level rise can be better understood in the context of a "vertical" approach to the measurements of such reciprocal influences. Last but not least, the 'human' element of the oceans, i.e. the population of islanders profoundly impacted by these increasing pressures, will play a crucial role in securing resilience and, overall, in providing responses to the most serious threats based on preparedness and compliance with the objectives of "*Vertical Ocean*".

"Research will be conducted over the next three years by a team of over 20 scientists from University of Milano-Bicocca, with the support of the Maldivian Government" – explained Professor Paolo Galli, Scientific Coordinator of the *"Vertical Ocean"* project and Director of the Marine Research and Higher Education Center (<u>https://marhe.unimib.it</u>) in the Maldives. He continued: "The MoU will provide a framework within which technical assistance and in-kind support will be secured to local officers and scientists to better protect the Maldives, in line with SGDs 14 (Life below Water) and 17 (Partnerships for the Goals)".