Written Intervention for the Dialogue on the Ocean and Climate Change at SB64

June 11, 2026

The Universitet i Bergen welcomes the opportunity to contribute to the 2026 Dialogue on the Ocean and Climate Change. The Bjerknes Centre for Climate Research is a global leader in climate change science and brings together scientists from the University of Bergen, the Norwegian Research Centre, the Nansen Environmental and Remote Sensing Center, and the Institute of Marine Research. We would like to use this opportunity to highlight the importance of the ocean carbon sink and the key role of observing systems and in situ field data in supporting the activities of the UNFCCC.

Emitted CO_2 can either be stored in the atmosphere, sequestered by the ocean carbon sink, or sequestered by the land carbon sink. Estimates of the ocean carbon sink based on ocean models and ocean observation data products allow the scientific community to constrain the land carbon sink and understand where anthropogenic emissions end up. Recent evidence from Scandinavia suggests significant weakening of the land sink, thus we cannot consider that the function of the carbon sinks is immune to the impacts of climate change. Maintaining and expanding observing capabilities is especially important given recent announcements by the U.S. that the Ocean Observatories Initiative which provided critical ocean observing data on ocean carbon uptake and climate change impacts is being decommissioned. We welcome the EU's leadership in this space through the OceanEye initiative, as shared at the Ocean and Climate Change Dialogue. The value of ocean carbon and oxygen observing systems becomes especially important as we see expanding interest in marine carbon dioxide removal technologies.

We also highlight that there are still fundamental knowledge gaps on how climate change and marine industrial processes such as fishing and dredging impact the biological carbon pump, and the associated consequences of such impacts on the strength of the ocean carbon sink. A recent workshop on the roles of marine biology in helping the ocean store carbon identified 10 processes that were key to improve in IPCC models to better resolve changes in the biological carbon pump. The workshop brought together ocean carbon scientists from around the world, and across multiple projects, including but not limited to NERC BIO-Carbon (UK), OceanICU (EU), EXPORTS (USA), BIOPOLE (UK), APERO (France), and SOLACE (Australia). Final outputs from the workshop will be available in time for the 2027 Ocean and Climate Change Dialogue.

Additionally, we highlight that for blue carbon accounting, field measurements of carbon stocks and accumulation rates are essential for allowing countries to account for these ecosystems in their NDCs. Recent research as part of the HEU project MARCO-BOLO has shown that for Europe, even a holistic compilation of all carbon stock data from seagrass sediments revealed major spatial gaps which limited modeling efforts to predict carbon stocks using oceanographic variables for Europe. We would like to note that while in many cases we have the data we need to act (i.e. preserve blue carbon ecosystems to preserve carbon storage), in many cases data gaps still exist that limit technical implementation (i.e. carbon stocks and accumulation rates to allow for carbon crediting and insuring). This is the case for both developed and developing countries.

We welcome opportunities for the Ocean and Climate Change Dialogue to connect this information with the Research and Systematic Observations track and Research Dialogue of the UNFCCC.

The University of Bergen would also like to highlight the Norway-Pacific Ocean-Climate (N-POC) Scholarship Programme as a case study for knowledge sharing and support of ocean-climate science expertise in PSIDS. N-POC is an ambitious partnership in research and PhD training between the University of Bergen in Norway and the regional University of the South Pacific (USP). Funded by Norway's Ministry of Foreign Affairs through the Norwegian Agency for Development Cooperation, the programme fully funds PhD scholarships to up to 22 scholars from the Pacific Islands region who are researching ocean and climate issues at the USP, within disciplines ranging from the natural sciences to the social sciences and humanities. The two universities have a long record of collaboration on research projects, performing arts, student exchange and shared initiatives of science-driven ocean and climate diplomacy. The collaboration between the two universities is managed through a broad Memorandum of Understanding. Finance opportunities through academic channels and University partnerships is one area we would like to highlight.

We thank the co-facilitators for a productive and interesting Dialogue.