

5 June 2024

Dear Special Rapporteur to the Human Rights Council;

Thank you for the opportunity to give input. Ocean Conservancy is a nonprofit organization based in Washington, D.C., USA working to create a healthy ocean protected by a more just world. We advocate for rapid and ambitious nationwide greenhouse gas emissions mitigation that includes ocean-based options. We therefore would like to bring to your attention the potential human rights implications of a portfolio of new and emerging technological ocean-based climate solutions called marine carbon dioxide removal (mCDR). The rapidly developing mCDR sector is worth considering as the Special Rapporteur develops its report on access to information, procedural rights, effectiveness of decision-making processes, and better protecting substantive human rights in the context of climate change.

mCDR encompasses a suite of emerging technologies that seek to use the ocean's physical, chemical, and biological properties to mitigate climate change. Examples include sinking of biological materials to sequester carbon, iron fertilization, ocean alkalinity enhancement, and direct capture of carbon dioxide dissolved in seawater¹. Private entities and governments, mostly from the Global North, are driving forward this research to provide the global public good of climate mitigation. But early results indicate that many of these technologies could have social and ecological impacts on human communities both where the intervention occurs and far beyond. These impacts could be multiplied if natural systems were perturbed or disrupted by mCDR activities. However, research into the social and cultural outcomes of mCDR is lagging, and public discussions about tradeoffs among the many climate solutions that are ready or developing are embryonic at best (Question 1).

A coordinated global mCDR research effort is needed to provide much more decision-relevant information on these technologies (Questions 1 and 2). The scientific community is beginning to self-coordinate through support from philanthropic and government funders. However, most of the global community does not know about mCDR and ocean-based climate interventions, and it is far from having decision-relevant information about the benefits and risks of mCDR technologies. mCDR research is expensive, and it also depends on existing expensive global climate change monitoring and modelling. This alone creates high barriers for low-income nations or groups to be part of the research (Question 3). Because the social and ecological outcomes of mCDR are under-researched, the global public faces further barriers to understanding how these technologies are likely to affect their human rights and climate change overall (Question 3).

¹ https://oceanconservancy.org/wp-content/uploads/2023/01/Oceans-CDR-22-12-B_03_locked.pdf

Until national or international rules and regulations about mCDR exist², Codes of Conduct can help ensure that emerging climate change technologies like these are safe, effective, and equitable³. Without guidance, experimentation and implementation of new technologies like mCDR could occur in haphazard, opaque ways that prioritize return on investment for those proposing them but do not adequately consider social impacts, ecological risks, or equity.

The Aspen Institute Code of Conduct for Marine Carbon Dioxide Removal Research that Ocean Conservancy coauthored⁴ provides a first step towards addressing these concerns (Question 5). It seeks to ensure that research teams foreground equity and justice while filling knowledge gaps about mCDR activities. It includes principles that are central to the UN Declaration on the Rights of Indigenous Peoples and guides researchers to engage and provide decision-making support to communities that may be affected by mCDR research. Additional work is needed to make this particular Code of Conduct more easily implementable and to include voices from SIDS and LDCs. However, requiring mCDR researchers to demonstrate adherence to a Code of Conduct will provide a minimum bar to ensure that human rights are valorized and prioritized when considering mCDR as part of national or global responses to climate change. By extension, all work to develop new and emerging ocean-based climate solutions must be scaffolded by best practices guidance about meaningfully including the public in developing, consenting to, and carrying out research and development of these solutions.

Thank you again for the opportunity to comment.

Very truly yours,



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² mCDR policy is evolving rapidly. For example, the United States Environmental Protection Agency is considering how mCDR activities fall within existing permitting structures (<https://www.epa.gov/ocean-dumping/marine-carbon-dioxide-removal-and-solar-radiation-management-permitting>), and the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) Working Group 41 is developing advice for London Protocol Parties about mCDR (<http://www.gesamp.org/work/groups/41>).

³ <https://www.frontiersin.org/articles/10.3389/fmars.2022.872800/full>

⁴ https://www.aspeninstitute.org/wp-content/uploads/2023/11/110223_Code-of-Conduct_FINAL2.pdf