# ONE OCEAN HUB POLIC BRIEF



A multi-partner coalition to protect and restore the ocean's contributions to climate regulation, human well-being and planetary health

By Prof Elisa Morgera

The ocean and its biodiversity play a key role in regulating the global climate and slowing climate change by absorption of excess heat, carbon dioxide  $(CO_2)$  and other greenhouse gases from the atmosphere. Yet the potential of the ocean and marine ecosystems to achieve the international climate goals are still largely overlooked in intergovernmental climate negotiations. We distil here key inter-disciplinary research findings across the marine, social and legal sciences on the ocean-climate nexus and propose to take more synergistic, preventive and precautionary approaches to the interdependencies of climate change mitigation and adaptation, and the protection of marine biodiversity and human rights.

Considering the widely shared hopes across the international communities that climate finance can plug the gaping hole of resources devoted to Sustainable Development Goal (SDG) 14 (Life below water) which remains the least funded SDG of all, this policy brief calls for creating a multi-actor coalition for a comprehensive, sustainable and inclusive approach to ocean-based climate action that would set the necessary framework for channelling climate finance to the ocean. We recommend developing this coalition across different international treaties and United Nations bodies to 'protect and restore the ocean's contributions to climate regulation, human well-being and planetary health'.



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# **KEY MESSAGES**

- Prioritise ocean-based climate action that enhances efforts to protect the marine environment from climate change and prevents further human rights impacts on ocean-dependent communities;
- Prioritise community-led marine ecosystem restoration over technological approaches to blue carbon;
- Avoid repeating past mistakes, such as climate responses that have: not achieved climate mitigation, damaged biodiversity, infringed human rights, and/or led to neo-colonial approaches in conservation;
- Develop a multi-actor partnership that provides a new model of inclusive governance for ecosystembased and human rights-based climate finance for ocean-based climate action

# How much do you know about the role of the ocean in climate regulation?

- The ocean has absorbed 90% of the excess heat from global warming since 1955.
- The top few metres of the ocean store as much heat as the Earth's entire atmosphere.
- If the lower 10 kilometres of the atmosphere had taken up the same amount of heat as the ocean from 1971–2010, the atmosphere would have warmed by 36°C.
- Protecting and restoring ocean habitats is estimated to have the potential to sequester CO<sub>2</sub> from the atmosphere at rates up to four times higher than forests can.



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- The ocean is a sink for approximately a quarter of anthropogenic CO<sub>2</sub>. Both the ocean as a physical body of water and its biodiversity are essential for sequestering CO<sub>2</sub> and for global climate regulation.
- Carbon stored in bottom waters or sediments of the deep sea is considered to be removed from the atmosphere for millions of years, so activities that disturb the deep seabed could release significant amounts of carbon.
- Fish are key players in the global carbon cycle, because they sequester organic carbon as they die, sink and decompose at depth.

#### Rationale

While the Intergovernmental Panel on Climate Change (IPCC) has been assessing the relevant science on the pivotal role played by the ocean in both driving the climate system and mitigating climate change since the 1990s when negotiations for the UN Framework Convention on Climate Change (UNFCCC) were launched, there has been slow and insufficient consideration of the ocean-climate nexus under the UN climate change regime over the past 30 years. Even over the last three years, despite the inclusion of the ocean in the Glasgow Climate Pact, the priority actions identified at the ocean and climate dialogues since 2020 have not yet been operationalised through national action or internationally via inclusion in Conference of the Parties (COP) Decisions. In other words, the ocean and climate dialogues have not yet led to the identification of continuing workstreams under the UNFCCC that can enhance and support Parties' progress on ocean-based climate action, and channel climate finance towards SDG14 (which remains the least funded SDG of all).

Meanwhile, international research and advocacy on the oceanclimate nexus has not yet focused on the full interconnected range of marine ecosystem services (including deep-sea ecosystem services) that are negatively impacted by climate change (food and water supply, renewable energy, benefits for health and well-being, cultural values, tourism, trade, and transport). There is sufficient knowledge to avoid 'foreseeable negative impacts on human rights' that can arise from decisions that may negatively affect marine biodiversity, as marine ecosystem services affected by climate change are essential for various dimensions of human well-being, which are protected as international human rights.

# Learning from past mistakes, but also challenging some assumptions about climate action

Our research has identified a series of lessons learnt from the approach used for reducing emissions from deforestation and forest degradation (REDD+), that point to mistakes that should not be repeated in the context of ocean-based climate action, but also evidence of a different approach to financing climate action than is usually understood. REDD+ has mobilised over US\$350 million of results-based payments to date,<sup>1</sup> financially supporting developing countries that reduced deforestation and therefore contributed to carbon absorption and storage'.<sup>2</sup> This experience shows that ocean-based climate action can be financed internationally by:

- providing a means to enable countries to comply with the pledges made in their National Determined Contributions (NDCs) with financial support from a variety of sources;
- taking integrated approaches to mitigation and adaptation which have significant potential for societal benefits;
- moving beyond market-based approaches, by allowing for uncertainty in the measurement of carbon flux and storage that impact on certification and crediting;

<sup>1</sup> D Maniatis et al., 'Toward REDD+ implementation' (2019) 44 Annual Review of Environment and Resources 373–398.

<sup>2</sup> ME Recio, 'Legal Transformation in an Era of Globalisation: <u>The Case of REDD+'</u> (PhD Thesis, University of Eastern Finland, Joensuu, 2022).

- valuing the protection of ecosystems through a holistic approach;
- developing guidance and financing approaches that ensure respect for international biodiversity and human rights standards, outside of the UNFCCC/Paris Agreement Framework, as long as we ensure equitable co-development of this guidance by countries in the Global North and Global South.

That said, it cannot be overstated that REDD+ projects, despite the adoption of environmental and human rights safeguards, did not prevent negative impacts on the environment and Indigenous peoples' human rights. In addition, the promise of a marketbased approach (even if eventually a regulated market does not materialise) and the arising of private carbon markets attracted investment by entrepreneurs that have not contributed to climate mitigation and have contributed to neo-colonial approaches to conservation (UN Doc A/77/226, para 20).

# The proposed coalition

To achieve faster, but also inclusive and transparent progress on ocean-based climate action under the UNFCCC and at the national level, a bottom-up approach should be explored. Interested countries, UN bodies and non-State actors should move forward outside of the UN climate negotiations, albeit with a view to mobilising climate finance under the Paris Agreement. To that end, we can draw on the example of the Climate and Clean Air Coalition that has promoted action on black carbon, but develop more specific approaches to ensure an ecosystem-based and human rights-based approach, and meaningful inclusion of different knowledge systems and Global South perspectives. from the Global South and North, Indigenous and local knowledge, children<sup>3</sup> and youth;

- include mitigation goals, even when challenges persist in quantifying the contribution that emission reductions make to a country's mitigation target, which is one of the key uncertainties with regard to ocean-based climate action;
- overcome the priority assigned to mitigation over biodiversity co-benefits and human rights protection, and limitations in public participation under the UNFCCC/Paris Agreement;
- support a country-led prioritisation of ocean-based climate actions that maximises multiple benefits, rather than reflecting exogenous and narrower interests of development partners;
- support coordination of relevant functions across the UN System, namely:
  - UN Office of the High Commissioner for Human Rights and the UN Special Rapporteurs on Climate Change and on Human Rights and the Environment;
  - The UN Environment Programme's work on marine ecosystems and on human rights and the environment;
  - The UN Development Programme
  - the Secretariat of the Convention on Biological Diversity, whose 2022 Global Biodiversity Framework includes goals on human rights, nature-based solutions to climate change, increasing marine protected areas and ecosystem restoration, as well as guidance on ecosystems integrity, people's resilience and biodiversity-based livelihoods in the face of climate change;

The proposed multi-actor partnership would:

• be a State-led initiative with non-State actors' contributions to information, analyses, and scientific assessments, with equal representation of natural and social sciences, researchers

3 For children's participation, see our proposed Framework for Children's Participation in International Ocean-Climate Fora in S Shields et al, 'Children's Human Right to be Heard at the Ocean-Climate Nexus' (2023) 38(3) International Journal of Marine and Coastal Law.



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Photo: Jakob Owens

- the secretariat of the 2023 Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement), which includes innovative provisions on the ocean-climate nexus and on human rights;<sup>4</sup>
- the UN Food and Agriculture Organisation, to support climate action within the fisheries sector and integration of small-scale fishers' knowledge;<sup>5</sup> and
- UN Decade for Ocean Science and the UN Decade for Ecosystem Restoration (2021–2030).

The Coalition will focus on co-developing ecosystem-based and human rights-based approaches to the:

 integration of NDCs and Marine Spatial Planning processes, focusing on context-specific approaches and meaningful participation of Indigenous peoples and local communities;

4 E Morgera et al, 'Addressing the Ocean-climate Nexus in the BBNJ Agreement: Strategic Environmental Assessments, Human Rights and Equity in Ocean Science' (2023) 38(3) International Journal of Marine and Coastal Law.

5 J Nakamura, JC Lima Weston and M Lennan, 'International Legal Responses for Protecting Fishers' Fundamental Rights Impacted by a Changing Ocean' (2023) 38(3) International Journal of Marine and Coastal Law.



Photo: The National Oceanic and Atmospheric Administration Photo Library

- creation and management of dynamic marine protected areas for climate mitigation purposes, in addition to their conservation features, that will shift with projected species distribution according to climate change models;
- restoration and enhancement of marine habitats (planting of seagrass beds, kelp, mangroves, seeding of biogenic reefs) that offer climate protection and reduce the impacts of climate-induced extreme weather events, such as tidal waves and storminess;
- reduction in damaging fishing practices that target fish species that contribute to climate change mitigation, notably the emerging industrial mesopelagic fishing industry;
- precautionary approaches to ocean-based carbon dioxide removal technologies, that may alter the dynamics of the ocean ecosystem and themselves risk degrading ecosystem services, including nutrient cycling and commercial fish stocks and, consequently, carbon sequestration;
- piloting of sustainable and inclusive ocean-based climate action that should be prioritised in the allocation of international climate finance;
- development of guidance for international climate funders.

This brief is based on Elisa Morgera, Mitchell Lennan, Giulia La Bianca, Holly J. Niner, Ellycia Harrould-Kolieb, Eugenia Recio Jeremy Hills, Mara Ntona, Alana Malinde S.N. Lancaster, Mia Strand, Bernadette Snow, Kira Erwin, Lynne Shannon, Sian Rees, Kerry Howell, Kieran Hyder, Georg Engelhard, and Kati Kulovesi, 'Ocean-based Climate Action and Human Rights Implications under the International Climate Change Regime' (2023) 38(3) International Journal of Marine and Coastal Law.

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