



Oceans and Law of the Sea

Contribution from the United Nations Framework Convention on Climate Change

I. Introduction

1. The United Nations Framework Convention on Climate Change (UNFCCC) secretariat (“the secretariat”) seeks to contribute to the United Nations General Assembly resolution entitled “Oceans and the law of the sea” (79/144), of 12 December 2024 for the report entitled “Oceans and the law of the sea” on developments and issues relating to ocean affairs and the law of the sea, including the implementation of the resolution in accordance with resolutions 49/28, 52/26 and 54/33. This report will cover the main recent developments in the UNFCCC process on oceans and law of the sea, for the reporting period between September 2024 to August 2025.
2. Parties have recognized the importance of protecting the ocean and its ecosystems in the Convention and the Paris Agreement:
3. In the Convention, Parties agreed to protect the climate system (Article 2), defined as the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions (Article 1.3, Article 4 (d)).
4. In the Paris Agreement, Parties noted in its preamble the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth.

II. Adoption of and update on the mandate on ocean-based climate action

5. At COP 25, the [Chile Madrid Time for Action](#) 2019, governments recognized the need to strengthen the understanding of, and action on, ocean and climate change under the UNFCCC. COP 25 mandated the first [Ocean and climate change dialogue](#), drawing upon the knowledge and scientific findings from the IPCC [Special Report on the Ocean and Cryosphere in a changing climate](#).
6. At COP 26, in the [Glasgow Climate Pact](#) 2021 (Decision 1/CP.26 Paras. 60-61), building on the outcomes of the first ocean and climate change dialogue in 2020, Parties invited the relevant work programmes and constituted bodies under the UNFCCC to consider how to integrate and strengthen ocean-based action in their existing mandates and workplans and to report on these activities within the existing reporting processes. Parties also invited the Subsidiary Body for Scientific and Technological Advice (SBSTA) Chair to hold an annual ocean and climate change dialogue to strengthen ocean-based action.
7. At COP 27/CMA 4, in 2022, the COP [Sharm el-Sheikh Implementation Plan](#) (Decision 1/CP.27 para. 50) and CMA [Sharm el-Sheikh Implementation Plan](#) (Decision

1/CMA.4 para. 79) continued to strengthen ocean-based action under the process and encouraged Parties to consider, as appropriate, ocean-based action in their national climate goals and in the implementation of these goals, including but not limited to nationally determined contributions, long-term strategies and adaptation communications.

8. At COP28, in 2023, the outcome of the first global stocktake (Decision 1/CMA.5, para. 180), welcomed the outcomes of and the [informal summary report](#) on the 2023 [ocean dialogue](#) and encouraged further strengthening of ocean-based action, as appropriate.

9. In accordance with [decision 1/CP.27, the Sharm el-Sheikh Implementation Plan](#), developed country Parties selected Ulrik Lenaerts from Belgium. Developing country Parties selected two co-facilitators who will be co-facilitating the ocean dialogue on a rotational basis, starting with Carlos Márcio Bicalho Cozendey from Brazil in 2025, and Sivendra Michael from Fiji in 2026.¹

III. The Ocean and climate change dialogue 2024

10. The 2024 [ocean dialogue](#) was held in hybrid mode over two days on 11–12 June 2024 in conjunction with the sixtieth session of the subsidiary bodies, Bonn, Germany. The dialogue focused on two key topics: first, marine biodiversity conservation and coastal resilience; and second, technology needs for ocean climate action, including finance links. All information on the 2024 dialogue is available on the UNFCCC’s [webpage](#).

11. At the dialogue, participants emphasized the essential role of conserving and restoring ocean ecosystems to provide climate change mitigation and adaptation benefits, protect biodiversity, and support livelihoods. Further, blue carbon ecosystems, renewable ocean energy, and advanced ocean technologies were identified as key to scaling ocean-based solutions but also requiring sustainable financing and capacity-building support to maximize their potential.

12. The 2024 dialogue underscored the urgent need to integrate climate, ocean, and biodiversity efforts so as to create synergies between the Convention on Biological Diversity and the Paris Agreement. Aligning the Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and National Biodiversity Strategies and Action Plans (NBSAPs) is essential for developing cohesive and impactful strategies. UNFCCC constituted bodies were urged to continue incorporating the ocean into their activities and workplans. Parties were encouraged to include ocean-based strategies and actions in their NDCs, as one critical tool to scale up climate action in the next decade, both for mitigation and adaptation.

13. On 2 October 2024, the mandated [informal summary report](#) of the ocean and climate change dialogue was published.

14. The co-facilitators of the dialogue presented the key messages and outcomes at the COP29 opening plenary session; and convened a [side event](#), “Insights from the 2024 ocean dialogue to drive climate ambition and finance”.

IV. The Ocean and climate change dialogue 2025

15. By the [letter](#) dated 24 March 2025, the co-facilitators laid down their vision for the 2025 ocean dialogue, and identified three priority areas:

- a) Ocean-based measures in the Nationally Determined Contributions.
- b) The ocean under the Global Goal on Adaptation.
- c) Ocean-climate-biodiversity synergies.

16. In advance of the 2025 dialogue, the co-facilitators prepared the [information note](#) which elaborated on their choice of the three topics and cross-cutting issues, the guiding

¹ See [letter](#) of the Chair of the Subsidiary Body for Scientific and Technological Advice, Adonia Ayebare, dated 24 January 2025.

questions, structure and [agenda](#) of the dialogue. 11 UN agencies, and 4 constituted bodies and work programmes of the UNFCCC, provided written contribution to the information note.

17. The 2024 dialogue was held in hybrid-mode on 17–18 June 2025, during the subsidiary bodies meetings in Bonn, Germany. Further information on the dialogue, including the agenda, webcast and panel presentations is available [here](#).

18. Based on the dialogue proceedings, the co-facilitators shall prepare the informal summary report that will contain actionable key messages, to be presented at the plenary of COP30.

V. Cooperative activities on the ocean with United Nations entities and observers

19. During the reporting period, the secretariat continued to strengthen synergies across the UN system by supporting ocean-based climate action through its involvement in key UN initiatives.² As a member of the inter-agency coordination mechanism- UN-Oceans,³ the secretariat regularly shared information on the ocean under the UNFCCC process; co-organized the UN-Oceans side event on at COP29 to support Parties in scaling up ocean-related actions, including in the context of the next round of NDCs; and contributed to the UN-Oceans convened side event at COP16 in Cali, Colombia, on strengthening ocean-biodiversity-climate synergies.⁴

20. For the 2024 ocean dialogue, ten UN-Oceans members contributed to the information note, and for the 2025 ocean dialogue, eleven UN-Oceans members contributed to the information note. In both the dialogues, UN agencies and observers actively participated in the proceedings, as expert panel members and in breakout groups discussions.

21. The secretariat was invited to contribute to the preliminary review of the Third World Ocean Assessment.⁵ The secretariat was invited by the co-chairs of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection to present at the 51st session.⁶ For the joint collaboration between UNITAR, the secretariat and COP28 Presidency, the secretariat developed the ocean e-module.⁷ The secretariat presented at the DOALOS convened capacity building sessions to the Nippon fellows on "Climate change and the ocean: An overview of UNFCCC's ocean-related work".⁸ The secretariat presented at the Large Marine Ecosystems meeting convened by IW: Learn on the ocean under the UNFCCC process.⁹ The secretariat was the co-lead for the Ocean Acidification indicators break out group in the Expert Group Meeting convened by UN-DESA in preparation for HLPF 2025.¹⁰

22. Serving as a United Nations entity on the Advisory Board of the United Nations Decade of Ocean Science,¹¹ the secretariat contributed to the review of the Decade Programme Submissions, the mid-term evaluation of the Decade, and to IOC's programmatic work on the ocean.¹² At the 2025 UN Ocean Conference, the secretariat was invited to present at the Ocean Decade Forum.¹³ Additionally, the secretariat reviewed the International Guide

²<https://unfccc.int/topics/ocean#UN-wide-coordination-on-the-ocean> .

³https://www.un.org/depts/los/coop_coor/un_oceans.htm

⁴https://www.un.org/Depts/los/coop_coor/documents/CbdCOP16UnOceansProgWeb.pdf

⁵ The Third World Ocean Assessment is one of the outputs of the third cycle of the Regular Process for Global Reporting and Assessment of the States of the Marine Environment, including Socioeconomic Aspects, available at: <https://www.un.org/regularprocess/woa3>.

⁶ <http://www.gesamp.org/meetings/51st-session-of-gesamp>

⁷ [Course: Mastering International Climate Negotiations: All You Need to Know | One UN Climate Change Learning Partnership](#)

⁸ <https://www.un.org/oceancapacity/content/unf-fellowship>

⁹ <https://iwlearn.net/events/lme24-athens-greece>

¹⁰ <https://sdgs.un.org/HLPF/2025/ThematicReviewEGMs>

¹¹ <https://www.unesco.org/en/decades/ocean-decade>.

¹² <https://oceandecade.org/news/dab-defines-strategic-orientations-for-ocean-decades-second-half/>

¹³ [Events - Ocean Decade](#)

on Marine/Maritime Spatial Planning, co-led by UNESCO's IOC and the European Commission's Directorate-General for Maritime Affairs and Fisheries.¹⁴

23. The secretariat made a written contribution to the Report of the Special Rapporteur on the human right to a clean, healthy and sustainable environment, on the topic "The ocean and human rights".¹⁵ The secretariat provided a written input to the theme "Capacity building and the transfer of marine technology: New developments, approaches and challenges", which was the focus of the twenty-fifth meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the law of the sea.¹⁶ The secretariat made a written contribution to the report of the Secretary General in accordance with the General Assembly resolution 78/159, entitled "Strengthening cooperation for integrated coastal zone management (ICZM) for achieving sustainable development"

24. The secretariat also contributed to the Global Dialogue on Sustainable Ocean Development convened by the Global Ocean Accounts Partnership (GOAP) secretariat,¹⁷ and the Global Environment Facility Biennial International Waters Conference.¹⁸ Additionally, the secretariat at the request of ocean observers, presented at various workshops, including the CBD Informal Working Group on the Ocean, GOAP convened ocean-climate NDCs and ocean accounts,¹⁹ FAO's and other ocean observers NDCs side event at SB62, and COP29 Global Ocean Forum's youth oriented session on the ocean under the UNFCCC process.

25. The secretariat extensively contributed to the 2025 UN Ocean Conference (UNOC), including by a written contribution to the Secretary-General's background note for the preparatory meeting of the 2025 UN Ocean Conference;²⁰ and, co-leading on the Ocean Action Panel 7: Leveraging ocean, climate and biodiversity interlinkages.²¹ At UNOC, the secretariat delivered a plenary statement, engaged in the Ocean Action Panels, and contributed to various events convened by UN agencies, including IOC-UNESCO and UN Environment's 24th Global Meeting of the Regional Seas Conventions and Action Plans.²² The COP30 Presidency, Brazil organized a high level side event at UNOC, "Making Waves From Paris to Belém: Accelerating Ocean-Climate Action", which was facilitated by the 2025 ocean dialogue co-facilitators, Ambassador Carlos Cozende. ²³

26. In the UNOC political declaration, "Our ocean, our future: united for urgent action", Parties welcomed the convening of the ocean and climate change dialogue.²⁴ Both the UNOC official programme,²⁵ and the political declaration include extensive references to the Paris Agreement and the ocean-climate nexus. The co-facilitator of the 2025 ocean dialogue, Ambassador Carlos Cozende spoke at the UN-Oceans side event at UNOC, on "UN-Oceans as a mechanism to mobilize multilateral ocean action and amplify collective impacts toward the implementation of Sustainable Development Goal 14".²⁶

VI. Updates under the UNFCCC Process

27. The UNFCCC constituted bodies and work programmes, have started to integrate the ocean in their workplan activities. With the outcome of the first global stocktake on the ocean, and the 2024 ocean and climate dialogue, this reporting period saw an increase in the number

¹⁴ <https://www.ioc.unesco.org/en/guidance-marine-spatial-planning>

¹⁵ <https://docs.un.org/en/A/HRC/58/59>

¹⁶ https://www.un.org/depts/los/consultative_process/contribution25/UNFCCC.pdf

¹⁷ <https://www.oceanaccounts.org/global-dialogue-sustainable-ocean-development/>

¹⁸ <https://iwllearn.net/events/conferences/iwc10-2024>

¹⁹ <https://www.oceanaccounts.org/webinar-ocean-accounts-and-climate-action/>

²⁰ <https://sdgs.un.org/sites/default/files/2024-06/N2413601%20eng.PDF>

²¹ <https://sdgs.un.org/sites/default/files/2025-05/25-00811%20ATT%20Formatted%20OAP7%20biodiversity%20interlinkages%20REV.pdf>

²² <https://www.unep.org/events/conference/twenty-fourth-global-meeting-regional-seas-programme>

²³ https://sdgs.un.org/sites/default/files/2025-05/UNOC3_Blue%20Zone_Side%20Events%20Programme_May27-2025.pdf

²⁴ <https://www.un.org/pga/wp-content/uploads/sites/109/2025/05/UNOC3-declaration-final.pdf>

²⁵ <https://sdgs.un.org/conferences/ocean2025/programme>

²⁶ [UN Oceans: Home](#)

of ocean activities been planned for and implemented by the constituted bodies and the work programmes. Annex I provides for the updates on the ocean under the UNFCCC process.

Annex I: Relevant updates under the UNFCCC process

1. Nationally determined contributions

In the 2024 [synthesis report](#) of the secretariat on the nationally determined contributions (NDCs) under the Paris Agreement, Parties continued to report ocean-based measures to demonstrate climate action. Of the Parties that included an adaptation component in their NDCs, 31 per cent identified ocean ecosystems as a priority sector for adaptation and 13 per cent have quantified targets for fisheries; while 12 per cent included reference to human- and climate-induced ocean changes such as acidification, extreme weather events, sea level rise, storms and drought. Of the 21 per cent of Parties that included information on ocean or blue carbon as a priority sector for reducing GHG emissions, 71 per cent mentioned specific ocean-based mitigation measures.

29. There has been an encouraging trend in the recently submitted NDCs. Of the 23 new NDCs analysed between 1 October 2024 and 5 May 2025, 74 per cent of Parties included ocean-based mitigation and adaptation measures, targets, and policies. Ocean-based adaptation measures were featured in the recent NDCs of 88 per cent of the Parties.²⁷ In terms of mitigation, 41 per cent of the Parties included ocean-based mitigation actions in these NDCs.²⁸

2. Action for Climate Empowerment

30. One key connection between ACE and ocean discussions within the UNFCCC process is climate literacy, which includes the ACE elements of education, awareness, training, and access to information. Last year, the UNFCCC secretariat launched a course on [Mastering International Climate Negotiations: All You Need to Know](#), which includes a module on the Ocean, in an effort to enhance understanding and awareness of ocean-related matters and their consideration under the UNFCCC process. Providing people with accurate, timely, and relevant data about the ocean-induced changes caused by climate change, such as ecosystem degradation and coastal risks, is essential. Accessible information empowers individuals, communities, and policymakers to make informed decisions and promote sustainable ocean practices. Additionally, education systems that are fit for purpose can equip individuals with the skills and knowledge needed to design and implement effective, science-based solutions.

31. ACE is also a key enabler for inclusive and participatory climate change processes, such as NAPs and NDCs. It supports societal engagement and ownership by integrating and amplifying the voices of children, youth, women, Indigenous Peoples, and other key stakeholders who bring valuable knowledge and leadership to ocean-climate action. In this way, ACE strengthens both the ambition and legitimacy of national climate policies and strategies. When citizens are informed, engaged, and heard, governments are better positioned to implement ambitious measures that protect the ocean and build climate-resilient societies.

3. Adaptation Committee

32. As part of its mandate to promote the implementation of enhanced action on adaptation, the Adaptation Committee continues to strengthen the integration of ocean-based adaptation in climate resilience frameworks. This includes ongoing work under the UAE Framework for Global Climate Resilience (decision 2/CMA.5, paras. 44–45), particularly through the development of technical guidance and training materials and by leading the work of the NAP Taskforce. The AC is supporting countries in incorporating marine and

²⁷ These measures primarily focus on restoring coastal and marine ecosystems—such as mangroves, coral reefs, and seagrass beds—building coastal protection infrastructure, implementing marine spatial planning, and advancing sustainable fisheries management. Nature-based solutions, ecosystem-based adaptation approaches, and investments in shoreline resilience are also common.

²⁸ These measures include the enhancement of blue carbon ecosystems, promotion of ocean renewable energy technologies, and decarbonization of the maritime sector, such as through clean shipping fuels and port infrastructure improvements. Several Parties also indicated plans to include coastal wetlands and other blue carbon habitats in their national greenhouse gas inventories.

coastal ecosystems into national adaptation planning, in recognition of their role in reducing climate risks and enhancing resilience.

4. Global Goal on Adaptation

33. CMA 5 adopted the United Arab Emirates Framework for Global Climate Resilience,²⁹ which includes seven thematic and four dimensional targets.³⁰ In addition, it launched the two-year United Arab Emirates–Belém work programme on indicators for measuring progress achieved towards the targets referred to in paragraphs 9–10 of decision [2/CMA.5](#),³¹ the modalities of which were further elaborated at SB 60.³² The work programme is to conclude at CMA 7, in November, 2025.

34. Throughout the work programme, a series of workshops are scheduled, and experts have been convened by the SB Chairs to assist in the technical work. At each meeting of the Subsidiary Bodies and CMA, Parties will provide guidance on the work as needed.

35. In 2025, the key stages of work are as follows:

- (a) January to April: Experts continue their technical work to produce a consolidated list of indicator options and a report on their work.
- (b) Prior to SB 62: workshop to facilitate the work of the experts.
- (c) SB 62: workshop to take stock of the progress of work by the technical experts.
- (d) Between SB 62 and SB 63: workshop to reflect on the final list of potential indicators to be agreed at CMA 7.
- (e) November, CMA 7: Parties to adopt a final list of indicators.

36. Since CMA 6, experts have continued work on refining the indicators from a pool of 7,000, had multiple virtual meetings, and discussed common approaches and methodologies such as mapping, gap analysis, and prioritization of indicators. A hybrid workshop to facilitate the work of the technical experts was held from 21 to 22 March 2025 in Bonn.³³

37. Following a compilation and refined mapping of indicators, CMA 6 invited experts to prepare a consolidated list of indicator options, and a progress report,³⁴ prior to SB62. Each target group submitted their report to the secretariat; the reports are available on the UNFCCC website.³⁵ In addition, the secretariat has prepared a technical report that provides an overview of the technical work done by experts, some noteworthy practices, challenges, and recommendations by experts.³⁶

5. Technology Executive Committee

38. Many coastal communities and Small Island Developing States have been left vulnerable to a combination of slow-onset climate impacts, including sea-level rise, coastal erosion, warming ocean temperatures, ocean acidification and salinization of land and water, and fast-onset hazards, including extreme weather events such as storm surges and tropical cyclones. These impacts often cause negative effects in coastal communities, such as losses of livelihood, water insecurity, decreased productivity in agrifood systems³⁷, and displacement. There is an urgent need to increase uptake of technologies to adapt to

²⁹ Decision [2/CMA.5](#), para. 6.

³⁰ Set out in decision [2/CMA.5](#), paras. 9 and 10, respectively.

³¹ Decision [2/CMA.5](#), para. 39.

³² See documents [FCCC/SBSTA/2024/7](#), paras. 30–63, and [FCCC/SBI/2024/13](#), paras. 68–101.

³³ See <https://unfccc.int/event/workshop-uae-belem-wp-indicators>.

³⁴ Progress report: <https://unfccc.int/documents/645725>.

³⁵ <https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/introduction-to-adaptation-and-resilience/loss-and-damage/reports-by-technical-experts-uae-belem-work-programme-may-2025>.

³⁶ Technical report by secretariat: <https://unfccc.int/documents/647061>.

³⁷ Interlinkage between climate change and agrifood systems is outlined in the publication: [Climate Technologies for Agrifood System Transformation: Placing food security, climate change and poverty reduction at the forefront](#) (FAO and UNFCCC, 2024).

progressive impacts and challenges of climate change³⁸, and adopt innovative approaches that integrate both technology and nature to enhance the resilience of coastal and ocean-dependent communities.

39. The TEC published a policy brief [Innovative Approaches for Strengthening Coastal and Ocean Adaptation](#) in 2022 which was informed by Technology Day³⁹. This policy brief emphasizes the value of integrated technological and ecosystem-based adaptation approaches, and interdisciplinary and cross sectoral efforts. For instance, green-gray infrastructure is recognized as effective approach which can bring multiple benefits such as extended lifespan of gray infrastructure, regulating water quality, supporting fisheries, and sequestering carbon. Another policy brief [Technologies for Averting, Minimizing, and Addressing Loss and Damage in Coastal Zones](#), co-published by TEC and WIM ExCom in 2020, also highlights hybrid technologies that combine engineered and nature-based approaches. Hybrid technologies encourage stronger integration by bringing together multi-sectoral actors, including experts in the fields of biodiversity research, engineering, and landscape planning, as well as representatives of local communities and governmental agencies. Drawing upon the work, the TEC delivered key messages and recommendations in the [joint annual report of the TEC and the CTCN for 2023](#) that could be helpful to dive into the proposed topics of the 2025 Ocean Dialogue.

40. In terms of NDC, the TEC and CTCN jointly published [Technology and NDCs: Stimulating the Uptake of Technologies in Support of NDC Implementation](#) in 2023. Climate modelling and vulnerability assessment technology introduced in Uruguay and utilizing ocean energy in Nauru are highlighted as success stories on the uptake of ocean-related technologies and their contribution to NDC implementation. Recommendation of this publication does not focus on a specific technology or sector, but it should be useful in considering ocean-based measures in NDCs.

³⁸ Many countries recognize early warning system is key technology to adapt to climate change. See the publication: [Realising EW4All: Innovation and Technology in Support of Risk-Informed Climate Resilience Policy and Action](#) (TEC and GEO, 2024).

³⁹ See overview of each event held under the Technology Day. [Ecosystems and Technology: Innovative approaches to strengthening coastal and ocean adaptation](#) (6 September 2021, a side event to the IUCN World Conservation Congress) [National Policy, Local Action: Scaling Integrated Approaches to Strengthen Coastal and Ocean Adaptation](#) (14 October 2021, an informal SBSTA event as a part of the SBSTA Chair lobby) [The Best of Both Worlds: Uniting Adaptation Technologies and Nature-based Solutions to Enhance Coastal and Ocean Resilience](#) (8 November 2021, a Nature Zone side event to the COP 26 in Glasgow).