

Framework Convention on Climate Change

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# Ocean and climate change dialogue 2025

Informal summary report by the co-facilitators of the Ocean and Climate Change Dialogue 2025

#### *Summary*

The ocean and climate change dialogue ("dialogue") was mandated by the Conference of the Parties at its twenty-sixth session. The 2025 dialogue was held in hybrid mode on 17–18 June 2025, in conjunction with the sixty-second session of the subsidiary bodies in Bonn, Germany. As the co-facilitators of the dialogue, we have prepared this report that provides a summary of the discussions that took place on three topics, chosen in consultation with Parties and observers: first, Ocean-based measures in the Nationally Determined Contributions, second, the ocean under the Global Goal on Adaptation, and third, Ocean-climate-biodiversity synergies. The cross-cutting issues included means of implementation, particularly finance, as well as science.

The dialogue offered a vital space for enhancing collaboration, understanding and building ocean-based climate action, illustrating needs, opportunities and case studies, as well as highlighting key messages for consideration at COP 30.

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# Abbreviations and acronyms

ABMT Area-based management tool
AOSIS Alliance of Small Island States

AR 7 WGII Working Group II of the Seventh Assessment Report of the

Intergovernmental Panel on Climate Change

BBNJ Agreement under the United Nations Convention on the Law of the Sea on

the Conservation and Sustainable Use of Marine Biological Diversity of

Areas Beyond National Jurisdiction

CBD Convention on Biological Diversity

CBDR Common But Differentiated Responsibilities

CCS carbon dioxide capture and storage

CMA Conference of the Parties serving as the meeting of the Parties to the Paris

Agreement

CO<sub>2</sub> carbon dioxide

COP Conference of the Parties

DOALOS Division for Ocean Affairs and the Law of the Sea

EbA Ecosystem-based adaptation

EU European Union

FAO Food and Agriculture Organization of the United Nations
GBF Kunming-Montreal Global Biodiversity Framework

GCF Green Climate Fund

GEF Global Environment Facility
GGA Global Goal on Adaptation

GHG greenhouse gas

GOOS Global Ocean Observing System

GST Global Stocktake

ICJ International Court of Justice

ICZM Integrated coastal zone management
IFC International Finance Corporation
IFI International Financial Institution
IMO International Maritime Organization

IOC-UNESCO Intergovernmental Oceanographic Commission of the United Nations

Educational, Scientific and Cultural Organization

IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem

Services

IPCC Intergovernmental Panel on Climate Change
ITLOS International Tribunal for the Law of the Sea
IUCN International Union for Conservation of Nature

LDC least developed countries

MARPOL International Convention for the Prevention of Pollution from Ships

mCDR marine carbon dioxide removal

MEAs Multilateral Environmental Agreements

MOI Means of Implementation
MPAs marine protected areas

MRV measurement, reporting and verification

MSP Marine Spatial Planning
MWP Mitigation Work Programme
NAP National Adaptation Plan
NbS nature-based solutions

NBSAPs National Biodiversity Strategies and Action Plans

NDC nationally determined contribution NGO non-governmental organization

PCCB Paris Committee on Capacity-building
RSO Research and Systematic Observation

SBSTA Subsidiary Body for Scientific and Technological Advice

SCF Standing Committee on Finance
SDG Sustainable Development Goal
SIDS Small Island Developing State(s)

SOPs Sustainable Ocean Plans

TEC Technology Executive Committee

UAE United Arab Emirates

UN United Nations

UNCCD United Nations Convention to Combat Desertification
UNCLOS United Nations Convention on the Law of the Sea

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization
UNFCCC United Nations Framework Convention on Climate Change

UNOC United Nations Ocean Conference
UNSG United Nations Secretary-General

# I. Key messages

- 1. As co-facilitators, we could experience, both in the run-up as during the two days dialogue at SB 62, a strong engagement from the Parties and from observers to enhance the ocean and climate dimension and to translate its integration in concrete operational terms that will contribute to higher ambition on tackling climate change and pursuing a healthy ocean. We are grateful for this, and we have synthesized the following topical and cross-cutting messages from the two days of dialogue discussions, including the breakout groups discussions and the plenary statements. We encourage Parties to read these messages in conjunction with and as a complement to the key messages of the previous informal summary reports of the ocean dialogue prepared by our predecessors.<sup>1</sup>
- 2. We hope that these messages are helpful for Parties for informing the discussions and preparation of their new NDCs, and COP 30 agenda matters pertaining to the Global Goal on Adaptation, climate finance, and strengthening international cooperation on the ocean-climate-biodiversity interlinkages.
- 3. On Topic 1, ocean-based measures in NDCs, we underscore the urgency of the inclusion of ocean-based mitigation and adaptation measures in the new NDCs for collectively strengthening ocean-based climate ambition. On Topic 2 on the ocean under the Global Goal on Adaptation, we highlight that ocean should be a cross-cutting priority and embedded across all relevant indicators, as it cuts across multiple thematic targets. On Topic 3, ocean-climate-biodiversity synergies, we reaffirm the UN Ocean Conference outcomes on strengthening international cooperation, across relevant conventions and multilateral fora, in line with their respective mandates, and urge Parties to ratify the BBNJ Agreement. On the cross-cutting themes, we highlight that science, finance, technology and capacity-building are critical enablers of ocean-based climate action. Finally, we highlight some key messages which we believe can be useful for Parties for COP 30.

#### A. Ocean-based measures in NDCs

- 4. The 2025 NDCs cycle provides a critical opportunity for Parties to enhance ambition and to include sustainable ocean-based measures and implement the outcome of the first global stocktake decision. By including the ocean in NDCs, Parties can collectively strengthen climate ambition, while maximizing climate and biodiversity co-benefits. A wide range of ocean-based mitigation and adaption measures, targets and policies are available for inclusion in NDCs, that are aligned with the 1.5°C target of the Paris Agreement. These include integrated coastal zone management, nature-based solutions, the conservation, restoration, and management of coastal blue carbon ecosystems, climate-smart and resilient fisheries and aquaculture solutions, marine renewable energy technologies, decarbonization of marine transport, marine spatial planning, marine protected areas, and ecosystem-based adaptation. In line with the outcome of the first Global Stocktake decision, paragraph 28, we encourage Parties to transition away from fossil fuels in energy systems, including transitioning to marine renewable energy.
- 5. While these ocean-based actions provide a wide range of opportunities, there is no one-size-fits-all approach. Ocean-based measures must reflect each country's national circumstances. Ensure the development of NDCs uphold human rights principles and involve Indigenous Peoples and local communities, and coastal communities, and integrate traditional knowledge, knowledge of Indigenous Peoples and local knowledge systems. Ocean measures must be grounded in best available science, with increased investment in research and data collection. Regional cooperation can scale climate action.
- 6. On accounting of blue carbon ecosystems for their inclusion in the NDCs, we reiterate the 2023 key message that it is essential for Parties to strengthen blue carbon accounting methodologies and tools. Parties must embrace the 2013 Wetlands Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, which includes methodologies

<sup>&</sup>lt;sup>1</sup> The 2024 informal summary report is available <u>here</u>. The 2023 informal summary report is available <u>here</u>.

and guidance to estimate and report on anthropogenic emissions and removals of greenhouse gases from wetlands, including mangrove forests, tidal marshes, and seagrass meadows. Some emerging marine technologies, notably mCDR, involve significant uncertainties and require further research to understand their mitigation potential, costs, co-benefits, adverse side effects, and governance requirements. In this regard, Parties may wish to consider the implementation of IMO's 2013 geoengineering amendment.

- 7. Access to finance, technology, and capacity-building are critical enablers for the inclusion and implementation of ocean-based measures in NDCs. Blue finance, from its different sources, should match ambition for ocean-based climate action in the NDCs. We reiterate the 2024 key message that in their new NDCs and in the implementation policies thereof, Parties could have quantified targets for their ocean-based measures and include the needs for, or the provision of, ocean-related finance, technologies and capacity-building for implementation of their ocean targets. We encourage Parties to consider the best practices and case studies that have been shared during the dialogue as considerations for inclusion of ocean measures, policies and targets in their new NDCs.
- 8. Gaps in data, science, monitoring, reporting and verification make it more challenging to fully integrate ocean sectors into NDCs and secure the necessary financing. Additionally, the high costs of affordable technologies for developing countries pose a considerable challenge to the transition to offshore renewable energy and blue carbon. Therefore, effective integration of ocean in NDCs will need to go hand in hand with investing in robust data systems, MRV processes, science and ocean observations, regional partnerships for joint research and technology sharing, capacity-building, integration and inclusion of Indigenous Peoples and local communities, and coastal communities, whilst integrating their traditional knowledge and ensuring their participation.

#### B. The Ocean under the Global Goal on Adaptation

- 9. Ocean as a cross-cutting consideration should be integrated across all GGA thematic targets, and hence should not be limited to a few selected targets and indicators. Shared indicators can reduce duplication and strengthen coherence across conventions. Alignment of indicators with existing indicators and data systems under multilateral biodiversity frameworks, such as the CBD's GBF is key for harnessing synergies, minimizing reporting burden, and increasing resource efficiency. Marine-relevant CBD GBF indicators, such as MPA coverage and ecosystem integrity, can directly inform GGA monitoring to support aligned national and multilateral reporting.
- 10. Indicators should capture ecosystem integrity and connectivity, focusing on holistic ocean system health. Accordingly, key indicators should be practical, realistic, global, and broadly applicable. Sub-indicators should be context specific and locally applicable to cater for diversity across local communities and countries. A metric to protect small-scale fishers, women, coastal communities, Indigenous Peoples and local communities, and resilience (fisheries, food security and early warning systems) should also be included. Integrating a specific indicator to address maladaptation risks could be beneficial.
- 11. Disaggregation by ecosystem type is needed to reflect differences between coastal, deep-sea, high seas, and other marine systems. Accordingly, include ecosystem-type disaggregated indicators (e.g. mangroves, coral reefs, seagrasses) and MPAs coverage and management effectiveness as adaptation indicators, given their key role to contribute to both biodiversity conservation and climate resilience (carbon sequestration, shoreline protection). Quantitative indicators are needed to scale up ecosystem-based adaptation and nature-based solutions, including measures to track and monitor blue carbon ecosystems.
- 12. Equity in data access and sharing is critical for providing a regional picture of interdependent ecosystems. Strengthening early warning systems and regional ocean observations is important for the development of meaningful indicators. Building and enhancing local capacity, alongside integrating traditional knowledge, knowledge of Indigenous Peoples and local knowledge systems is vital to improve robustness and local relevance of the data systems. Inclusion of metrics on financial flows allocated to ocean action and technology transfer are recommended.

- 13. Coastal and marine ecosystems offer natural entry points for integration, as many adaptation priorities such as MPAs, coastal protection, sustainable fisheries, and blue carbon ecosystems are directly linked to biodiversity conservation. Aligning the planning and reporting processes of NBSAPs and NAPs can improve efficiency, reduce duplication, and foster synergies between climate and biodiversity goals.
- 14. Despite strong interlinkages, NBSAPs, NAPs, and ocean-related policies are often developed under separate ministries impeding coherence. Stronger inter-ministerial coordination and aligned reporting cycles are needed to enhance coherence, reduce administrative burdens, and strengthen efficiency. Financing streams for biodiversity and adaptation remain too often siloed, limiting the response to the multiple opportunities for cobenefits that exist. Greater integration of climate and biodiversity funding mechanisms, including joint programming through GCF, GEF, and related funds, would better support projects that address interconnected challenges.

#### C. Ocean-climate-biodiversity synergies

- 15. We welcome the recently concluded 2025 UN Ocean Conference and its' outcomes in the declaration entitled "Our ocean, our future: united for urgent action" that reaffirm the ocean-climate-biodiversity synergies. We are pleased to note the emergence of initiatives such as the 'Blue NDC Challenge,' spearheaded by Brazil and France during the 2025 United Nations Ocean Conference, and we encourage countries to consider joining this initiative in the lead-up to COP 30 in Belém. We take note of the Ocean Action Panel on "Leveraging Ocean, Climate and Biodiversity Interlinkages" and encourage the implementation of its conclusions and key messages. Particularly, we emphasise that co-benefits between climate, biodiversity and ocean actions should be encouraged, and that integrated, inclusive, and adaptive governance approaches are essential to respond to interlinked challenges. Further, overcoming knowledge, capacity, and finance gaps—as well as governance fragmentation—is key to advancing this nexus.
- 16. UN Ocean Conference outcomes must be translated into national level processes and advanced in the context of specific global frameworks, including the UNFCCC and Paris Agreement, CBD, UNCLOS, and the BBNJ Agreement. These measures and actions should be embedded in the national climate strategies, to support mitigation, adaptation, and biodiversity objectives, and in line with the GBF, SDG14 and the Paris Agreement.
- 17. We underscore the 2024 key message that an opportunity exists for the Parties to align their NDCs, NAPs, and NBSAPs to enable the development of more coherent national strategies for climate and biodiversity. Parties recognize the ocean-climate-biodiversity interlinkages and the potential for enhancing synergies across the CBD and the Paris Agreement. Harmonizing marine-related targets and indicators, aligning planning cycles, and strengthening inter-ministerial coordination can enhance resource efficiency, reduce reporting burdens, and improve access to climate and biodiversity finance, while helping countries deliver on the GBF and the Paris Agreement goals and targets.
- 18. The BBNJ Agreement provides a critical opportunity to advance integrated ocean governance that supports climate ambition beyond national jurisdictions. The BBNJ Agreement acknowledges the urgency of addressing biodiversity loss and ecosystem degradation caused by climate change. It emphasizes that marine protected areas and other area-based management tools must be informed by climate resilience, and that capacity-building and technology transfer should support adaptation to climate impacts. In this regard, Parties are encouraged to ratify the BBNJ Agreement for its early implementation and entry into force and to consider the synergies and cooperation discussions in the Agreement's first Conference of the Parties.
- 19. We reiterate the 2024 key message that MPAs and other area-based management tools play a key role in supporting livelihoods, safeguarding marine biodiversity, and increasing resilience to climate change. Parties are strongly encouraged to implement the GBF's 30 by 30 target, along with the other goals and targets, for the effective conservation and management of ocean ecosystems.

20. Strengthening institutional coherence and coordination across the Rio Conventions, UNCLOS, and other treaties relevant to climate change is critical to scaling up ocean-based climate action. We welcome the <a href="ITLOS Advisory Opinion">ITLOS Advisory Opinion</a> on the obligations of states on climate change and international law, and the Advisory opinion of the <a href="ICJ on Obligations of States in respect of Climate Change">ICJ on Obligations of States in respect of Climate Change</a>. In this regard, we take note that the above-mentioned conventions and treaties support and reinforce each other. Accordingly, we encourage Parties and the secretariats of these conventions and treaties to enhance institutional cooperation for strengthening the ocean-climate-biodiversity interlinkages. We take note of the inter-agency mechanism <a href="UN-Oceans">UN-Oceans</a> to strengthen and promote coordination and coherence of United Nations system activities related to ocean and coastal areas.

#### **D.** Cross-cutting themes

- 21. Ocean-based actions remain underfunded in existing climate finance streams, despite their crucial role in both adaptation and mitigation. Access to ocean finance for developing countries, especially SIDS and LDCs, for the implementation of their NDCs remains slow, fragmented, and ad hoc. We recall the UNOC declaration which recognizes SDG 14 as one of the least funded SDGs and which acknowledges that accelerating ocean action globally requires significant and accessible finance and the fulfilment of existing commitments and obligations under relevant intergovernmental agreements.
- 22. Existing finance mechanisms (GCF, GEF, Adaptation Fund) and MDBs provide some entry points for ocean finance, but often lack specific windows to directly finance ocean-based adaptation. The possibility of having dedicated blue finance windows within existing climate funds, to ensure predictable and targeted support for mitigation, adaptation, and resilience-building in marine and coastal systems, was discussed and should be explored further. We also underscore the UNOC declaration's call to enhance access to finance for developing countries and to promote the role of international financial institutions, development banks, and climate funds in supporting blue economy transitions and risk-sharing instruments.
- 23. Capacity gaps limit access to finance for developing countries. Many SIDS, LDCs, and coastal communities struggle with complex application processes, limited institutional capacity, and insufficient technical support. A coordinated and streamlined application process, with targeted support for developing countries, especially SIDS and LDCs, through partnerships and building capacity could help unlock the finance. Ensure coastal communities, women, small-scale fisheries, and Indigenous Peoples are included in finance strategies, project design, and delivery. Including longer-term and flexible funding, integrating traditional knowledge, knowledge of Indigenous Peoples and local knowledge systems and socio-cultural realities is essential for equity and just transition, while overcoming persistent barriers in accessibility. Tailored financial instruments to support coastal adaptation and biodiversity actions are needed.
- 24. Ocean investments in developing countries are often perceived as high risk, discouraging private sector engagement. Reframing projects to clearly highlight their adaptation and mitigation co-benefits, alongside blended finance models and risk-sharing mechanisms, can make them more attractive to investors. Private sector engagement can complement public finance sources. Innovative mechanisms such as de-risking strategies and blended finance models (Blue Bonds, insurance schemes, guarantee funds) show potential to unlock ocean-related investments. While high costs and uncertain returns challenge emerging areas like blue carbon ecosystem restoration and offshore renewables, long-term investments can reduce costs, scale solutions, and align biodiversity and climate goals.
- 25. Improving the tracking of ocean-related finance flows can help to ensure transparency and accountability in the implementation of ocean measures in the NDCs. Clearer metrics, transparency on grants versus loans, and accountability in financial flows are needed to avoid debt burdens on coastal communities. Recognizing co-benefits of ocean initiatives—such as mangrove conservation and restoration and fisheries management for both carbon and, respectively, disaster risk reduction and food security—can elevate their value in climate finance while ensuring whole of ecosystem approaches.

- 26. Climate funding pipelines can leverage the ocean-climate-biodiversity nexus to promote cross-sectoral projects that deliver tangible co-benefits. Exploration of new financing pathways under the UNFCCC process to create a blue finance window, such as SCF and MWP, can facilitate predictable, targeted support for mitigation, adaptation, and resilience-building in marine and coastal systems. We welcome the 2027 theme of the SCF on "Financing Climate Action in Water Systems and Ocean". We underscore that, consistent with Articles 9 and 10 of the Paris Agreement, and as part of a global effort, developed country Parties should continue to take the lead in mobilizing climate finance from a wide variety of sources and have the responsibility to provide financial resources and support to assist developing country Parties in both mitigation and adaptation, including through capacity-building and the transfer of technology. The fulfilment of these existing commitments and obligations is essential to enable the effective implementation of ocean-based climate solutions.
- 27. We recall the UNOC declaration that ocean action must be based on the best available science and knowledge, including, where available, traditional knowledge, knowledge of Indigenous Peoples and local knowledge systems, while recognizing and respecting the rights of Indigenous Peoples. Leveraging the communities of the Research Systematic Observation workstream, integrating coastal communities, Indigenous Peoples and local communities traditional knowledge in National Adaptation Plans, advancing the recent international law developments, and noting the ongoing work on the IPCC seventh assessment report, can strengthen further synergies within ocean, climate and biodiversity streams on science.
- 28. Ocean science and sustained observation systems are critical for proven and emerging ocean—climate solutions, with particular attention to the creation of regional science platforms and the inclusion of developing country researchers, Indigenous Peoples, and women. Long-term regional data systems, investments in data collection and research, and partnerships amongst countries are needed to avoid overlaps, identify gaps, and support systemic approaches to science and monitoring. Investments in data collection and research, Greater transparency in funding and capacity-building for data and technology sharing are also necessary.
- 29. We affirm the calls from UNOC to recognize the importance of increasing scientific knowledge and developing the research capacity of developing countries, in particular SIDS and LDCs, to support data collection and knowledge-sharing, including through South-South cooperation and technology transfer. Traditional knowledge, knowledge of Indigenous Peoples and local knowledge systems must be respectfully incorporated to inform data and science gaps. Capacity-building is essential to inform the scientific community and policymakers of the traditional knowledge available. Science must be communicated to policymakers in more understandable ways, while respecting the sensitivities around knowledge and data sharing. The co-production of knowledge between scientists and communities is critical, alongside ethical research practices and clear codes of conduct.
- 30. We note the suggestion to develop a three-to-five year roadmap for the dialogue. Sequencing priority topics, and alignment with the UNFCCC key cycles, such as the global stocktake and the NDC cycle, and international milestones can ensure continuity, coherence, and technical depth across the ocean-climate agenda. Strengthen technical inputs through science-policy expert panels, ensure meaningful participation of developing countries, Indigenous Peoples and local communities, and coastal communities, and include monitoring and stocktaking checkpoints to assess implementation progress over time. We take note that the development and implementation of such a roadmap is subject to the availability of adequate financial resources for the secretariat.

#### E. Considerations for COP 30

31. The 2025 NDC cycle presents a unique and time-bound opportunity for Parties to demonstrate their collective progress to enhance ocean-based climate ambition. We urge all Parties to reflect and implement ambitious ocean-based mitigation and adaptation measures that are aligned with the 1.5°C goal of the Paris Agreement and guided by the outcome of the first GST decision in their NDCs.

- 32. We welcome the Subsidiary Bodies' guidance to the technical experts on refining the GGA indicators to assist in measuring progress towards the targets referred to in paragraphs 9–10 of decision 2/CMA.5. We encourage the experts to consider the deliberations of the dialogue when finalizing indicators for ecosystems and biodiversity and other relevant thematic targets. Parties may wish to reflect on how the expert work on the indicators can help in ensuring that ocean-based adaptation is visible, measurable, and adequately resourced within the GGA framework, with a view to recommending a draft decision for consideration and adoption at CMA7.
- 33. We note with high appreciation the valuable contributions to the dialogue made by Parties and observers in exchanging good practices and information to strengthen international cooperation and to identify ocean—climate—biodiversity synergies. In this regard, we encourage Parties and observers to submit further views on cooperation with other international organizations, as contained in document <a href="SBSTA/2025/INF.1">SBSTA/2025/INF.1</a>, to inform consideration of this matter at SBSTA 63.
- 34. When considering the <u>finance mandates</u>, including the Baku to Belém Roadmap to 1.3T and other finance-related agenda items, Parties may wish to reflect on how these negotiated outcomes and deliberations can support the implementation of the dialogue's key messages, including on ocean-related finance, and the scaling up of its case studies to date.
- 35. We encourage Parties and non-Party stakeholders to provide sufficient resources for the implementation of the programme <u>budget</u> for the biennium 2026–2027, to support the implementation of mandates related to strengthening ocean-based climate action.

#### **II.** Introduction

- 36. In accordance with <u>decision 1/CP.27</u>, the <u>Sharm el-Sheikh Implementation Plan</u>, Parties decided that the annual ocean and climate change dialogue ("dialogue") will, from 2023, be facilitated by two co-facilitators, selected by Parties biennially, who will be responsible for conducting the dialogue and preparing the informal summary report. As the co-facilitators of the 2025 dialogue, we have prepared this informal summary report.
- 37. The 2025 dialogue was held in hybrid-mode on 17–18 June 2025, in conjunction with the sixty-second session of the subsidiary bodies meetings in Bonn, Germany. In accordance with <u>decision 1/CP.27</u>, the <u>Sharm el-Sheikh Implementation Plan</u>, we convened the <u>virtual informal exchange of views</u> ("exchange of views") with Parties and observers.
- 38. By our <u>letter</u> dated 24 March 2025, we laid down our vision for the 2025 ocean dialogue, and identified three priority areas around which we invited Parties and observers to engage at the exchange of views. Based on these consultations, we communicated the dialogue topics to be:
  - a) Ocean-based measures in the Nationally Determined Contributions.
  - b) The ocean under the Global Goal on Adaptation.
  - c) Ocean-climate-biodiversity synergies.

The cross-cutting themes were Means of Implementation- finance, technology transfer and capacity-building, with a primary emphasis on finance, and science.

- 39. In advance of the dialogue, we prepared the <u>information note</u> which elaborated on our choice of the three topics and cross-cutting issues, the guiding questions, structure and <u>agenda</u> of the dialogue. 11 UN agencies, and 4 constituted bodies and work programmes of the UNFCCC, provided written contribution to the information note.
- 40. Day 1 started with the high-level opening segment consisting of the SBSTA Vice-Chair (Carol Franco) UN Ocean Conference co-hosts, France (Benoît Faraco) and Costa Rica (Giovanna Valverde Stark). Thereafter, three expert panels, focused on setting the stage for the dialogue, introduced the three dialogue topics and the cross-cutting themes. Speakers presented science-based insights, opportunities for action and support, and areas for international cooperation. Each panel was followed by a plenary session, allowing time for short interventions and Q&A. Peter Thomson, the UN Secretary General Special Envoy for the ocean provided closing remarks.

- 41. Day 2 was dedicated to shaping the dialogue's outcomes. Participants took part in world café-style breakout discussions—facilitated and guided by prepared questions. The groups rotated twice, with each round building on the previous one's work, leading to a set of emerging recommendations.
- 42. After the breakout sessions, a plenary session resumed for each breakout group to present the emerging key messages. Parties made plenary statements to highlight good practices and lessons learned from their national and regional contexts in integration ocean-based action in their NDCs, adaptation plans and overall synergistic sustainable development planning. As the co-facilitators, we then finalized the key messages and closed the dialogue.
- 43. The webcast of the day 1 proceedings is available <u>here</u>, and of day 2 is available <u>here</u>. This informal summary report summarises these proceedings and contains key messages of the dialogue, which will be presented by us at COP 30.

### III. High-level remarks and opening

- 44. **The SBSTA Vice-Chair, Carol Franco**, opened the dialogue by welcoming participants and congratulating the newly appointed co-facilitators. She highlighted the dialogue's growing role in accelerating the integration of ocean-based action into climate efforts and referenced the UNOC political <u>declaration</u>, which reaffirmed the need to fully implement the Paris Agreement and recognized the dialogue as a key platform to advance that mandate. She outlined the dialogue's thematic priorities and cross-cutting issues and urged participants to build a coherent and ambitious path toward COP 30 in Belém.
- 45. Giovanna Valverde Stark, Head of Delegation of Costa Rica and co-host of UNOC, emphasized the country's long-standing commitment to ocean and environmental protection. She highlighted key outcomes from UNOC, such as growing support for the ratification of the BBNJ Agreement and a precautionary approach to deep-sea mining. She noted Costa Rica's National Blue Carbon Strategy, and the intention to include it in its new NDC, whilst underscoring the role of international cooperation. Citing the success of Costa Rica's "Immersed in Change" initiative, she underscored the need to strengthen synergies across the Rio Conventions and to address ocean health holistically, including transboundary pollution and plastic waste.
- 46. **Ambassador Benoît Faraco**, **Head of Delegation of France and co-host of UNOC**, urged participants to build on the momentum of UNOC and turn outcomes into concrete ocean-based climate action. He called for continued multilateral efforts on plastic pollution, BBNJ Agreement ratification, and deep-sea protection, stressing the ocean's role in carbon storage. Highlighting the importance of science for policy and disaster risk reduction, he reaffirmed France's commitment to advancing ocean-based climate solutions through UNFCCC mechanisms, including climate and adaptation finance, and referenced the launch of the <u>Ocean Rise & Coastal Resilience Coalition</u> to address sea-level rise. He also called for stronger integration of ocean priorities into NDCs.

# IV. Expert Panels

47. In the next segment of the dialogue, three expert panels set the scene for the dialogue. Each panel presented on their respective topics and the cross-cutting issues, underpinned by science, scope for action/support for access to means on implementation and international cooperation.

#### A. Topic 1: Ocean-based measures in NDCs

48. **Marinez Sherer, COP 30 Special Envoy for the Ocean**, <u>presented</u> data on cumulative human impacts—based on 19 stressors, warning that cumulative human impacts are rapidly degrading marine ecosystems and threatening biodiversity, ecosystem services, and human well-being. She highlighted Brazil's integration of blue carbon and coastal adaptation strategies—such as <u>ProManguezal</u> and <u>ProCoral</u>—into its new <u>NDC</u>, and the

- potential of sustainable fisheries, marine renewable energy, MSP, and ICZM. Sherer identified key barriers, including insufficient finance and capacity, data gaps, fragmented governance, and lack of Indigenous People knowledge inclusion. She urged participants to embrace the ocean's full potential for mitigation and adaptation. She closed by invoking mutirão, to place the ocean at the heart of COP 30.
- 49. **Ole Vestergaard, UN Environment,** highlighted the urgent need for ocean action by shifting to implementation, noting the momentum from UNOC and the Blue Economy Finance Forum. He stressed the inclusion of ocean-based measures in NDCs, especially through the conservation and restoration of blue carbon ecosystems like mangroves and seagrass, which deliver not only carbon benefits but also co-benefits for food security, pollution control, and disaster risk reduction. Vestergaard called for a systemic, cross-sectoral approach that recognizes land-sea linkages and avoids treating ocean issues in silos. He outlined a range of ocean-based measures for NDCs inclusion—from marine ecosystem restoration and sustainable fisheries to ocean renewables and decarbonizing maritime transport—and confirmed UNEP's ongoing technical support to help countries put these actions into practice.
- 50. **Martin Koehring, UN Environment,** highlighted the growing traction of blue finance in advancing ocean-based climate solutions, referencing outcomes from the Blue Economy and Finance Forum. He presented UNEP Finance Initiative's <u>Sustainable Blue Economy Finance Initiative</u>, which aligns financial institutions—now 87 members managing \$11 trillion—with SDG 14, the Paris Agreement, and biodiversity goals. Key tools include the <u>Turning the Tide</u>, <u>Diving Deep</u>, and <u>Setting the Sail</u>, which offer sector-specific strategies for sustainable investment. He also introduced two major initiatives: the <u>Ocean Investment Protocol</u>, a unified framework to guide capital toward sustainable ocean sectors, and the <u>One Ocean Finance Facility</u>, a new UN platform aiming to mobilize \$170 billion by 2040 for ecosystem restoration, coastal resilience, and economic sustainability through blended finance.
- 51. **Anna-Marie Laura, Ocean Conservancy**, <u>presented</u> the Blue NDC Challenge, launched by Brazil and France with support from Australia, Fiji, Kenya, and Seychelles, urging Parties to integrate ocean-based climate solutions into their new NDCs. These include actions like restoring marine ecosystems, scaling marine renewables, decarbonizing shipping and aquatic food systems, and supporting sustainable fisheries. She stressed the importance of quantified targets and inclusion of MSP measures, to unlock finance and implementation. While most NDCs include adaptation measures, mitigation sectors, including offshore renewables and shipping remain underrepresented. The NDC Challenge aims to elevate ambition and ensure the ocean is central to climate strategies for a resilient, net-zero future.
- 52. Senivasa Waqairamasi, Head of Delegation, Fiji (on behalf of AOSIS), emphasized that limiting warming to 1.5°C is vital to protect ocean ecosystems, warning that exceeding this threshold risks coral reef collapse, intensified marine heatwaves, and loss of critical ocean functions. AOSIS called for integrating ocean-based targets and measurable commitments, across adaptation, mitigation, and loss and damage within NDCs, and for stronger recognition of the ocean's role under the UNFCCC process. 39 members of AOSIS have contributed over 600 ocean-related commitments—focused on adaptation and mitigation measures. She underscored the need for access to finance, technology, and capacity-building for SIDS to be able to integrate and implement ocean-based measures in their NDCs. She highlighted the undeveloped potential of ocean-energy, the importance of ocean-based accounting, and cautioned against over-reliance on marine geoengineering. Mitigation must prioritize fossil fuel reduction, the only proven path to addressing the climate crisis, and ensuring a resilient, livable future.

#### B. Topic 2: The Ocean under the Global Goal on Adaptation

53. **Joanna Post**, **IOC-UNESCO**, <u>presented</u> on the vital role of ocean observations as critical infrastructure for ocean-based adaptation and mitigation, stressing that temperature is the central climate indicator under Article 2 of the Paris Agreement. She underscored the importance of ocean observations and data in the GGA to ensure climate-resilient pathways.

She highlighted the role of GOOS in delivering ocean observations data to decision makers, and the UNOC declaration that stressed the importance of observations both for science and the society. She further gave the example of the improvement of the El Nino forecasts due to ocean observations and early warning systems. Highlighting the importance of the ocean-climate-biodiversity nexus, she referred to the ongoing work of the Ocean Biodiversity Information System, on developing nine global indicators aligned with the GGA, that are measurable, scalable, verifiable, justifiable, and accessible. She stressed the importance of long-term data sets, both for climate and weather forecasting. Post warned that underfunding systems like Argo could reverse decades of progress and undermine climate modelling. She called for integrated and disaggregated indicators for the ocean, also referring to the work of IOC including on MSP guidelines. Post presented the Starfish Barometer as a science-based tool to assess the ocean state and human pressure. Post stressed the importance of aligning ocean indicators with existing global frameworks such as the GBF and 2030 Agenda, as well as with the NAPs and NBSAPs. Finally, she underscored the need to invest in ocean observations and monitoring systems to meet the Paris Agreement objectives.

- 54. **Richard Muyungi, Chair, African Group of Negotiators,** emphasized the need to integrate ocean-related indicators into the GGA, highlighting the severe impacts of climate change on the ocean and livelihoods, such as ocean acidification and coral reefs bleaching. e stated that the ocean is a key priority for Africa and the African Group of Negotiators. Noting that the ongoing technical work has reduced proposed indicators to 490, with a goal to narrow them to under 100, the importance of ensuring the mainstreaming of the ocean in the final indicators was underscored. Muyungi stressed that these indicators must be both universally applicable and locally relevant, and clearly linked to MOI, to support vulnerable communities. He also highlighted the synergies between NAPs and NBSAPs, with NAPs providing a wider sectoral coverage including biodiversity, and underscored the importance of implementation of NAPs. He concluded by calling for use of existing frameworks such as the GBF for the ocean indicators.
- Fegi Nurhabni, Deputy Director of Disaster Mitigation and Climate Change Adaptation at Indonesia's Ministry of Marine Affairs and Fisheries, presented Indonesia's approach to integrating the ocean dimension into the GGA. She outlined Indonesia's evolving integration of ocean-based mitigation and adaptation measures into its NDCs. With respect to adaptation, initially defined under ecosystem and landscape resilience in its first NDC, it now extends to EbA, emphasizing the role of mangrove in ecosystem conservation and restoration. The upcoming NDC expands this to seagrass and coral reefs and recognizes the role of Indigenous Peoples and local communities. Nurhabni stated that these ocean measures are integrated into Indonesia's blue economy policy, with the aim of sustainable fisheries management, aquaculture, and marine plastic reduction. Underscoring the importance of the inclusion of Indigenous Peoples in the implementation of NDCs, she pointed to customary practices like Sasi, where the communities have the right to manage their own customary designated areas allocated under the MSP. To support the GGA, Indonesia proposed six ocean-based indicators covering coastal and marine ecosystems resilience, coastal community resilience, coastal infrastructure resilience, Indigenous and local knowledge integration, ocean climate information systems, and adaptive fisheries management. She closed by underscoring the importance of having globally relevant and locally actionable indicators that can be adopted by all countries, aligned with the CBDR principle developing countries and based on international cooperation, especially MOI.

# C. Topic 3: Ocean-climate-diversity synergies

Valentina Germani, Senior Legal Officer at DOALOS, emphasized the synergies between the ocean, biodiversity, and the climate, supported by scientific assessments like IPCC, IPBES, and World Ocean Assessment reports, and the generation of science and knowledge by the UN Decade of Ocean Science. She highlighted the One Ocean Science Congress that called for significantly increased investment in ocean research, monitoring, and modelling, whilst also calling for increased capacity-building and inclusion of traditional and local knowledge systems. She referenced the UNOC political declaration which acknowledges the ocean is facing a global emergency, impacted by climate change,

biodiversity loss, and pollution, and urged coordinated global action, including implementation of relevant global instruments like UNCLOS, the Paris Agreement, and the CBD, and the urgent need to scale up financial mechanisms and streamline financial mechanisms to support ocean action. Germani noted progress on the BBNJ Agreement, now with 50 ratifications, which calls for ecosystem resilience-building, including to climate stressors, and maintenance and restoration of ecosystem integrity. It establishes ABMTs, including MPAs that are to be informed by climate resilience objectives, and a financial mechanism to support developing countries. Cooperation and coordination among relevant instruments, frameworks and bodies are at the heart of the BBNJ Agreement, and Germani stressed the importance of aligning the BBNJ Agreement with the UNFCCC and Paris Agreement and leveraging the dialogue for strengthening ocean-based climate action. Lastly, the UN-Oceans was highlighted as a key platform for strengthening coherence, collaboration, and information sharing across UN agencies on the ocean.

- Fredrik Haag, Head of the IMO Office for the London Convention/Protocol & Ocean Affairs, highlighted the IMO's role in regulating maritime safety, pollution prevention, and ocean-based climate mitigation technologies. He emphasized that the London Convention and Protocol are the key global treaties that regulate climate change mitigation technologies in the marine environment. Since, 2006, the regulations governing CCS in the sub-seabed are in force, and since 2019, Parties are also allowed to export CO2 streams for CCS in sub-seabed geological formations. He further states that in 2013, the Parties to the London Protocol also adopted amendments to regulate marine geoengineering activities, and while not yet in force, both the governing bodies and the joint Scientific Groups, including the joint Scientific Groups and Group of Experts on the Scientific Aspects of Marine Environmental Protection continues to advance the scientific understanding of marine geoengineering techniques. Haag encouraged Parties to engage with the London Convention and London Protocol regimes. He also referenced IMO's goal of net-zero GHG emissions from international shipping by around 2050, under the 2023 IMO Strategy, and the approval of the IMO Net-Zero Framework by member states in April 2025. Additionally, he mentioned IMO's broader efforts on invasive species, marine litter, the designation of Particularly Sensitive Sea Area, Special Areas and Emission Control Areas under the MARPOL Convention. He stressed the importance of capacity-building for developing countries, especially SIDS and LDCs, and reiterated the importance of the dialogue for strengthening synergies on the ocean-climate nexus.
- Tomás López Londoño, Marine Biologist, Directorate of Marine, Coastal and Aquatic Resources Affairs of the Ministry of Environment and Sustainable **Development, Colombia** highlighted that nearly half of Colombia's territory is marine, hosting vital ecosystems like mangroves, coral reefs, and seagrasses that support biodiversity conservation and support coastal resilience. He presented on Colombia's 2030 Biodiversity Action Plan (NBSAP) that is structured around six national goals and aligns with the GBF. The priority areas to guide the national goals include- integration and intersectoral coherence for territorial biodiversity management and climate action, Promoting the transition of productive models towards sustainability, controlling environmental crimes, governance and sustainable financing models. He stated that Colombia has already reached Goal 3 of the GBF, with 38 per cent of its marine and coastal areas under MPAs and other ABMTs. Under its national goal 2, marine and coastal ecosystem restoration, Colombia was advancing largescale restoration projects, such as a pledge to restore 33,500 hectares of mangroves by 2028, combining science, traditional knowledge, and strong community participation, which was announced at UNOC. On Colombia's NDC targets, initiatives like the HERENCIA COLOMBIA, PROCARIBE+, BIOMANGLAR, intended to conserve mangrove ecosystems by 2030, implement sustainable adaptation and risk management initiatives for sustainable use of blue carbon ecosystems, incorporate EbA in 100 per cent of the MPAs, declare 30 percent of marine areas under protection status and implement Integrated Management and Zoning Plans for coastal environmental units. He concluded by stating that these commitments reflect Colombia's vision to integrate climate action, biodiversity conservation, and coastal resilience through a coherent and inclusive marine policy.
- 59. **Tristan Tyrrell, Programme Officer, CBD secretariat,** emphasized Colombia's leadership as COP 16 Presidency in implementing the GBF, with a strong focus on marine and coastal ecosystems. He noted that while the framework avoids listing specific biomes,

the ocean is explicitly referenced in <u>targets 2 and 3 on restoration and protected areas</u>. COP 16 served as the first stocktaking moment since the framework's adoption, reaffirming the importance of marine biodiversity, spatial planning, and enhanced collaboration with other processes, including the UNFCCC and the BBNJ Agreement. He also highlighted the CBD's <u>continued moratorium</u> on geoengineering and efforts to align biodiversity strategies with national climate plans.

### V. Day 1 Closing

60. Ambassador Peter Thomson, UN Secretary-General's Special Envoy for the Ocean, closed day 1 of the dialogue proceedings with his <u>video message</u>. He emphasized the dialogue's vital role in advancing ocean-based climate action and providing a crucial mechanism for integrating the ocean into climate negotiations, particularly as urgency grows following the first Global Stocktake's warning that we are off track to meet the 1.5°C target. Highlighting the key priorities for the 2025, he urged full inclusion of ocean-based targets in new NDCs, scaling nature-based solutions like mangroves and coral reefs, and expanding blue finance and research, especially for developing countries. Ambassador Thomson concluded by calling for coordinated action across the MEAs, and for the ocean to be at the center of COP 30 discussions, to pave the way for a "Blue COP 31".

# VI. Breakout group discussions

61. On day 2 of the proceedings, participants exchanged on the three topics of the dialogue, in nine world café format breakout group discussions led by moderators and facilitators (see annex I) based on the guiding questions. This was followed by the plenary where nominated representatives from each breakout group presented on the key messages that emerged from their respective discussions. This section summarizes the knowledge exchange, highlighting the main ideas, actionable recommendations, and the good practices.

#### A. Topic 1: Ocean-based measures in NDCs

- 1. How can conservation measures such as MPAs, NbS, and blue carbon ecosystems, support efforts by Parties to adapt to the accelerating impacts of climate change, restore biodiversity, support livelihoods, and maintain ecosystem services?
  - 62. On this question, the discussions highlighted the following takeaways:
  - (a) The 2025 NDCs cycle presents a pivotal opportunity for Parties to include sustainable ocean-based actions. By embedding ocean measures in NDCs and aligning them with the 1.5°C target, countries not only enhance ambition but also protect vital marine ecosystems and support food and economic security.
  - (b) Ocean-based actions can unlock win-win outcomes for climate, biodiversity, and sustainable development. A diverse range of ocean actions are available for inclusion in the NDCs, offering both mitigation and adaptation benefits such as offshore renewable energy, MPAs, decarbonisation of shipping, fisheries, blue carbon ecosystems, MSP and EbA.
  - (c) Key ocean sectors offer significant mitigation opportunities, notably decarbonisation of shipping, phasing out offshore oil and gas, and advancing offshore renewable energy with biodiversity safeguards in line with CBD and SDG 14.
  - (d) There is no one-size-fits-all approach. Ocean-based measures must reflect each country's local context and development stage. Ensure the development of NDCs uphold human rights principles and integrate Indigenous Peoples and local communities knowledge. Ocean measures must be grounded in best available science, with increased investment in research and data collection. Regional cooperation can scale ocean-based climate action.
  - (e) Blue carbon ecosystems require stepwise integration into NDCs, supported by habitat mapping, carbon stock assessments, clear governance, and adequate finance.

Emerging technologies such as mCDR and CCS must follow a precautionary approach, be backed by robust legal frameworks, and undergo further research before deployment.

- 63. The current NDCs cycle is a pivotal moment for Parties to include sustainable ocean-based climate measures. It was stated that the integration of ocean in the NDCs should be aligned with the 1.5°C target, just transition, and with the outcome of the first global stocktake decision. Some participants called for aligning the development of the ocean targets in the NDCs with the ITLOS advisory opinion. Participants identified a broad set of ocean measures spanning both mitigation and adaptation, including offshore renewable energy, MPAs, decarbonisation of shipping, fisheries, blue carbon ecosystems, and EbA. Fiji showcased its transition to a blue economy, focusing on addressing marine plastic pollution, climate-smart fisheries, and targeting various ocean measures into NDC 3.0, thereby demonstrating that sustainable ocean action can boost ambition and deliver co-benefits for emissions reduction and livelihoods. Japan's new NDC showcases offshore wind energy as a major ocean-based mitigation action. The Blue NDC challenge and the Marrakesh Partnership were mentioned as initiatives to support Parties to include ocean in their new NDCs.
- 64. **Several ocean-based opportunities were identified to enhance climate ambition in the NDCs.** MSP and EbA were identified as tools to support cross-sector coordination and maximize co-benefits. **Belgium** is finalizing its third MSP for the period 2026-2034, which will include further development of renewable energy zones and new MPAs. With <u>75 per cent</u> of countries' exclusive economic zones being deep-sea areas with high carbon storage potential, some participants suggested the inclusion of areas beyond national jurisdictions in Parties NDCs, by leveraging the BBNJ Agreement on its entry into force and the Regional Seas Conventions. <u>UNCLOS</u> was also highlighted as an opportunity for Parties to include ocean-based measures in their NDCs, and for a more synergistic interpretation across relevant conventions so as to not to undermine ocean-based climate actions. It was mentioned to prioritize those ocean-based actions that had co-benefits with other sectors, such as agriculture, disaster risk reduction.
- 65. **Fisheries should be included as both mitigation and adaptation measures in the NDCs.** Participants noted that emissions from fishing vessels and aquaculture are significant and increasingly quantifiable, making them relevant to NDCs inclusion. However, Parties also highlighted that inclusion of fisheries, aquaculture and related industries in NDCs emissions calculations had to be tailored to their national circumstances. It was pointed that different aquatic foods have different emission profiles, and this nuance must be reflected in the inclusion of aquatic foods in the NDCs. Further, potential in the inclusion of species in NDCs, such as pelagic fish, was highlighted as an opportunity, though major knowledge gaps in their inclusion were also stated. Parties were encouraged to report on the Port State Measures Agreement, for supporting sustainable fisheries management in the NDCs.
- Regional and international cooperation, data, science, and finance were flagged as critical enablers for developing and implementing ocean-based NDCs. A systems approach was underscored for integration of ocean in the NDCs, by the inclusion of finance and capacity-building measures. The role of the dialogue as a convening platform for knowledge exchange and partnerships was highlighted. Enhanced regional knowledgesharing, particularly among countries with similar coastal and governance challenges, was seen as key to applying context-appropriate solutions. Belgium's "energy island" project connecting offshore wind farms from Denmark and Norway illustrates regional collaboration. The Blue Mediterranean Partnership and the Pacific Resilience Facility (Fiji) were cited as effective multilateral support platforms for ocean-climate integration. Participants further urged strengthening national institutional coordination and coherence, including across various ministries, to effectively integrate ocean considerations into the NDCs. Participants highlighted the importance of locally led adaptation and private sector engagement that were aligned with community benefits. It was also stated that NDCs must include data measures on the ocean that Parties were taking to ensure adaptation and mitigation measures were implemented.
- 67. The importance of a rights-based and people-centred approach, ensuring the inclusion of Indigenous Peoples and local communities knowledge, was highlighted. Participants stated that ocean measures must be designed in accordance with human rights

principles by respecting principles of free, prior and informed consent. Additionally, development of NDCs must include the participation of Indigenous Peoples and local communities and incorporate culture considerations. The impact on small fishers and coastal communities must be considered. China's conservation of mangroves underscored the importance of community engagement and education on the benefits of EbA. It was stated that all ocean-based measures must be guided by the best available science, informed by access to open data, highlighting the Copernicus Marine Service initiative. Participants also highlighted that knowledge gaps persist, especially regarding the broader benefits of ecosystem-based approaches. Participants also suggested a NDCs toolbox that could act as a repository for guidance, and he NDC partnership was highlighted as an example.

- 68. Blue carbon ecosystems—mangroves, seagrass, seaweed, salt marshes—received strong attention for their sequestration potential, but monitoring costs, ecosystem vulnerability, and capacity gaps were identified as implementing barriers. Participants highlighted that the integration of blue carbon ecosystems in NDCs required a stepwise approach that included habitat mapping, carbon stock assessments, legal understanding, adequate financing, and defined governance responsibilities. In this regard, there was a suggestion for the IPCC to address the blue carbon accounting gaps. It was further stated that the cost of blue carbon measurements often outweighs the advantages, with sequestration potential limited, making implementation challenging. It was recommended to include biodiversity and fisheries benefits for implementation of blue carbon projects. Japan, for example, has assessed climate impacts and included blue carbon sequestration estimates for seaweed and seagrass in its national inventory, The Mangrove Breakthrough NDC Task Force Policy Guidance Briefs, further aim to support countries in developing science-based, measurable, and actionable NDC targets for mangrove conservation, restoration, sustainable management, and financing.
- 69. Ocean-based measures in the NDCs must reflect national circumstances and be locally relevant. Participants highlighted that there is no one-size-fits-all approach. Ocean-based measures in the NDCs must reflect each country's local context and development stage. It was pointed out that with ecosystem-based approaches, they were impacted by climate change, and the potential of blue carbon varied dependent on the country. Additionally, it was not possible to install offshore wind energy in all countries. The Philippines is conducting research on coral reef resilience to inform its NDC. Singapore has included mitigation measures in its NDC through NbS despite having limited blue carbon ecosystems, emphasizing technological innovation and climate finance as part of its tailored approach.
- 70. **Participants underscored the importance of applying the precautionary approach to mCDR.** Participants discussed that beyond the blue carbon ecosystems, emerging technologies such as offshore renewable energy, carbon capture and storage, and mCDR require further transparent and collaborative research. They further noted the absence of legal frameworks for deployment of mCDR in a majority of jurisdictions. In this regard, IMO's 2013 geoengineering <u>amendment</u> was highlighted. <u>The Ocean Panel's Principles</u> were referenced as a framework for responsible mCDR development. Participants also called for respecting the geoengineering moratorium under the CBD.
- 71. **Decarbonisation of shipping was highlighted as a high-impact opportunity.** Participants highlighted that port incentives, such as fee reductions and green certifications, could drive emission reductions, which would require coherent and coordinated approach across the port and shipping sectors. IMO's Special Areas and Emission Control Areas under the MARPOL amendment and the IMO Net-Zero Framework were also discussed, with recommendations to include these new developments in Parties NDCs. Phasing off offshore oil and gas was also discussed noting the significant climate benefits but recognizing this would requiring strong buy-in from the private sector. The Ocean Panel's report was highlighted in this regard with significant mitigation opportunities provided in key ocean sectors including maritime transport and offshore renewable energy for inclusion in NDCs.
- 72. Embedding biodiversity considerations into offshore wind planning, including through nature-positive wind farm design, ensure that development of NDCs is synergistic, avoid harm to biodiversity, and align with CBD and SDG 14. There were concerns about mitigation measures inadvertently harming biodiversity, reinforcing the need for co-benefits focused approaches. Participants suggested that research-based planning, such

as site-specific offshore energy feasibility assessments, can prevent conflicts with shipping and ecological systems, while addressing hazards from extreme weather and competing ocean uses. Netherlands has implemented operational measures, such as temporarily shutting turbines, to minimise ecological impacts. Several case studies highlighted the value of aligning coastal zone regulations and biodiversity laws to secure just transition and livelihood benefits. India highlighted its use of Coastal Regulation Zones and the Biological Diversity Act to integrate biodiversity and community interests. Saudi Arabia, through the Saudi Green Initiative and Red Sea Project, is restoring marine ecosystems and assessing the biodiversity impacts of offshore energy development, aiming to harmonize ecological restoration, climate mitigation, and sustainable tourism.

- 73. Continued integration of ocean considerations into relevant UNFCCC processes and initiatives was suggested. In line with the COP 26 mandate, participants highlighted that by the integration of ocean activities in the workplans of UNFCCC's constituted bodies, including the SCF, TEC, PCCB, and MWP, could help unlock finance, capacity-building and technical assistance for Parties to include ambitious ocean-based solutions in their NDCs.
- 2. Which obstacles, particularly in terms of MOI (finance, capacity-building, and access to technologies) do you see for this integration of sustainable ocean-based action in NDCs and how could they possibly be overcome?
  - 74. The key takeaways from these discussions included:
  - (a) Access to ocean finance for developing countries especially SIDS and LDCs for their NDCs remains slow, fragmented, and ad hoc, with no streamlined process to guide developing countries to apply for funding for marine projects. Current climate finance often lacks specific windows for ocean-based adaptation. A coordinated and streamlined application process, with targeted support for developing countries through partnerships and building capacity could help unlock the finance.
  - (b) Climate funding pipelines can leverage the ocean-climate-biodiversity nexus to promote cross-sectoral projects that deliver tangible co-benefits. Exploration of new financing pathways under the UNFCCC process to create a blue finance window, such as SCF and MWP, can provide predictable, targeted support for mitigation, adaptation, and resilience-building in marine and coastal systems.
  - (c) Ocean investments are perceived as high risk, discouraging private sector engagement. Reframing projects to clearly highlight their adaptation and mitigation cobenefits, alongside blended finance models and risk-sharing mechanisms, can make them more attractive to investors.
  - (d) Blue finance must match ambition for ocean-based climate action in the NDCs. By setting quantified ocean-based targets in their NDCs, and specifying the needs for, or provision of, ocean-related finance, technologies, and capacity-building to implement those targets, Parties can attract private sector support.
  - (e) Gaps in data, science, monitoring, reporting and verification make it difficult to fully integrate ocean sectors into NDCs and secure the necessary financing. Additionally, high costs of affordable technologies for developing countries make it difficult to transit to offshore renewable energy and blue carbon. Effective integration of ocean in NDCs requires investing in robust data systems, MRV processes, science, ocean observations, regional partnerships for joint research and technology sharing, capacity-building, integration and inclusion of Indigenous Peoples and local communities knowledge and their participation.
  - 75. Fragmented and ad hoc access to finance remains one of the most persistent barriers to integrating ocean-based action into NDCs. Participants highlighted that the slow pace of accessing climate finance, which is often fragmented and ad hoc, is a strong barrier to including ocean in the NDCs. It was highlighted that there was no streamlined process for access to ocean-based projects, with SIDS and coastal LDCs facing significant difficulties in accessing dedicated ocean finance through existing mechanisms such as the GCF and GEF. It was noted that current climate finance often lacks specific windows for ocean-based adaptation. Suggestions were made to foster partnerships. The Coastal adaptation and nature-based solutions for the implementation of NAPs: Considerations for

<u>GCF proposal development</u> was highlighted as it intends to facilitate access to, and funding by, the GCF via improved, high-quality proposals.

- 76. It was highlighted that ocean investments are often perceived as high risk, discouraging private sector investments. Participants stated that fragmented finance makes it difficult to secure consistent financing, and the risk profile of investing in ocean initiatives remains poorly understood, discouraging potential private sector investments. The Blue Carbon Ecosystem guide showcases case studies from Parties that have incorporated blue carbon ecosystems into their NDCs and national investment strategies. Noting the high costs for blue carbon accounting, which made such projects less attractive for financing, there were suggestions to reframe the blue carbon initiatives as adaptation actions, with clear mitigation co-benefits to improve funding prospects.
- 77. Existing climate mechanisms can support ocean-based measures in NDCs, but financing ocean solutions is often under prioritized in the funding pipelines. Lack of alignment between climate finance and the ocean-climate nexus was highlighted, noting that climate funds were not equipped to address the triple planetary crisis holistically. Suggestions were made to prioritize cross-sector projects that deliver co-benefits, thereby making it more attractive for ocean financing. Participants further recommended exploring new financing pathways such as the SCF that could provide draft guidance to the operating entities of the financial mechanism, GCF and GEF; and encouraging the MWP to include ocean topics in its future dialogues and investment focused events. The Climate Investment Planning and Mobilization Framework, championed by the NDC Partnership and GCF, aims to identify various financing streams, including private sector for the development of ambitious NDCs.
- 78. Capacity-building must be designed according to national and local contexts and must elevate Indigenous Peoples and local communities knowledge to build ownership of the NDCs. It was noted that there needs to be clear mechanisms to mobilize Indigenous Peoples and local communities in the development of the new NDCs. Senegal noted that its new NDC was being developed with proactive outreach to local actors, including efforts to explain the NDC process and incorporating traditional knowledge. Participants also highlighted the need to create more level playing fields to balance private sector interests with local communities, noting issues such as deep-sea mining. Participants called for greater communication across sectors and stakeholders, and for developing clear mechanisms to address conflicts of interest.
- 79. Inclusion of the ocean NDCs are a key tool for countries to signal political will and climate ambition, thereby attracting private sector support. It was stated that blue finance must match the ambition for ocean-based climate action. It was suggested that the new NDCs, must set clear ocean-based targets and costing estimates, whilst highlighting actionable steps to implement the targets and measures. Several innovating financing mechanisms were highlighted, including sovereign blue bonds, payment for ecosystem-based services, and insurance programmes. The Seychelles' <u>blue bond</u> was cited as a model of how blended finance can support marine conservation and development goals when linked clearly to NDC implementation pathways.
- 80. Lack of national capacity for ocean data collection, science, and research was highlighted. Participants highlighted data gaps as a barrier to integrating ocean sectors like fisheries, aquaculture, and seafood processing into NDCs. It was highlighted that without robust MRV systems, it is difficult to ensure that finance reaches intended beneficiaries. The economic contribution of ocean ecosystems remains poorly documented, complicating efforts to integrate them into the NDCs. In response, participants discussed joint research programs, co-production of knowledge, stronger partnerships between research institutions and NDC teams, technology-sharing frameworks, and greater support for open-access data platforms. The Republic of Korea highlighted a Memorandum of Understanding to partner with Global Green Growth Institute to explore blue carbon opportunities to support the implementation of NDCs for partner countries, in addition to building their capacity through targeted training programs on Article 6 and blue carbon.

#### B. Topic 2: The ocean under the Global Goal on Adaptation

- 3. How can the ocean dimension best be integrated in the indicators as presently considered under the UAE–Belém work programme, particularly to accelerate ecosystem-based adaptation and advance nature-based solutions for coastal resilience?
  - 81. The key takeaways from the discussions on this guiding question were:
  - (a) Ocean as a cross-cutting consideration must be integrated across all GGA thematic targets, and not limited to selected targets and indicators. Expert engagement in indicator development should continue beyond COP 30, with the dialogue's messages to be transmitted for the development of ocean-related indicators.
  - (b) Ocean ecosystems are interconnected and diverse, and their alignment with other frameworks and standards is key for harnessing synergies and minimizing reporting burden. Ensure coherence and cohesion across the UN system for the GGA indicators, with recommendations for the dialogue to provide a platform for these conversations.
  - (c) Indicators should capture ecosystem integrity and connectivity, focusing on holistic system health, not isolated components. Accordingly, key indicators should be practical, realistic, global, and broadly applicable; while sub-indicators must be context specific and locally applicable to cater for diversity across local communities and countries. A metric to protect small-scale fishers, women, Indigenous Peoples and local communities metric and resilience (fisheries, food security and early warning systems), must be included. Integrating a specific indicator to address maladaptation risk could be beneficial.
  - (d) Disaggregation by ecosystem type is needed to reflect differences between coastal, deep-sea, high seas, and other marine systems. Accordingly, for the indicators design, include ecosystem-type disaggregated indicators (e.g. mangroves, coral reefs, seagrasses); and MPAs coverage and management effectiveness as adaptation indicators, given their key role to contribute to both biodiversity conservation and climate resilience (carbon sequestration, shoreline protection). Quantitative indicators are needed to scale up EbA and NbS, including measures to track and monitor blue carbon ecosystems.
  - (e) Equity in data access and sharing is critical for providing a regional picture of interdependent ecosystems. Strengthening early warning systems and regional ocean observations is important for the development of meaningful indicators. Building and enhancing local capacity, alongside integrating Indigenous People knowledge is vital to improve robustness and local relevance of the data systems. Inclusion of metrics on financial flows allocated to ocean action and technology transfer are recommended.
  - 82. Ocean as a cross-cutting issue must be integrated across all GGA thematic targets. As a cross-cutting issue, the ocean cuts across multiple thematic targets, including water, food, health, ecosystems, infrastructure, livelihoods, poverty, and MOI. Accordingly, it was urged that ocean dimensions are embedded across all the relevant GGA indicators, and not limited to selected targets and indicators. Reflecting the land—ocean connection in areas such as salinity, pollution, and water level, it was suggested to include the ocean in agriculture and land use indicators. At the same time, it was highlighted that the diversity of ecosystems needs to be taken in account as all indicators cannot be applied to all ecosystems. The list of indicators needs to include the contribution of oceans beyond ecosystems but also of coastal ecosystems as blue-green infrastructure.
  - 83. Alignment of indicators with other frameworks and standards is key for harnessing synergies and minimizing reporting burden. Observing that ocean ecosystems are interconnected and diverse, participants recommended leveraging existing indicators and data systems under multilateral biodiversity frameworks, such as the CBD's GBF, that includes marine targets such as 30 per cent area protection, ecosystem integrity, and effective conservation. IOC is Ocean Biodiversity Information System is a relevant source to inform them. It was urged that all the indicators must take transboundary effects into account, and comply with other human rights, climate and biodiversity regimes, including the Montreal Protocol and CBD.

- 84. Indicators should be realistic & practical and should take into consideration realities and diversity of communities. Participants noted that people-focused indicators were missing. Indicators should be universal, practical, and beneficial to everyone. Observing that community-led adaptation was crucial for effective ocean-based adaptation, the central role of small-scale fisheries and coastal communities was underscored. It was pointed that small-scale fishers, women, Indigenous Peoples, and local communities are often underrepresented in national-level adaptation planning and indicator development. Accordingly, it was suggested to have a metric to protect communities and their resilience (relating also to fisheries, food security and early warning systems). It was suggested that the FAO Small-Scale Fisheries Guidelines could inform GGA indicators for small-scale fisheries and community resilience. Pacific SIDS shared specific examples of early warning systems where tide gauge data are combined with Indigenous Peoples reef monitoring to inform local evacuation and risk protocols.
- Indicators should capture ecosystem integrity and connectivity, focusing on holistic system health, and not isolated components. Participants raised the importance of having key indicators that are realistic, practical, global, and broadly applicable, while creating sub-indicators that are more context specific and locally applicable to reflect diversity across local communities and countries. Ocean adaptation impacts need to be captured and integrated at both the headline indicator level and with sub-indicators aimed to provide granularity to specific contexts. It was stated that the indicators should have a common source, such as ecosystem extent, so that they can be applied globally and also drilled down to the local level. It was stated that the sub-indicators must remain in place to ensure cross-cutting representation of oceans. It was recommended that these indicators should reflect aspects relating to ocean acidification, coastal erosion, and how ecosystems are affected. For example, several Pacific SIDS (e.g. Samoa, Fiji, Tonga) have developed comprehensive National Ocean Policies which integrate climate change, fisheries, marine conservation, and community resilience. Reaffirming that ocean-based adaptation depends on the health of varied ocean ecosystems, from coastal zones to the high seas, it was urged to consider the impacts of activities such as deep-sea mining and mCDR.
- 86. **Disaggregation by ecosystem type is needed to reflect differences between coastal, deep-sea, high seas, and other marine systems.** It was stated that sub-indicators are important for specific ecosystem types such as Arctic & Antarctic, coastal, deep sea, tropical, wetlands, coral reefs, and food systems, fisheries, etc. However, proliferation and/or duplication must be avoided. Indicators should be adaptive, iterative, integrative, and implemented in practice, reflecting that adaptation is a journey rather than a fixed goal. Accordingly, it was suggested that disaggregation by ecosystem type is needed to reflect differences between coastal, deep-sea, high seas, and other marine systems. Consequently, for the indicators design it was recommended to include ecosystem-type disaggregated indicators (e.g. mangroves, coral reefs, seagrasses); and MPAs coverage and management effectiveness as adaptation indicators, given their key role to contribute to both biodiversity conservation and climate resilience (carbon sequestration, shoreline protection). For example, Brazil has integrated coral reef protection into both its NDC and NBSAP, thereby highlighting MPAs with climate resilience benefits.
- 87. Quantitative indicators are needed to scale up EbA and NbS, including measures to track and monitor blue carbon ecosystems. Participants expressed the need for onground mechanisms to track and monitor indicators, and more specifically NbS and EbA measures. This inclusion will allow for increased and expanded knowledge on what the best practices are and where they are needed more (e.g. MPAs). The role of blue carbon ecosystems such as mangroves, coral reefs, seagrass beds, and wetlands, was underscored as providing vital support for coastal adaptation, mitigation, and resilience. Accordingly, it was suggested to include quantitative indicators to scale up EbA and NbS, with measurement of ocean resilience and efficiency of adaptations measures. Colombia's Integrated Information System on Vulnerability, Risk, and Adaptation to Climate Change (SIIVRA), seeks to align GGA indicators with local plans and integrate them into national data systems.
- 88. **Data gaps and ocean observations remain a key barrier.** Equity in data access and sharing was highlighted as critical for providing a regional picture of interdependent ecosystems. It was stated that data availability and monitoring capacity gaps were particularly

acute for deep sea, high seas, and developing countries with limited marine monitoring infrastructure and research capacity. Uncertainty in ocean data requires acceptance of proxy indicators and tiered approaches to data quality. Accordingly, the need to strengthen ocean observation and monitoring systems to enable meaningful indicators, was underscored. Specifically, it was recommended to strengthen regional ocean observation systems, including by supporting existing networks such as GOOS and early warning systems, as these systems require funding. GOOS already provides regional ocean data for sea-level rise, temperature, acidification, etc., which can support the monitoring of ocean-related GGA indicators. Chile for example has formulated the National Data Centres Plan 2024–30.

- 89. Building local capacity and integrating science are key to allow for local adaptation and monitoring of ecosystems. It was noted that measuring indicators is complex and should not be dismissed simply because measurement is difficult. In this regard, it was urged to build and enhance capacity to be able to measure indicators, alongside integrating Indigenous People knowledge to improve robustness and local relevance of the data systems. Underscoring the importance of science, it was recommended that indicators shall not only reflect ecosystem science, meaning biophysical science, but also the social and cultural dimension. The Mangrove Breakthrough NDC Task Force Policy Guidance Briefs Wetlands International contains guidance for Parties on development of GGA indicators.
- 90. There is a risk of ending up with indicators that support maladaptation, and integrating a specific indicator to address this risk could be beneficial. Ecosystem integrity and exposure are crucial aspects to be measured by the indicators. Accordingly, it was suggested to include an indicator on maladaptation risks. Participants calls for clarification on how to measure resilience and on how to include risks like acidification. It was stated that risk indicators and early warning for flooding require greater coverage, as current IPCC processes do not adequately address them. Some participants also called for more technical guidance from the Adaptation Committee.
- 91. **Finance and technology indicators were recommended**. Participants underscored the need to include finance and technology indicators. It was suggested to include metrics on financial flows allocated to ocean adaptation, for example, the per cent of adaptation finance directed to ocean action. <u>IFC Blue Finance principles</u> were referenced as country-led and blended finance mechanisms designed to support ocean-based adaptation, especially in vulnerable coastal regions. It was also suggested to include ocean in reporting on research and developments indicators, potentially accounting for new and emerging technologies.
- 92. Expert engagement in indicator development should continue beyond COP 30, with the dialogue to help with continued coordination on ocean-related indicators. Participants underscored the importance of ensuring that existing ocean indicators remain in the final set of indicators, and that the messages from the dialogue are transmitted into the GGA work on indicators. There were calls for ensuring coherence and cohesion across the UN system for the GGA indicators, with recommendations for the dialogue to provide a platform for these conversations.

# 4. What scope do you see for better alignment between NBSAPs and NAPs, including for monitoring progress?

- 93. The main takeaways from the discussions on this guiding question included:
- (a) Coastal and marine ecosystems offer natural entry points for integration, as many adaptation priorities such as MPAs, coastal protection, fisheries, and blue carbon ecosystems are directly linked to biodiversity conservation. Aligning the planning and reporting processes of NBSAPs and NAPs can improve efficiency, reduce duplication, and foster synergies between climate and biodiversity goals.
- (b) Despite strong interlinkages, NBSAPs, NAPs, and ocean-related policies are often developed under separate ministries, creating fragmentation and impeding coherence. Stronger inter-ministerial coordination and aligned reporting cycles are needed to enhance coherence, reduce administrative burdens, and strengthen efficiency.
- (c) Shared indicators can reduce duplication and strengthen coherence across conventions, with harmonization of CBD (GBF) and UNFCCC (GGA) processes fostering

synergies. Marine-relevant CBD GBF indicators, such as MPA coverage and ecosystem integrity, can directly inform GGA monitoring to support aligned national and multilateral reporting.

- (d) Persistent data and capacity gaps, especially in developing countries, limit the effectiveness of integrated monitoring systems. Capacity-building, technical guidance, and regional mechanisms for data sharing and early warning systems are essential to strengthen both national and regional responses.
- (e) Ensuring participatory processes is essential, with small-scale fisheries, coastal communities, Indigenous Peoples, and women contributing to adaptation and biodiversity planning. Community engagement in monitoring, including through citizen science and local environmental action plans, enhances ownership and strengthens monitoring frameworks.
- (f) Financing streams for biodiversity and adaptation remain siloed, limiting opportunities for co-benefits. Greater integration of climate and biodiversity funding mechanisms, including joint programming windows through GCF, GEF, and related funds, would better support projects that address interconnected challenges.
- 94. Coastal and marine ecosystems offer natural entry points for integration. It was noted that many adaptation priorities, such as MPAs, coastal protection, fisheries, and blue carbon ecosystems, are directly linked to biodiversity conservation objectives. Integrated national ocean policies, MSP, and EbA offer practical pathways to operationalize this alignment. Brazil highlighted its MSP processes that align adaptation and biodiversity goals. In Japan, NAP measures, targets, and content are now transferred to the NBSAP, and around half of the targets have key performance indicators (e.g., "number of local governments that prepared a disaster map"). Some Parties mentioned building capacity and increasing integration of NBSAPs and NAPs with the new NDCs, recognizing that ecosystem restoration brings mitigation co-benefits and food security for communities.
- 95. Given the biodiversity-climate-ocean interlinkages, it was recommended to enhance integration and strengthen coordination across the relevant ministries. It was noted that in spite of the strong interlinkages between biodiversity and climate, development of NBSAPs, NAPs, and ocean-related policies are often overseen by different ministries within countries, thereby impeding coherence and understanding across line ministries. This fragmentation impedes integration and makes it difficult to align objectives, actions, and indicators. It was recommended to align timelines and reporting cycles for NBSAPs and NAPs to promote internal coordination. Participants underscored the need to encourage joint inter-ministerial coordination between environment, fisheries, climate, and finance ministries. In Singapore, the agency creating the NBSAP is different from the agency responsible for the NAP, with an interministerial committee facilitating coordination among government agencies.
- 96. Aligning biodiversity (NBSAPs) and adaptation (NAPs) planning and reporting processes can improve efficiency, coherence, and reduce duplication. It was recommended to align reporting timelines for NBSAP and NAP reports to allow ministries at the national and sub-national levels to coordinate with each other, reduce administrative burden and fosters synergies between climate and biodiversity goals. Pacific SIDS highlighted the development of National Ocean Policies that provide an integrated platform for aligning climate adaptation (NAPs), biodiversity (NBSAPs), and fisheries management. Additionally, Regional governance through the Pacific Ocean Commissioner's Office strengthens coherence across national and regional adaptation-based biodiversity strategies.
- 97. Significant gaps in marine and coastal ecosystem data persist for developing countries, especially LDCs, and SIDS. Participants highlighted that there is limited technical capacity to develop and apply integrated monitoring systems that serve both adaptation and biodiversity objectives. The need for capacity-building to strengthen integrated monitoring and reporting systems, as well as technical guidance on aligning reporting templates, data collection systems, and monitoring frameworks, was underscored. Additionally, participants emphasized the value of regional multinational mechanism for increasing monitoring progress, and for providing early warning and data sharing. Djibouti and Somalia share connected marine environments, with Somalia establishing Multi-Hazard Early Warning Systems to enhance regional monitoring and data sharing.

- 98. There is a need to raise awareness at the national level about where synergies exist, and to emphasize that the benefits outweigh any additional burden. It was suggested to have joint trainings and/or technical sessions for government representatives working on NAPs and NBSAPs to enhance alignment. Participants also suggested that regional technical cooperation should be strengthened, including for example through the UNFCCC Regional Collaboration Centres, CBD technical bodies, and regional ocean governance platforms.
- 99. Countries should ensure participatory processes that integrate the knowledge and needs of small-scale fisheries, coastal communities, Indigenous Peoples, and gender across both adaptation and biodiversity planning. Emphasis was placed on integrating community-based management, traditional knowledge, and small-scale fisheries into adaptation and biodiversity strategies. The need for gender-responsive approaches was also stressed. In Pacific SIDS, there is strong use of community-based resource management and traditional knowledge as part of ecosystem-based adaptation and biodiversity protection. It was suggested that the Small-Scale Fisheries Guidelines could serve as a common reference for both NAPs and NBSAPs when integrating fisheries-related indicators.
- 100. Monitoring should be undertaken in close collaboration with communities, drawing on citizen science to enable local participation and ownership. It was suggested to collaborate with organizations that have expertise in engaging communities, including on gender and Indigenous Peoples inclusion. Some Parties mentioned plans to map stakeholder interests in their NAP planning process to identify institutions needed to create linkages. Colombia has encouraged communities to develop their own local environmental action plans under guidance from the Ministry of Environment, beginning with a diagnosis of local climate and social hazards. These plans enable communities to undertake local monitoring and updates while contributing data and insights that strengthen national monitoring systems for NAPs. It was highlighted that community-based early warning systems can strengthen resilience and responsiveness at the local level, whilst, at the national scale, assessing commonalities and maintaining consistency in monitoring systems would enhance coherence and effectiveness. Portugal's annual global sustainable development report, which analyses all SDGs and indicators and is supported by a statistical committee that meets regularly to assess progress.
- 101. Shared indicators can support both national reporting obligations and multilateral commitments under CBD, UNFCCC, and the BBNJ Agreement. It was noted that many developing countries face duplicated efforts in reporting under UNFCCC (NAPs, NDCs), CBD (NBSAPs), and other MEAs. There is a lack of standardized guidance on how to align indicators, reporting formats, and monitoring systems across different conventions. Participants called for harmonization of indicators under CBD (GBF) and UNFCCC (GGA) processes to reduce duplication and foster synergies. Noting that the CBD GBF indicators include multiple marine-relevant indicators (e.g., MPA coverage, ecosystem integrity, species conservation status), it was recommended that they can directly inform GGA monitoring under UNFCCC, promoting alignment across processes. Panama's Nature Pledge, while recognizing synergies across climate change, biodiversity, and desertification, focuses on commitments established in the NDCs, the NBSAPs, and the National Desertification and Degradation Targets. The Bern process was launched to foster dialogue, strengthen coordination, and collaboration at the national level between biodiversity-related conventions in support of effective and synergetic development and implementation of the GBF.
- 102. Funding streams for adaptation and biodiversity often operate separately. Participants discussed that current financial mechanisms (e.g., GCF, GEF) lack integrated funding windows. It was suggested that climate funds (GCF, Adaptation Fund) and biodiversity funds (GEF) should be encouraged to develop joint programming windows for co-benefit projects.

#### C. Topic 3: Ocean-climate-biodiversity synergies

- 1. How can the outcomes of UNOC best contribute to the ocean-climate-biodiversity nexus under the UNFCCC process?
  - 103. The main takeaways from the discussions on this guiding question included:
  - (a) UNOC was recognized as a key venue to align climate, biodiversity, and ocean agendas, with outcomes to be translated into national level processes and advanced in the context of specific global frameworks, including the UNFCCC and Paris Agreement, CBD, UNCLOS, and BBNJ. There were calls for the dialogue to reflect on the outcomes that support synergies with other conventions, including the CBD and BBNJ Agreement.
  - (b) UNOC reaffirmed the ocean-climate-biodiversity nexus through the existing legal instruments thereby strengthening the call for synergies across the conventions. There were calls for the establishment of a UN mechanism to coordinate on the nexus and clarify on possible overlaps. However, there was caution in creating such a mechanism, noting the existing inter-agency mechanism, UN-Oceans.
  - (c) Safeguards, trade-offs, and ecosystem integrity were underscored as critical for advancing mitigation solutions. mCDR must apply the precautionary principle. There were calls for clarification needed on the roles of UNFCCC, CBD, and the London Protocol on ocean-based mitigation solutions.
  - (d) Implementation and capacity were identified as barriers. Participants underscored the need for enhanced regional capacity building, development of concrete workplans to support joint implementation of NbS, across conventions., and decision-making grounded in the best available science and integration of Indigenous Peoples and local communities knowledge.
  - (e) Addressing land-based pollution, including plastics and industrial waste, is a critical part of the ocean-climate nexus, particularly given its close connection to fossil fuel value chains. Discussions highlighted the BBNJ Agreement as a potential tool for addressing climate stressors in areas beyond national jurisdiction, particularly deep seabed mining.
  - 104. UNOC was recognized as a central venue to identify and align efforts across climate, biodiversity, and ocean agendas. Participants discussed that UNOC outcomes must be translated into national-level processes and should be brought forward in the context of specific global frameworks, including the UNFCCC and Paris Agreement, CBD, UNCLOS, and BBNJ Agreement. There were calls for the dialogue to reflect on the outcomes from UNOC that support synergies with other conventions, including the CBD and BBNJ Agreement. The ocean breakthroughs, including the mangrove breakthrough was cited as an initiative to showcase the ocean-climate-biodiversity nexus. The case to integrate ocean-based measures in NDCs was made by several Parties which could be amplified through initiatives such as the Blue NDC challenge.
  - 105. UNOC "Our ocean, our future: united for urgent action" declaration reaffirms international legal pillars such as UNCLOS and the work of the International Law Commission on sea-level rise, that already establish the ocean-climate-biodiversity nexus. Participants noted that, through recognition in UNOC outcomes of existing international legal instruments and principles, there was an opportunity to leverage and emphasize this nexus, drawing on the best available science. Additionally, participants also noted the significance of the ITLOS advisory opinion on climate change which emphasizes states' obligations to integrate climate considerations into the protection and preservation of the marine environment. Accordingly, participants stressed that synergies across UNFCCC, Paris Agreement and UNCLOS will need to be further explored.
  - 106. Greater governance and institutional cooperation were emphasized. Discussions underscored the need for stronger coordination between scientific bodies such as the IPCC, IPBES, and World Ocean Assessment, including the BBNJ Agreement upon its entry into force. Suggestions were made for a COP 30 decision on synergies between the three Rio Conventions, either through a new agenda item or under existing cooperation tracks. Building on the ocean-climate-biodiversity interlinkages recognized in the UNOC outcome and

- responding to Decision 16/22 of COP of CBD, some participants called for a mechanism to coordinate across the UN system on the nexus such as creating an ad hoc office. However, there was caution expressed in such an idea, with several participants referring to the existing inter-agency ocean coordination mechanism, UN-Oceans convened by DOALOS.
- 107. **Safeguards, trade-offs, and marine ecosystems integrity were highlighted as essential considerations in advancing mitigation solutions.** Offshore wind and mCDR must incorporate biodiversity safeguards and ecosystem integrity, with calls to apply the precautionary principle to marine geoengineering. There were calls to clarify the role of UNFCCC, CBD and London Protocol on mitigation-based interventions. Colombia's <u>Ocean Renewables Strategic plan</u> has a strong emphasis on renewable energy development, particularly wind and solar. However, implementation has been hindered by degraded ecosystems and high poverty levels in the targeted regions, highlighting the importance of integrated planning that embeds social equity, ecological health, and just transition principles alongside climate goals.
- 108. **Implementation of ocean-based solutions and capacity were identified as barriers.** Discussions highlighted that UNOC outcomes urged capacity-building of developing countries, especially SIDS and LDCs. Participants noted that existing capacity building networks rely mostly on land criteria than on the ocean. It was recommended to enhance capacity-building at the regional level to ensure the most relevant joint approaches on nexus to avoid duplication of efforts and unnecessary reporting burdens. The cross-secretariat coordination model of the <u>Basel</u>, <u>Rotterdam and Stockholm (BRS) Conventions</u> was suggested as a good practice in this regard. Concrete workplans, such as those developed between Ramsar and CBD, were seen as useful in supporting joint implementation of NbS.
- 109. Recognition of the role of UNOC in advancing ratifications towards the BBNJ Treaty, and of the role of science and Indigenous Peoples traditional knowledge in decision-making to advance the ocean-climate-biodiversity nexus, was highlighted. Participants underlined that UNOC was critical in underscoring the importance of the early entry into force and effective implementation of the BBNJ Agreement. It was also noted that UNOC had emphasized that decision-making on the ocean-climate-biodiversity nexus must be firmly grounded in the best available science and integrate Indigenous Peoples and local communities knowledge. Recognition of the right to a healthy environment, as affirmed by the UN General Assembly, was highlighted as a rights-based entry point to strengthen the ocean-climate-biodiversity nexus.
- 110. UNOC raised public awareness on the existing threats to marine biodiversity, such as plastic pollution, ecosystem exploitation, maritime transport, use of fossil fuels/offshore oil and gas extraction. It was discussed that addressing land-based pollution, including plastics and industrial waste, is a critical part of the ocean-climate nexus, particularly given its close connection to fossil fuel value chains. Discussions highlighted the BBNJ Agreement and the regulatory framework of the International Seabed Authority as a potential tool for protection of the ocean from climate stressors in areas beyond national jurisdiction, particularly in addressing deep seabed mining, which can disrupt the ocean's role as a climate sink.
- 111. The importance of source-to-sea and freshwater integration was also emphasized. Participants advocating for better cooperation between river basin organizations and regional seas organizations. The initiative between the <a href="Black Sea Commission">Black Sea Commission</a> and the <a href="Danube River Commission">Danube River Commission</a> demonstrates how upstream-downstream integration can enhance ocean outcomes, directly contributing to the nexus objectives.
- 2. How can the dialogue support Parties in the early ratification and implementation of the BBNJ Agreement in its different sections including the establishment of ABMTs and MPAs?
  - 112. The main takeaways from the discussions on this guiding question included:
  - (a) The dialogue could play a central role in supporting Parties with the early ratification and implementation of the BBNJ Agreement by raising awareness among UNFCCC Parties about the BBNJ Agreement's relevance to climate objectives.

- (b) UNFCCC could call for cooperation with the BBNJ Agreement after it enters into force and could designate focal points on the ocean to facilitate communication. The next dialogue theme could be on the early implementation of the BBNJ Agreement, to exchange experiences.
- (c) Increased ocean warming is driving climate change impacts such as ocean acidification and coral reef degradation. Strengthening scientific understanding of these impacts, alongside the use of science and Indigenous Peoples knowledge was identified as essential foundations for policymaking.
- (d) On the operationalization of ABMTs and MPAs, it was suggested to incorporate climate objectives, while ensuring coordination across access and benefit-sharing regimes and international financial bodies. The importance of inclusive and participatory governance was emphasized, with calls to ensure representation of small-scale fishers, Indigenous Peoples, and coastal communities across BBNJ bodies.
- (e) The dialogue was seen as a space to promote coherence between climate objectives and those of other legal frameworks, particularly the CBD and the BBNJ Agreement. The CBD's 30x30 targets were noted as important to tie into this discussion, together with a better understanding of ecological connectivity both within and beyond national jurisdiction.
- (f) Closer alignment among the Rio Conventions and BBNJ Agreement is suggested, and accordingly coordination between secretariats and national-level actors across these frameworks was underscore. The dialogue was considered a venue to help Parties identify overlaps and opportunities for cooperation, particularly in the context of the BBNJ BBNJ Agreement's entry into force and its early implementation.
- 113. The dialogue could play a central role in supporting Parties with the early ratification and implementation of the BBNJ Agreement. The dialogue was seen as a platform for coordination and awareness raising among UNFCCC Parties about the importance of the BBNJ Agreement and its relevance to climate change goals. There were suggestions that the dialogue could provide concrete recommendations through its reports and messages that could directly inform and support the ratification and implementation of the BBNJ Agreement. Some participants suggested that UNFCCC could call for cooperation with the BBNJ Agreement after it enters into force, and few suggested designations of sectoral focal points to facilitate communication across the secretariats. It was also suggested that the COP 30 Presidency could elevate the BBNJ Agreement in their ocean diplomacy communications ahead of Belém.
- 114. It was proposed that the next dialogue could orient its theme on the early implementation of the BBNJ, providing space for Parties and stakeholders to share experiences. Such exchanges would also help demonstrate the co-benefits of BBNJ implementation for climate resilience. For example, ABMTs and MPAs not only support biodiversity conservation but also strengthen local community resilience to climate change and sustain carbon sinks. Additional areas of potential action with co-benefits were also identified, such as ocean acidification, coral reef bleaching and financing. Strengthening scientific understanding of these impacts, alongside the use of science and Indigenous Peoples knowledge identified as essential foundations for policymaking.
- 115. Noting that cooperation and coordination among relevant instruments, frameworks and bodies (including UNFCCC, the Paris Agreement, ISA, CBD, UNCCD) are at the heart of the BBNJ Agreement, the dialogue can help promote these synergies in relation to the ocean-biodiversity-climate nexus and identify potential areas of cooperation. It was highlighted that Parties to the BBNJ Agreement are required to cooperate, promote coherence, and participate constructively in decision-making processes across relevant frameworks and bodies. With areas under the BBNJ covering half of the planet's surface, it was suggested that there may be scope to consider closer alignment among the BBNJ and the Rio Conventions recognizing their interdependence. Coordination between secretariats and national-level actors was emphasized as essential. The CBD's 30x30 targets were noted as important to tie into this discussion, together with a better understanding of ecological connectivity both within and beyond national jurisdiction. Examples from other

regimes were shared to illustrate how such cross-cutting cooperation might be approached, including the London Protocol and the <u>Kigali Amendment to the Ozone Convention</u>.

116. On the operationalization of ABMTs and MPAs, there were discussions around the need for technical bodies to define clear criteria for identifying MPAs beyond national jurisdiction such as vulnerability assessments, and for management goals that incorporate climate-related objectives. It was stated that coordination would be needed across access and benefit-sharing regimes and IFIs to support effective implementation. Participants underlined that the implementation phase should ensure that small-scale fishers, Indigenous Peoples, and other coastal communities are well represented across BBNJ's bodies and mechanisms, and COP 1 of BBNJ Agreement should set the tone for a transparent, inclusive and participatory governance model.

#### **D.** Cross-cutting issues

- 117. The breakout group discussions highlighted several cross-cutting issues. The discussions on the financing for NDCs should be read in conjunction with the MOI discussions in Topic 1, and these were a continuation of the previous discussions on financing. The key takeaways from the discussions on these cross-cutting issues included:
- (a) Ocean-based actions, especially adaptation, remain underfunded in existing climate finance streams, despite their crucial role in both adaptation and mitigation. Existing finance mechanisms (GCF, GEF, Adaptation Fund) and MDBs provide some entry points, but have limited capacity to directly finance ocean activities.
- (b) Ocean based adaptation deserves dedicated finance mechanisms within existing climate funds to ensure predictable and targeted support for coastal protection and marine resilience, while reducing fragmentation and improving access for vulnerable regions. Establish or scale ocean finance windows in GCF, GEF and the Adaptation Fund to specifically target ocean-based adaptation and NbS. Diverse funding sources to fund various adaptation actions are needed.
- (c) Capacity gaps limit access for developing countries. Many SIDS, LDCs and coastal communities struggle with complex application processes, limited institutional capacity and insufficient technical support. Sufficient finance is needed to integrate science and enhance capacity-building. Simplify application processes, provide targeted support to SIDS and developing countries to access the existing finance mechanism.
- (d) Ensure coastal communities, SIDS, women, small-scale fisheries, and Indigenous Peoples are included in finance strategies, project design and delivery. Including longer-term and flexible funding, while integrating traditional knowledge and socio-cultural realities is essential for equity and just transition, while overcoming persistent barriers in accessibility. Tailored financial instruments to support coastal adaptation and biodiversity actions are needed.
- (e) Private sector engagement can complement public finance sources. Innovative mechanisms such as de-risking strategies and blended finance models (blue bonds, insurance schemes, guarantee funds) show potential to unlock ocean-related investments. While high costs and uncertain returns challenge emerging areas like blue carbon and offshore renewables, long-term investment can reduce costs, scale solutions, and align biodiversity and climate goals.
- (f) Improve tracking of ocean-related finance flows to ensure transparency and accountability in the implementation of ocean measures in the NDCs. Clearer metrics, transparency on grants versus loans, and accountability in financial flows are needed to avoid debt burdens on coastal communities. Recognizing co-benefits of ocean initiatives, such as mangroves for disaster risk reduction and fisheries management for both carbon and adaptation, can elevate their value in climate finance while ensuring whole of ecosystem approaches.
- (g) Indigenous Peoples and local knowledge must be respectfully incorporated to inform data and science gaps. Capacity-building is essential to inform the scientific

community and policymakers of the traditional knowledge available. Science must be communicated to policymakers in more understandable ways, while respecting the sensitivities around knowledge and data sharing. The co-production of knowledge between scientists and communities is critical, alongside ethical research practices, equitable governance, and clear codes of conduct.

- (h) UNFCCC can provide a space to make use of both science and Indigenous Peoples and local knowledge. Leveraging the RSO workstream communities, including local community knowledge in NAPs, the recent international law developments, the participation of Indigenous Peoples in UNFCCC processes, and the IPCC AR7 WGII can strengthen further synergies within ocean, climate and biodiversity streams on science.
- (i) Long term-regional data systems, investments in data collection and research, and partnerships amongst countries is needed to avoid overlaps, identify gaps, and support systemic approaches to science and monitoring. Investments in data collection and research, greater transparency in funding, and capacity-building for data and technology sharing are necessary.
- (j) Science and sustained observation systems are critical for proven and emerging ocean—climate solutions, with particular attention to creation of regional science platforms and the inclusion of developing country researchers, Indigenous Peoples, and women.
- (k) Develop a three-to-five year roadmap aligned with UNFCCC workplans and cycles to ensure continuity, coherence, and technical depth across the ocean-climate agenda. Strengthen technical inputs through science-policy expert panels, ensure meaningful participation of developing countries, Indigenous Peoples, and coastal communities, and include monitoring and stocktaking checkpoints to assess implementation progress over time.
- 1. What are the key financing instruments and sources for the Parties to implement ocean-based action in the new NDCs? To which extent do you believe existing climate finance is accessible for ocean-related strategies?
  - 118. Despite the growing recognition of the ocean-climate nexus, climate funds such as the GCF and GEF do not offer dedicated ocean finance streams. Participants highlighted the urgent need for targeted finance for the ocean, noting that the ocean, and more specifically ocean-based adaptation remains underfunded. It was observed that the GCF is predominantly mitigation-oriented, and the GEF is largely focused on terrestrial action. Participants called for climate funds to recognize the ocean as a dedicated stream to allocate funds for ocean-based solutions more efficiently. The Pacific Resilience Facility was cited as a regionally tailored model designed to attract adaptation finance for Pacific countries. Jamaica was referenced as having incorporated flood resilience into its financing strategies, with lessons relevant for ocean adaptation.
  - 119. Finance should reflect the unique needs of coastal communities, SIDS, women, small-scale fisheries, Indigenous Peoples, and coastal communities. Noting that accessibility remains a persistent barrier in climate finance, particularly for Indigenous Peoples and local communities, there were recommendations for their inclusion to enhance equity, integrate traditional knowledge and the contextual and socio-economic realities of coastal and island communities. Reference was made to The East African Ocean Festival in Kenya, an annual event celebrating the cultural and ecological links between communities and the ocean.
  - 120. **Technical assistance is essential for improving accessibility**. Participants expressed concern regarding the complexity and inaccessibility of readiness funds including the GCF Readiness Fund. It was noted that though the availability of these funds was known, however, small delegations were not able to access these, due to lack of capacity to complete complex applications. Accordingly, it was suggested to enhance capacity-building and technical assistance to ensure equitable access. Participants noted that dedicated blue finance windows can help to streamline project pipelines, improve access, and derisk investments.
  - 121. Ocean-based adaptation requires dedicated financing windows within climate funds. Participants suggested that as funding for inclusion of ocean in NDCs and for ocean-based solutions remains fragmented, creating a distinct blue finance stream within the GCF,

GEF and the Adaptation Fund would enable dedicated ocean-based funding. Such dedicated channels would enable predictable support for coastal protection, offshore renewables, and marine resilience, particularly in vulnerable regions. Additional financing could be mobilized for both climate and biodiversity action, by attracting philanthropic investments. Tools like the Blue Carbon Ecosystem Investment Guide and the Climate Investment Planning and Mobilization Framework were recognized for their role in preparing investment-ready, nature-based coastal solutions.

- 122. Participants further suggested that the dialogue could highlight co-benefits of existing ocean initiatives, such as mangrove preservation and blue carbon. Noting that while local communities often perceive these as disaster risk reduction measures, there was potential for these ocean solutions to be recognized as climate finance opportunities. The dialogue was identified as a forum that could address a specific case for example of the Pacific SIDS to explore how to access ocean-based finance for the region, and further identify climate co-benefits in existing ocean initiatives. It was noted that as the cost of blue carbon research and implementation remains high, and the benefit is too onerous for the return, incentives and blended finance models could help reduce these costs and increase scalability. South Korea's climate response fund includes ocean measures, financed equally by the national budget and revenues from its domestic carbon trading system. This fund mobilizes approximately USD 1.8 billion annually to support research, eco-friendly fishing fleets, and other NDC-related measures.
- 123. Engaging the private sector through de-risking and blended finance can complement public funding. De-risking blue finance was identified as essential and could be achieved through investments in resilience and by encouraging the insurance sector to engage more actively. Opportunities also exist to leverage insurance and resilience investments, making ocean finance more attractive to private capital. Noting the high costs of research and implementation barriers of emerging areas in offshore renewables, with small returns, participants discussed that to attract more private sector investment and philanthropic contributions, derisking strategies must be deployed, including tools to verify these returns so as to justify the set-up of these projects. However, investments can reduce costs over time—for example, offshore wind remains expensive outside Europe but is expected to become more affordable with increased capital inflows. The German Offshore-Wind <u>Initiative</u> aims to meet the expansion target for offshore wind energy and the construction gap of offshore wind energy, by strengthening the export business primarily for smaller and middle-sized German companies within the offshore wind energy sector. Scaling up blended finance instruments such as Blue Bonds, and guarantee schemes. For example, through innovative guarantees, the Nautilus Fund de-risks and mobilises sustainable debt investments, empowering ocean-positive projects that protect marine ecosystems, enhance community resilience and drive socio-economic growth in vulnerable coastal regions.
- 124. It was further highlighted that the return on investment for local communities is unclear, making projects difficult to justify, along with lack of accounting to measure blue carbon ecosystems. Participants highlighted that even through discussions around finance had broadened to now encompass blue carbon credits, however, there were risks that came with focusing on carbon markets as local communities did not know of the return on investments in blue carbon projects. Further, there was an absence of accounting, and the value of ecosystem functioning was not known. It was noted that instruments such as sovereign blue bonds, insurance schemes, and payment for ecosystem services offer diversified financing routes beyond carbon markets. Japan has set up nine individual blue carbon projects at the municipal level. The credits are state owned and can only be traded once. The ecosystem and ecosystem functionality are embedded into the price. It was further suggested that by the inclusion of the ocean in NDCs, financing could be enhanced.
- 125. Transparency in tracking how ocean action financing is advanced was emphasised. Participants expressed the need for transparency regarding finance and finance flows. Participants noted that clarity is needed not only on how much money is being allocated but also on whether financing comes in the form of loans or grants. Concerns were raised about coastal communities incurring debt due to loan-based mechanisms. There were suggestions for improving data and metrics for tracking ocean finance, recognizing that ocean-based solutions are often less profitable.

- 126. A holistic approach to fisheries was deemed necessary. It was noted that many marine and terrestrial financing and valuing focuses on the whole habitat. It was noted that a holistic view of fisheries, including fishing practices is essential to support not just adaptation, but also mitigation. Accordingly, the need to finance whole of ecosystem impacts was underscored.
- 2. How to enhance access to ocean science, integrating traditional and local knowledge systems, and strengthening capacity for ocean research, especially in developing countries, for tackling climate change and promoting marine biodiversity conservation and sustainable use?
  - The importance of adequately and respectfully incorporating Indigenous Peoples and local knowledge into science was emphasized. It was highlighted that data capture puts pressure on developing countries, and that data disparity also exists among countries relating to the GGA indicators. Participants noted that data poor areas often have Indigenous Peoples and local communities knowledge that can inform science gaps. It was suggested to build capacity to support the incorporation of Indigenous Peoples and local knowledge and inform the scientific community and policymakers of which scientific questions are relevant in local communities. For example, Zulu beliefs, which view ancestors as walking the seabed, reflect culturally anchored perspectives relevant to decisions around deep-sea mining and ocean governance. It was emphasized that such utilization should be collaborative and respectful, and social scientists should get more involved with Indigenous Peoples perspective. The Large Scale Seagrass Mapping and Management Initiative was exploring seagrass mapping to strengthen local capacity through research projects and was integrating local language. The Association of Pacific Rim Universities holds workshops to support and encourage the incorporation of Indigenous Peoples and local knowledge. It was suggested that national scientific programs could integrate EbA and marine biodiversity research.
  - 128. Participants discussed that the UNFCCC, could provide a space to make use of both science and Indigenous Peoples and local knowledge. Participants unanimously raised the need to enhance data sharing between biodiversity and climate frameworks to avoid any overlaps and to underline potential cooperation for a systemic approach to science as well as for monitoring systems. Some participants suggested utilizing the RSO science workstream communities for adequate ocean support on observation, assessments and modelling scenarios. Some participants suggested the need to clarify "best available science" to ensure the inclusion of traditional knowledge. It was also noted that the IPCC was aiming for a greater regional focus, and that IPCC AR7 WGII will addresses these matters. Parties were encouraged the further integrate local community knowledge into the NAPs. It was recommended that Indigenous People's participation is mainstreamed in UNFCCC delegations, and should be considered as experts, and not just on traditional knowledge. It was also suggested that with the recent international law developments, including ITLOS and ICJ advisory opinions, the dialogue could use these to strengthen further synergies within ocean, climate and biodiversity streams on science.
  - 129. Long term-regional data systems, investments in data collection and research, and partnerships amongst countries is needed. Underscoring the importance of data, it was suggested to increase investments in data collection and research. Further transparency in research and funding, collaboration amongst countries, capacity-building for data and technology sharing, and the inclusion of Indigenous Peoples and local communities knowledge was emphasized. Use of participatory research models with coastal communities was emphasized. The co-production of knowledge between scientists and communities was underscored, as well as having integrated science and policy frameworks that would combine national ocean research with local knowledge systems. The Pacific Islands Climate Action Network produces regionally authored reports and coordinates a SIDS science group, which fosters regional leadership in climate science. The SIDS Ocean Science Policy Network Pilot Project facilitates cross regional knowledge exchange, and provides targeted support to empower leaders, organizations, and institutions to develop SIDS led sustainable ocean programs. It was suggested that policy makers should apply a systems thinking perspective. Adhering to a code of conduct and ethics of research including respectful governance, equity and transparency was emphasized, noting the American Geophysical Union's Ethical

<u>Framework Principles</u>. It was suggested that environmental impact assessments should include impacts on the ocean.

- 130. To strengthen regional cooperation, it was recommended to create regional science platforms to share research and identify knowledge gaps, including those related blue carbon ecosystems. Examples included Australia's Bureau of Meteorology, and the Pacific Ocean Commissioner that was strengthening data access combining scientific and traditional knowledge. It was stated that science must be communicated to policy makers in a more understandable manner. Data sharing limitations were identified, such as data often being site-specific, sensitive nature of data, the need for proxies and embracing non-linear data for decision-making.
- 131. Ocean science and observations are critical for the proven and emerging ocean-climate solutions. Participants unanimously raised the need to enhance data sharing between climate and biodiversity framework to avoid overlaps and to underline potential cooperation for a systemic approach for science and monitoring systems. Participants underscored the importance of investment in ocean observation infrastructure, highlighted capacity gaps among developing countries researchers in ocean observations, and stressed the inclusion of Indigenous Peoples knowledge, and participation of women in coastal adaptation and marine biodiversity protection. GOOS was mentioned as an existing global platform offering essential ocean climate data, and which requires expanded coverage and accessibility for developing countries. There were suggestions for knowledge integration and technical cooperation across MEAs. The UN Decade of Ocean Science for Sustainable Development was noted as a global platform supporting capacity-building and inclusive ocean science, with many SIDS and LDCs actively participating.
- 3. How should a three-to-five-year roadmap for the Ocean and Climate Dialogue be structured to facilitate long-term planning and ensure a coherent and progressive addressing of relevant topics over time?
  - 132. At the outset we note that several recommendations were made on this guiding question. Whilst we collate these in the table below, we take note as our predecessors have that these expectations are tasks that the dialogue should address over time. In addition, we also note that the implementation of these recommendations is subject to the availability of financial resources for the secretariat.

Table 1 **Recommendations for the thematic roadmap** 

Thematic roadmap	Summary of recommendations	
Roadmap alignment and structure	Establish a 3–5 year work programme with defined outcomes, progress tracking, and reporting.	
	Long-term planning that reflects regional priorities and builds sustained capacity.	
	Align roadmap with upcoming milestones: GGA, SCF Forum, Article 6.8, GST 2028, post-2030 SDG Agenda, GBF review, BBNJ Agreement entry into force.	
	Align roadmap with Paris Agreement ambition cycle on NDC integration.	
	Roadmap should ensure continuity, coherence and ambition across ocean-climate agenda.	
	Use UN Decade of Ocean Science to feed science into the roadmap.	
Dialogue design and	Include monitoring and stocktaking checkpoints.	
participation	Strategically select topics to create synergies with other work programmes and agenda items of UNFCCC.	
	Structured, progressive dialogues with defined thematic focus areas over multiple years.	

Thematic roadmap	Summary of recommendations
	Track incorporation of dialogue outcomes in work
	programmes.
	Continue facilitating the exchange of views and good practices.
	Ensure participation of developing countries, coastal communities, small-scale fishers, Indigenous Peoples, and women in dialogue design and implementation.
	Increase Party attendance, by using online tools and engagement with COP Presidencies.
Synergies and	Be informed by the ITLOS and ICJ Advisory opinions.
international law developments	Strengthen synergies with IMO, CBD, and other climate-ocean-biodiversity fora.
	Follow developments in science including the IPCC AR7 assessment cycle.
	SCF funding for ocean-based solutions.
Dialogue expectations	Dialogue as a connecting hub for all ocean issues.
	Strengthen technical inputs through science-policy expert panels that feed into the dialogue (including marine scientists, regional bodies, Indigenous Peoples knowledge holders).
	Establishing a work programme or agenda item.
	Report back on UNFCCC workplans integrating the ocean and disseminate conclusions of the dialogue in negotiated items.
	GST design can serve as a template for collecting inputs, synthesizing knowledge, and framing outputs.
	Establish technical working groups or agenda items on synergies.
	The agenda should align with mandated events and initiatives.
	Serve as a strategic vehicle for integrating ocean issues into the broader UNFCCC processes.

# VII. Plenary

133. For the plenary session, we invited Parties to highlight good practices and lessons learned from their national and regional contexts in integration ocean-based action in their NDCs, adaptation plans and overall synergistic sustainable development planning. Due to time constraints, we invited Parties and observers to submit their plenary statements that have also been published on the UNFCCC ocean webpage. Annex II contains a list of the Parties and observer organizations that provided oral and written submissions. We have compiled responses to the guiding questions of the information note herein below.

Table 2 **Plenary statements summary** 

Guiding Questions	Summary of Key Points
1. Opportunities and best practices for integrating	Increase inclusion of blue carbon ecosystems in the new NDCs.
sustainable ocean-based actions in NDCs.	Restore and protect blue carbon ecosystems.
actions in ADCs.	Embed NbS through measurable indicators aligned with the GGA.
	Link NDCs to NAPs, and NBSAPs

Guiding Questions

Summary of Key Points

Utilize spatial planning tools and Indigenous Peoples knowledge in policy design.

Pilot innovative finance tools (e.g., reef insurance, Nature Bonds, Blue Carbon Plus).

Integrate Indigenous Peoples knowledge.

Use science-based tools and guidance (e.g., technical assistance, monitoring frameworks).

Include ocean breakthroughs with sectoral targets as pathways for NDC ambition.

Support the Blue NDC Challenge to scale ambition.

2. Obstacles and opportunities related to means of implementation-finance (Art. 9), technology (Art. 10), and capacity-building (Art. 11) for the inclusion of ocean in NDCs

#### Climate finance: obstacles and opportunities

Limited access to climate finance for developing countries, especially public finance due to non-market-viability of marine/coastal projects.

Create dedicated blue climate finance windows.

Simplify climate fund access procedures for SIDS and LDCs, including access to funding from IFIs.

Leverage IFIs finance, including innovative finance such as reef insurance, blue bonds, blended finance, Blue Carbon Plus, and nature bonds.

Need for increased resources in climate funds and for dedicated blue climate funding streams with increased funding eligibility for NbS.

Proposal to scale up the Baku to Belém Roadmap.

Emphasis on transparency, integrity, and inclusiveness in finance design and delivery.

# Ocean-based technologies: obstacles and opportunities

Facilitating access to ocean-based technologies to developing country Parties through collaborative approaches to research and development.

Facilitate the safe and responsible research and exploration of mCDR technologies through partnerships.

Pursuing voluntary cooperation through partnerships to enhanced ocean-based mitigation and adaption ambition, including through scaling of blue carbon projects such as mangrove restoration.

#### Capacity-building: obstacles and opportunities

Limited technical capacity for developing countries to implement and monitor ocean-based adaptation and mitigation measures.

Knowledge gaps and inequitable access to data, including in the deep sea and transboundary areas.

Strengthening capacity-building of developing countries, especially SIDS and LDCs, to enhance ocean-based climate action, including facilitating technology development, deployment and dissemination, and access to public finance.

Strengthening international cooperation, establishing regional research hubs and strengthening local research institutions, for peer learning and fostering country ownership, in particular for developing countries.

Integrating traditional knowledge systems, especially from Indigenous Peoples and coastal communities.

Guiding Questions	Summary of Key Points
	Supporting open-access data platforms and creating regional data-sharing platforms.
	Addressing research capacity needs and knowledge gaps through targeted investments and long-term partnerships.
3. Integration of the ocean dimension into GGA indicators	Calls for ecosystem-specific indicators under the GGA, including- early warning systems, ecosystem protection and restoration, livelihood resilience.
	Metrics for blue carbon ecosystems, marine biodiversity health, storm buffering capacity, reef condition, saltwater intrusion, and mangrove coverage.
	Indicators should be measurable, gender-responsive, support local adaptation, and be informed by Indigenous Peoples knowledge systems.
	Align GGA indicators with the GBF and ocean–climate synergies.
4. Scope for better alignment between NBSAPs and NAPs	Support for policy coherence across NDCs, NAPs, and NBSAPs.
(including monitoring progress)	Monitoring systems should track NbS and blue carbon contributions.
	Synchronize monitoring frameworks and reporting mechanisms under both UNFCCC and CBD.
	Use the GGA and GBF as platforms to ensure coherence.
	Emphasis on equity, co-benefits, and inclusive reporting practices.
5. Contribution of UNOC	UNOC outcomes should inform COP 30 processes.
outcomes to the ocean– climate–biodiversity nexus	Support ongoing initiatives like the Blue NDC Challenge and Ocean Breakthroughs.
under the UNFCCC process	UNOC a key opportunity to enhance ocean-climate- biodiversity synergies, including to build coherence across the Rio Conventions.
	Leverage UNOC outcomes to mainstream ocean priorities into the UNFCCC and CBD agendas.
6. Dialogue support for BBNJ ratification and	Support for the early ratification and operationalization of the BBNJ Agreement.
implementation (including ABMTs, MPAs)	Recognition of the BBNJ's potential to advance ABMTs and MPAs as key tools for adaptation and biodiversity conservation.
	Need for capacity support, legal assistance, and inclusion of climate considerations for BBNJ implementation.
	Emphasis on ensuring that BBNJ implementation contributes to GGA targets and NDCs.
7. Structuring a 3–5 year	Transition from ambition to structured implementation.
roadmap for the dialogue	Include annual thematic focus areas, e.g., finance, blue carbon, science-policy integration.
	Develop a multi-year action plan aligned with COP cycles.
	Track progress on key initiatives like BBNJ implementation, and GGA indicators.
	Support cross-convention coordination.

Guiding Questions	Summary of Key Points
	Foster recurring engagement with Indigenous Peoples,
	civil society, women, and youth.

# VIII. Summary of emerging key messages by the co-facilitators and next steps

134. At the end of the plenary, we summarized the key messages that emerged from the breakout group discussions. On Topic 1, the key messages were:

#### 135. On Topic 1, the key messages were:

- (a) Strong encouragement for the dialogue to actively guide the integration of ocean-related dimensions into the new NDCs.
- (b) There was a clear consensus on the vast array of sustainable ocean-based mitigation and adaptation measures available for their inclusion in the NDCs.
- (c) It was emphasized that there is no "one-size-fits-all" approach to incorporating ocean issues into NDCs. Rather, ocean-based solutions should be embedded in the NDCs in ways that are context-specific and sustainable.

#### 136. On Topic 2, the key messages included:

- (a) Rather than identifying a single target for the ocean, embed ocean considerations across all relevant targets and indicators within the GGA framework. in the refinement of the GGA indicators, ocean-related considerations must continue to remain mainstreamed.
- (b) Indicators should account for ecosystem connectivity and vulnerability under changing climate conditions and be science-based. Ocean adaptation impacts need to be captured and integrated at both the headline indicator level and with sub-indicators aimed to provide granularity to specific contexts. Ocean indicators may include disaggregated metrics for marine ecosystems.
- (c) Equity in data access and sharing is critical for providing a regional picture of interdependent ecosystems. Indicators should be realistic & practical and should take into consideration realities and diversity of communities.

#### 137. On Topic 3, the key messages included:

- (a) UNOC was recognized as a central venue to identify and align efforts across climate, biodiversity, and ocean agendas. The significance of the ITLOS advisory opinion and the ICJ legal proceedings were highlighted to inform the dialogue.
- (b) Strengthen alignment between NDCs and NBSAPs, with a focus on practical, implementable actions that support both climate and biodiversity goals.
- (c) On the entry into force of the BBNJ agreement, it could help further the oceanbiodiversity-climate synergies, by strengthening cooperation and coordination among relevant instruments, frameworks and bodies, including UNFCCC, Paris Agreement, CBD and UNCCD.

### 138. On the cross-cutting themes, the key messages included:

- (a) Ensure Indigenous Peoples and local communities are included in finance strategies, project design and delivery. Indigenous Peoples and local knowledge must be respectfully incorporated to inform data and science gaps.
- (b) Finance was highlighted as a critical enabler for both mitigation and adaptation, with particular attention to advancing and improving access to blue finance. The 2026 SCF Forum on "Financing Climate Action in Water Systems and Ocean", was highlighted as a possible opportunity to deepen this work.

- (c) Need for increased access to means of implementation (finance, technology transfer and capacity-building) for developing countries to support ocean-based climate action.
- (d) Recommendations to develop a thematic roadmap that aligns with the NDCs cycle and broader ambition cycle of the Paris Agreement, while also fostering greater synchronization across international processes on the ocean-climate-biodiversity nexus.
- 139. We ended the plenary with a call to action, urging participants to act as ocean ambassadors and foster cross-collaboration. This includes advocating for the integration of ocean issues within NDCs and working with colleagues to ensure that ocean-related priorities remain visible and central across relevant UNFCCC negotiation agenda items. We also encouraged participants to help translate the dialogue's collective insights into concrete tracks, initiatives, and proposals—not only within the formal negotiating process but also within the broader climate agenda (including New York week and pre-COP 30) on the road to Belem.
- 140. The next steps will be reporting back on the dialogue during the COP 30 opening plenary. Additionally, we shall convene a UNFCCC side event at COP 30 to present the conclusions and recommendations of this summary report, and to hear from experts and Parties on the way forward. Further information on the side event shall be made available in due time on the UNFCCC ocean and climate dialogue webpage.

#### Annex I

# Agenda

#### Day 1. Tuesday 17 June, 15:00-18:00

#### Welcome by the co-facilitators

#### **High Level Remarks and Opening**

- Carol Franco, SBSTA Vice Chair
- Giovanna Valverde Stark, Costa Rica, Co-host of the 2025 UN Ocean Conference
- Benoît Faraco, France, Co-host of the 2025 UN Ocean Conference

#### Expert Panel Topic 1. Ocean-based measures in NDCs

- Marinez Sherer, COP 30 Special Envoy for the Ocean
- Ole Vestegaard, Programme Management Officer, Marine, Coastal & Freshwater Ecosystems Branch, & Martin Koehring, Ocean and Finance specialist, UN Environment (virtual)
- Anna-Marie Laura, Senior Director of Climate Policy, Ocean Conservancy
- Senivasa Waqairamasi, Head of Delegation, Fiji

#### Plenary Q&A/ Short Interventions

#### Expert Panel Topic 2. The ocean under the GGA

- Joanna Post, Head, Ocean Observations and Services Section, IOC-UNESCO
- Richard Muyungi, Chair, Africa Group of Negotiators & Special Envoy and Advisor to the President of the United Republic of Tanzania, Environment & Climate Change
- Fegi Nurhabni, Deputy Director of Disaster Mitigation and Climate Change Adaptation, Ministry of Marine Affairs and Fisheries of the Republic of Indonesia

#### Plenary Q&A/ Short Interventions

#### Expert Panel Topic 3. Ocean-climate-biodiversity synergies

- Valentina Germani, Senior Legal Officer, Division for Ocean Affairs and the Law of the Sea (DOALOS)
- Fredrik Haag, Head, Office for London Convention/Protocol & Ocean Affairs, Marine Environment Division, International Maritime Organization (IMO) (virtual)
- Tomás López Londoño, Marine Biologist, Directorate of Marine, Coastal and Aquatic Resources Affairs of the Ministry of Environment and Sustainable Development, Colombia (virtual) & Tristan Tyrrell, Programme Officer, Convention on Biological Diversity (CBD) secretariat

#### Plenary Q&A/ Short Interventions

#### Closing

- Co-facilitators
- Peter Thomson, UNSG's Special Envoy for the Ocean (video message)

#### Day 2. Wednesday 18 June, 15:00-18:00

#### Introduction to the World Café Format Breakout Group Discussions

#### **Breakout Group Discussions**

- Participants will be divided into a total of 9 groups (10–20 people in each group) to discuss Topics 1, 2, 3, with 3 Groups discussing the same topic, based on our guiding questions
- There will be a total of 2 rotations, with 35 minutes allocated for each breakout group discussion

There will be a 5-minute transition time between each rotation

#### Plenary

- Feedback from the breakout group discussions
- Parties to highlight good practices and lessons learned from their national and regional contexts in integration ocean-based action in their NDCs, adaptation plans and overall synergistic sustainable development planning

Finalize the key recommendations

#### Closing

Co-facilitators

# Moderators and rapporteurs of breakout groups

	Moderator	Rapporteur
Topi	c 1	
1	Matt Frost, Plymouth Marine Laboratory	Marine Lecerf, Ocean & Climate Platform
2	Michelle Tigchelaar, WorldFish	Maximilian Schwarz, European Bureau for Conservation and Development
3	Espen Ronneberg, The Pacific Community	Loes Rutten, Marine Environment Department, Belgium
Topi	c 2	
1	Joanna Post, IOC-UNESCO	Julika Tribukait, The World Wide Fund for Nature
2	Edward Donaldson-Balan, International Ocean Climate, Department for Environment, Food and Rural Affairs, United Kingdom	Grace Tien, UNFCCC secretariat
3	Ingrid Lundberg, International Climate Negotiations and Engagement Branch, Department of Climate Change, Energy, the Environment and Water, Australia	Katie Thiessen, YOUNGO
Topi	c 3	
1	Tristan Tyrrell, CBD secretariat	Rose LaBrèche, Fisheries and Oceans Canada
2	Valentina Germani, UN DOALOS	Luz Angélica Gil, The Nature Conservancy
3	Martin Sommerkorn, WWF Arctic Programme	Carl Dudek, Département des Relations Extérieures et de la Coopération, Monaco

# **Annex II**

# List of Parties and non-Party stakeholders who provided oral and/or written statements for the plenary session

Parties and groups of Parties	UN organizations, observers and non-Party stakeholders
Australia	Climate Action Network Ecosystems Working Group
Brazil	Conservation International
Canada	Deep Ocean Stewardship Initiative
China	Hands Off Mother Earth Alliance
Djibouti	Mangrove Breakthrough NDC Task Force
European Union and its member States	Marrakech Partnership for Global Climate Action (MPGCA) Oceans and Coastal Zones Group
Fiji on behalf of Alliance of Small Island States (AOSIS)	Natural Resources Defense Council
Ghana	
India	Ocean and Climate Platform
Japan	Ocean Visions
Monaco on behalf of the Environmental Integrity Group	Sasakawa Peace Foundation
Philippines	The Nature Conservancy
Republic of Korea	Water Convention/ United Nations Economic Commission for Europe
Singapore	
United Kingdom of Great Britain and Northern Ireland	
Vanuatu	