

MONASH UNIVERSITY SUBMISSION TO SBSTA 56: OCEAN AND CLIMATE CHANGE DIALOGUE

24 March 2022

CALL DETAILS

Issue: The SBSTA Chair invited Parties and relevant organizations to submit, via the submission portal, views on possible topics for the Ocean and Climate Change dialogue, to be held in conjunction with SBSTA 56 (June 2022).

Title: Ocean and climate change dialogue

Session Name: SBSTA 56

Mandate: FCCC/CP/2021/12/Add.1

Monash University, as a UNFCCC observer organisation, welcomes the opportunity to submit its views on possible topics and considerations to inform an Ocean and Climate Change Dialogue during SBSTA 56 in accordance with decision 1/CP.26 Glasgow Climate Pact (paragraph 61).

Climate change is one of Monash University's strategic focus areas, and it works to mobilise climate action and energy transitions through cutting edge research, education and advocacy. Several Monash initiatives have particular interest and expertise relevant to climate change and oceans policy, including the Climateworks Centre and the International Environmental Law Cluster in the Faculty of Law.

COP26 advanced ocean-climate progress by granting some level of surety that henceforth oceans will be a permanent aspect of the multilateral climate change regime through the establishment of the "Ocean and Climate Change Dialogue" as an annual process to strengthen ocean-based action. Climate change is not a uniquely atmospheric phenomena and much action is needed before the importance of oceans to our climate system is adequately reflected. This is an important opportunity to ensure that the UNFCCC facilitates understanding of the ocean-climate nexus as well as increased ocean-climate action.

This submission suggests four topics for discussion at the SBSTA 56 Ocean and Climate Change Dialogue, in relation to actions that UNFCCC parties and bodies could take to "integrate and strengthen ocean-based action into existing mandates and workplans". These are:

1. Improved alignment between climate and ocean related regimes
2. Integration of oceans in UNFCCC outcomes and processes
3. Improved institutional arrangements
4. Inclusion of blue finance as part of climate finance

It is essential that the Dialogue leads to measures that are action-oriented and impact focused. Specific recommendations are provided on pages 6–7.

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1. EXTERNAL ALIGNMENT BETWEEN OCEANS AND CLIMATE

UNITED NATIONS CONVENTION ON THE LAW OF THE SEA AND UNFCCC ALIGNMENT

1. Both the ocean and climate change would benefit from greater alignment of UNFCCC practices with the provisions of the United Nations Convention on the Law of the Sea (UNCLOS).
2. The UNCLOS provides a universally applicable legal framework that extends the sovereignty of a coastal State beyond its land territory. Herein maritime zones are determined by a series of rules relating to outer limits as measured from a State's baselines and modified by the principles of maritime delimitation. Nearshore zones include the territorial sea which extends up to 12 nautical miles from a State's baselines and over which the coastal State retains sovereignty, limited by the right of innocent passage. Beyond this the 200 nm Exclusive Economic Zone (EEZ) confers on coastal States sovereign rights over living and non-living resources, and obligations relating to the protection and preservation of the marine environment.
3. These UNCLOS conferred rights and responsibilities over countries' maritime areas are poorly reflected in the application of the UNFCCC and the Paris Agreement. The UNCLOS legal framework of extended State sovereignty within the territorial sea in effect means that most adaptation activities, as well as the majority of highly productive blue carbon ecosystems, fall under national jurisdiction. A practical misalignment, however, exists between State sovereignty as recognised under UNCLOS, and the land-based focus of climate measures, in particular as applies to emissions and mitigation.
4. Greenhouse gas emissions and warming are contemplated under the UNCLOS Part XII pollution provisions which are interpreted as recognising greenhouse gasses as a form of pollution. The broadly held legal view is that the scope of UNCLOS Part XII goes beyond measures aimed only directly at marine pollution and allows for the inclusion of both climate change and ocean acidification therein, as well as to ocean warming due to absorbed thermal "energy".
5. Under UNCLOS the seabed is protected in regard to pollution activities, which would conceivably be interpreted to apply to actions that disturb and release high levels of stored carbon. Obligations under the UNFCCC should be aligned with that of pollution commitments under UNCLOS, and be explicitly recognised as existing within EEZs and the continental shelf. Guidance hereon should be developed with a stated obligation to include such measures within States' Paris Agreement plans and strategies.
6. The UNFCCC needs to align its scope of operations with those of UNCLOS, such that States take responsibility and are held accountable for ocean-based emissions within their zones commensurate to the manner in which land-based emissions are accounted for and treated under the UNFCCC.

SYNERGIES WITH THE INTERNATIONAL MARITIME ORGANISATION

7. The International Maritime Organisation (IMO), along with the aviation industry, is in a unique situation wherein the Kyoto Protocol Article 2.2 ceded responsibility for emissions reduction in international shipping to the sectoral intergovernmental body.
8. The IMO has a range of measures under both marine pollution (MARPOL) and its 2018 Initial Strategy on GHG Emissions. A range of regimes also provide for port State control of vessels (both shipping and otherwise), and a strong move is emerging towards the greening of ports both in regard to their operations and the prioritising of "green" vessels.
9. The unique situation established under the Kyoto Protocol, which has continued past its sunset clause, confers upon the IMO responsibility for both action and reporting. An enhanced system for the integration between climate and ocean institutions is needed in regard to this arrangement with the IMO, including a strengthening of its "invitation" to report, such that it becomes a compulsory requirement that the IMO regularly submit a report to the SBSTA.
10. The UNFCCC should further engage with the IMO such that its revised GHG strategy, due in 2023, enunciates Paris Agreement temperature goal aligned targets including a commitment to net zero emission by 2050. A concerted effort should be made to improved mitigation efforts, including the extension of current technical and operational measures and the inclusion of strong market-based measures for emissions reduction.

2. GREATER INTEGRATION OF OCEAN ISSUES

INTEGRATION WITHIN UNFCCC PROGRAMMES

11. Action in regard to the impact of climate on oceans and ocean-based mitigation and adaptation sits clearly within the UNFCCC process. Consequently, it has been the task of oceans diplomats and practitioners to justify their inclusion in the climate process. To achieve integration, barriers to participation must be removed and a COP process evolve that facilitates the meaningful inclusion of ocean-climate issues and practitioners. To be effective this must include a program to engage with ocean science including that presented by the IPCC, to remedy poor ocean literacy and to enhance capacity building and awareness raising at all levels.

12. Greater integration is required of ocean issues in UNFCCC programmes, deliberations and State action. Progress on oceans will not occur if it remains a side issue at successive COPs. Whilst acknowledging the enormous value of the SBSTA's now annual Dialogue on the Ocean and Climate Change, this needs to evolve into a platform from which ocean issues are mandatorily inserted into the main COP arena of discussions and lead to systemic inclusion in State action. This will facilitate a strengthened ocean related UNFCCC work program. It will also facilitate ocean inputs to a range of other mechanisms and processes, including the Financial Mechanism, the Global Stocktake, and NDCs and NAPs.
13. Meaningful integration and strong coordination extends to mechanisms relating to the conservation of biological diversity, including those being negotiated in the Treaty for Marine Biodiversity Beyond National Jurisdiction under UNCLOS. Negotiations at the fourth Intergovernmental Conference at the UN this March failed to result in an agreement. A clear governance framework beyond national jurisdiction is key for achieving climate adaptation mitigation and resilience, as well as broader conservation goals. Effective ocean-climate action needs the priority conclusion of an instrument that creates a legal framework for mitigating biodiversity loss and considers the link between the 'high seas' and anthropogenic climate change.
14. Extending this to State based engagement, the UNFCCC should facilitate the establishment of ocean-climate National Focal Points in each member State with shared responsibility for the above tasks.

COHERENCE AND CONSISTENCY IN OFFSHORE EMISSIONS REPORTING

15. National Greenhouse Gas Inventories as mandated under the UNFCCC, and extended under subsequent agreements, require parties to submit an annual national anthropogenic GHG inventory including sources, removals and sink. The generation of land use based GHG emission inventories relies on a model of land area to estimate carbon stocks and emissions and removals of GHGs associated with Land Use, Land-Use Change and Forestry (LULUCF) activities. This is defined by the United Nations Climate Change Secretariat as a "greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use such as settlements and commercial uses, land-use change, and forestry activities." The intent is that the sum of the areas in LULUCF reporting match the total land area so as to be comparable over time.
16. The 2006 Guidelines for National Greenhouse Gas Inventories invited "offshore areas over which the country has jurisdiction" to be included in emissions assessments. The global area of ocean under sovereign State control approximates that of the area of land. National Greenhouse Gas Inventories are permitted to include information on inland and coastal wetlands, mangrove forests, tidal marshes and seagrass meadows as outlined in the 2013 IPCC Wetland Supplement. Unlike compulsory terrestrial emissions and stock reporting however, the reporting of activity and stores in the offshore remains optional.
17. Coastal wetlands and nearshore occurrence of blue carbon can only be included under the area of the LULUCF reporting if categorised under one of the six IPCC terrestrial land-use categories of Forest Land, Cropland, Grassland, Wetlands, Settlements, and Other Land. As such ecosystems and associated blue carbon stores that occur beyond the specifically designated coastal boundaries in areas that are not part of the total "land" area of the country are not contemplated. Emissions or land use change regarding coastal wetlands that are not part of the total land area may be reported separately and are consequently excluded from the total land area matrix.
18. Consequently, change over time beyond the coastline is not mapped out and consideration of carbon emissions and stores in States' maritime territories remains inconsistent. The exclusion of nature-based oceanic carbon sinks and stores, and lack of a consistent means of reporting on the extent of non-inland wetland degradation or recovery in national emissions assessments, is at odds with the objectives of the UNFCCC regime. Human activity and the destruction or restoration of these offshore habitats is insufficiently accounted for in national inventories, and attention is needed to better quantify the mitigation potential and restoration needs of carbon-rich habitats beyond those already accounted for in the Wetlands Supplement.
19. The IPCC identified the ocean in the *Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)* as the planet's most important carbon sink – and the significant role of blue carbon in this. The scale of this is expected to increase as we continue to discover blue carbon ecosystems further offshore, as anthropogenic degradation of the seabed continues, and as opportunity for the scaling of blue carbon initiatives intensifies.
20. The exclusion of areas from UNFCCC and Paris Agreement Inventory obligations simply because they are not terrestrial runs contrary to international practice under UNCLOS of sovereign jurisdiction, and places States in an inconsistent policy position. Policy expansion under the UNFCCC is needed so as to provide for specific reporting of GHG emissions and carbon stocks in offshore areas. An ocean equivalent to LULUCF is needed.
21. Rules of good practice elaborated by the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* dictate that this must be transparent, consistent, comparable, complete and accurate. Ensuring compliance with these rules requires that existing boundaries of the LULUCF reporting remain unchanged, and that a parallel process for the ocean and offshore areas is instituted and phased in.
22. Such a process would require the development of a system of offshore land use categorisation and ocean-based emissions inventory assessments and related accounting, that could be consistently and methodically applied to a parallel maritime area regime. This would incorporate elements from the 2013 IPCC Wetland Supplement to the IPCC Guidelines for GHG inventories, and require the development by the IPCC of additional offshore

methodologies beyond those that currently exist for mangroves, salt marshes and sea grasses. Such methodologies would include but not be limited to:

- CO₂ sources from fishing, shipping and other vessels;
- CO₂ resuspended from the seabed by disturbance or destruction of marine habitats, including through fishing activities and seabed mining; and
- CO₂ stores and sinks in the seabed and marine habitats, including stores in fish and marine life.

23. Accounting methodologies and State allocation currently varies between vessels, depending on the purpose of the vessel (with different accounting methods for shipping, military and fishing vessels). A harmonisation of current reporting methodologies for vessel activity is needed, so that varied and inconsistent methodologies are removed and the process is streamlined.

MANDATED INCLUSION AND DEVELOPMENT OF NATIONAL TARGETS WITHIN NDCS AND LT-LEDS

24. The inclusion of oceans-related measures in NDCs is a widely supported action¹. The suite of available ocean-based climate actions includes the systematic protection of carbon intensive ocean ecosystems, the mitigation of oceans-based emissions, and the development and expansion of ocean-based renewable energy technology.
25. Although slightly over half of the NDCs communicated under the Paris Agreement have mitigation action in the ocean or coastal zone, this action is rarely a significant portion of the NDC and constitutes only a small portion of total mitigation commitments. Some parties that have substantially more maritime area than they do land area include no ocean or coastal mitigation actions at all. Given estimates from the 2020 report commissioned by the High Level Panel on a Sustainable Ocean Economy² that 20 or more percent of Paris aligned mitigation is likely to come from ocean-based sources, this is a substantial problem for parties in meeting their Paris Agreement goals.
26. Targets for the inclusion of ocean-related mitigation and blue carbon protection and regeneration in NDCs should be established. This should include the creation of biologically significant and properly managed and enforced area-based conservation, including marine protected areas.
27. The protection and regeneration of blue carbon areas in NDCs should not be used as offsets for emissions on land. Land-based emissions are the leading cause of climate change, and policy choices must not enable the oceans role as a sink to be used as a means to support activities that degrade marine and coastal ecosystems.
28. Marine-based activities that incur a high level of sea bed disturbance, resulting in high emissions, such as bottom trawling or dredging, should be discouraged and the UNFCCC should collaborate with other intergovernmental bodies to work towards a ban on such practices³.
29. Sustainable "blue food" industries should be supported to grow the level of large-scale production and consumption of aquatic plants such as seagrasses, recognising the equity and livelihood co-benefits that can come from these.
30. Fuel subsidies and other direct and indirect financial incentives that worsen CO₂ emissions and perpetuate overfishing should be highlighted within the UNFCCC process, both in terms of emissions reporting and NDCs. The UNFCCC should liaise with the WTO in regard to the issue of harmful fisheries subsidies, in particular fossil fuel subsidies. UNFCCC should support countries in their negotiations at the WTO for the elimination of harmful fisheries subsidies, of which approximately one quarter are fossil fuel subsidies.
31. Oceans governance planning and Long Term Low Emissions Development Strategies (LT-LEDS) have well-aligned spatial and temporal scales. Mutual benefits and lessons from offshore spatial mapping and processes should be recognised and the UNFCCC should mandate and subsequently support States to include oceans-based measures in their LT-LEDS.

GLOBAL STOCKTAKE

32. The Global Stocktake is an opportunity to identify gaps and opportunities, and will be a critical factor in ensuring that ocean contributions are prioritised and strengthened. This will be key in facilitating ocean inclusion and raised State ambition in particular as reflected in their NDCs.
33. Climate change is often discussed as a purely atmospheric phenomena, a situation that emerged in part due to the early UNFCCC climate change definition. We recommend that the UNFCCC facilitate discussions on how to incorporate ocean and coastal ecosystems as part of their inputs to the Global Stocktake. As part of this, consideration should be given to the integration of oceans directly into the UNFCCC, including through the compelling of action on ocean deoxygenation and acidification.

¹ Dobush B.-J. et al., A new way forward for ocean-climate policy as reflected in the UNFCCC Ocean and Climate Change Dialogue submissions, *Climate Policy*, 2022, 22:2, 254-271, DOI: 10.1080/14693062.2021.1990004

² Stuchtey, M.R. et al. Ocean Solutions That Benefit People, Nature and the Economy, Ocean Panel, 2020.

³ Sala, E., Mayorga, J., Bradley, D. et al. Protecting the global ocean for biodiversity, food and climate. *Nature* 2021, 592, 397–402. <https://doi.org/10.1038/s41586-021-03371-z>

3. INSTITUTIONAL RELATIONS AND PROCEDURES

ROLE OF UN-OCEANS

34. One of the most problematic elements of the ocean-climate coordination is the lack of a primary oceans governance agency. That a governance system may be fit for purpose for managing a sector and yet overly complex when needing to interact with other sectors is true for oceans. This acts as a barrier for other bodies or regimes to interact in a mutually beneficial manner and places a series of limitations on oceans governance. Much effort now goes into synergistic work within the UN system, what remains to be seen is the extent to which oceans considerations progress beyond a good intention, into actual action and inclusion in the climate arena. Such uncertainty is reinforced in the internally directed nature of COP26 Glasgow Climate Pact oceans measures.
35. UN-Oceans currently has a mandate to aid in the development of ocean literacy and policies, including regarding climate change adaptation and mitigation measures. UN Discussion are underway in regard to an enhanced role for UN-Oceans, citing the successful example of UN-Water. A suggested appropriate modification would be insertion of a key role for UN-Oceans in addressing “pressing issues” such as the “nexus between oceans, on the one hand, and climate change and variability, ocean acidification and disaster risk reduction, on the other”⁴.
36. The UNFCCC, as an active member of UN-Oceans, should progress the review and support an enhanced role for UN-Oceans as a means for heightened ocean-climate coordination and integration.
37. Success would be dependent not only on empowerment through the revised terms of reference, but also the provision of sufficient support, including financial resources.

UNFCCC SUPPORT FOR UN DECADE OF OCEAN SCIENCE & ALIGNMENT WITH IPCC FINDINGS

38. UN-Oceans, of which the UNFCCC is a member, has the lead role as the coordination mechanism for the UN Decade of Ocean Science for Sustainable Development (as determined at the Nineteenth meeting of UN-Oceans and seen in subsequent Summary report. 7-8 Feb 2019 Geneva, Switzerland).
39. A growing urgency is expressed in successive IPCC reports of the need to properly recognise and manage ocean-climate interactions and consequences, including in the most recent AR6, which again elevates the urgency and extent of action that must be taken. The omission of ocean-based climate action in favour of existing climate priorities will result in a failure to meet stated climate goals.
40. With mounting evidence of the impact of climate change and in particular the extent of absorption of anthropogenic heat and CO₂ into the oceans, and the resulting dire impacts, it is fathomable that the Part XII pollution components of the UNCLOS will become more significant over time. This may elevate the expectation that international rules under the Paris Agreement are based upon “appropriate scientific criteria for the formulation and elaboration of rules ... for the prevention, reduction and control of pollution of the marine environment” as required in the UNCLOS.
41. The UNFCCC should engage with this higher burden of scientific reliance and stimulate greater dissemination of key IPCC findings on the ocean. Observed science can aid in the conceptualisation ocean-atmosphere heat and gas exchange, and ocean-atmosphere biological feedback loops. This will both promote ocean literacy and amplify the narrative supporting the integration of the ocean within the UNFCCC.

INTERNATIONAL SEABED AUTHORITY

42. Near universal agreement exists that seabed mining will exacerbate changes already occurring to the oceans and ocean floor as a result of global warming, and could add to greenhouse gas concentrations in the atmosphere. The International Seabed Authority recognises that the magnitude of these effects is theoretical and needs further assessment.
43. Regulations have long existed for exploration in areas beyond national jurisdiction, and with several countries moving toward actual operations, the International Seabed Authority is drafting provisions for permit applications for extractive mining.
44. The UNFCCC should act to discourage development of activities with high emission profiles and must ensure that emissions from such operations are captured within governance arrangements.

⁴ A/72/70/Add.1. “Oceans and the law of the sea: Report of the Secretary-General” 6 Sept 2017

4. MAINSTREAMING BLUE FINANCE

45. The synergising of the climate finance and blue finance agendas is essential. This includes integration with COVID-19 stimulus recovery to ensure that any green recovery is also a blue recovery.
46. The importance of the blue economy is gaining momentum amongst policymakers worldwide. Unlocking the economic potential of the ocean, however, must be undertaken in a manner that also protects the marine environment and enhances ocean and coastal resilience, a critical part of which involves preventing greenhouse gas emissions. Blue natural capital is the foundation on which sustainable blue economies will be developed. Maintaining and restoring coastal and marine ecosystem services therefore not only makes economic sense, but can further create direct jobs and enhance or sustain livelihoods.
47. Ocean investments are underfunded, and of all the SDGs, Life Below Water (SDG14) receives the smallest amount of blended finance and impact investments. Barriers to the creation of a blue economy need to be addressed. Such challenges and threats to investing in the blue economy include the underfunding of ocean investments, as well as a lack of universal standards and metrics, a small pipeline of bankable ocean investments, misalignment of taxes, subsidies, and economic incentives with the blue economy and lack of data and specialist capacity⁵. A dialogue under the UNFCCC should be established to discuss potential climate mitigation and adaptation through innovative finance mechanisms (Blue Bonds, certificates, performance based) and sources of financial support for the ocean-climate nexus (multilateral, public and private, blended finance).
48. UNFCCC should contemplate that, given the legal requirements within the UNCLOS and the formal legal option of the International Tribunal on the Law of the Sea dispute resolution proceedings and redress, UNCLOS provisions may become an alternate avenue to the Warsaw International Mechanism for Loss and Damage, whereby SIDS in particular may seek not financial support, but adjudicated redress if a lack of ambition by some countries is seen to be causing to harm in others.

CLOSING AND RECOMMENDATIONS

In summary we recommend that the UNFCCC:

49. Encourage the creation of a mindset whereby ocean and climate are not competing for attention but rather recognised as inextricably joined and pursued in tandem.
50. Recognise the vital role the ocean plays in climate change emissions reduction and establish ocean-based mitigation targets.
51. Harmonise State rights and responsibilities beyond the coastline with those enunciated under the UNCLOS.
52. Engage with other maritime sectors such as shipping industry to ensure adequate targets in their decarbonisation efforts and enhanced reporting, including the IMO.
53. Champion the systemic and mandatory inclusion of ocean issues in the main COP arena of discussions.
54. Facilitate the establishment of ocean-climate National Focal Points in each member State.
55. Give priority during the dialogue to the coastal states, and within this grouping to those most vulnerable to and dependent on marine ecosystems.
56. Mandate requirements that States report on and take responsibility for climate impacts within their maritime territories.
57. Monitor the conservation and restoration of marine ecosystems such as mangroves, seagrasses and salt marshes through their inclusion in national GHG reporting inventories.
58. Establish, phase in and mandate a system of oceanic emissions inventory reporting and a methodology for reporting and monitoring sinks, sources and stores of carbon in the zone beyond State coastlines and out to their EEZ or continental shelf based on, but separate to, LULUCF spatially-based emissions inventory reporting.
59. Request that the IPCC create a new offshore ocean supplement to existing IPCC methodologies.
60. Recognise that many countries will not reach their NDC climate ambitions without the inclusion of ocean-based mitigation and support the establishment of national oceanic mitigation ambition and targets.
61. Support the harmonisation of LT-LEDs with spatial ocean planning and governance processes.

⁵ Singh, G.G.; Cisneros-Montemayor, A.M.; Swartz, W.; Cheung, W.; Guy, J.A.; Kenny, T.A.; McOwen, C.J.; Asch, R.; Geffert, J.L.; Wabnitz, C.C.; Sumaila, R. A rapid assessment of co-benefits and trade-offs among Sustainable Development Goals. *Marine Policy*, 2018; 93, pp. 223-231.

62. Acknowledge that GHG and thermal energy pollution causing acidification and ocean warming, as fall within the ambit of UNCLOS, confers upon States an obligation to avoid or control it.
63. Facilitate discussions on how to incorporate ocean and coastal ecosystems as part of SBSTA's inputs to the Global Stocktake, including ocean acidification and deoxygenation.
64. Support efforts to enhance the role of UN-Oceans, in particular as it relates to the ocean-climate nexus.
65. Embrace and communicate ocean science, including as relates to the UN Decade of Ocean Science for Sustainable Development and to dissemination of IPCC reports and findings.
66. Discourage the approval and development of activities with high emission profiles, with particular mind to those activities that disturb the seabed, such as dredging and bottom trawling.
67. Ensure that a fixed portion of climate finance is specifically blue finance.