



# Because the Ocean

Suva, Fiji  
6-7 May 2019  
Because the Ocean NDCs Workshop

## Before the Blue COP

# INCORPORATING THE OCEAN INTO NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)

[www.BecauseTheOcean.org](http://www.BecauseTheOcean.org)  
Contact: [info@BecauseTheOcean.org](mailto:info@BecauseTheOcean.org)



Photo: Peter Thomson

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# Background and Introduction

The 39 countries that signed the second “Because the Ocean” declaration, launched at COP22 in 2016, agreed to “*encourag[e] UNFCCC Parties to consider submitting Nationally Determined Contributions (NDCs) that promote, as appropriate, ambitious climate action in order to minimize the adverse effects of climate change in the ocean and to contribute to its protection and conservation.*”<sup>1</sup>

Under Article 4 of the Paris Agreement, “*Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.*” NDCs are to be updated every five years, representing “*a progression beyond the Party’s then current nationally determined contribution and reflect its highest possible ambition...*”

The first NDCs, (INDCs at the time – Intended Nationally Determined Contributions) were submitted in Paris in 2015, generally reflecting action for 2020 onwards. In light of the urgency to increase climate ambition, the “Talanoa Dialogue” was convened in 2018 to take stock of the collective efforts of Parties – as reflected in the NDCs – to achieve the long-term goal of the Paris Agreement. The resulting “Talanoa Dialogue Call for Action” emphasizes the need to enhance NDCs when Parties submit updated or new NDCs in 2020.<sup>2</sup> The UNSG Climate Summit in September 2019 and COP25 (Santiago, Chile) will therefore be crucial opportunities for Parties to communicate their efforts towards enhancing NDCs. Furthermore, as a leading member of the Because the Ocean initiative, the Government of Chile has indicated that the role of the ocean in climate change will prominently feature in its COP Presidency<sup>3</sup>, and COP25 President, Carolina Schmidt herself describes the Santiago gathering in December as the “Blue COP”.<sup>4</sup>

Incorporating ocean-related mitigation and adaptation measures into Parties’ NDCs provides significant co-benefits for the health of both the climate and the ocean. A series of workshops were held to further this goal, in Washington DC (September 2016)<sup>5</sup>, Bonn, Germany (at

COP23 in November 2017)<sup>6</sup>, in Santiago, Chile (2-3 October 2018)<sup>7</sup>, and in Madrid, Spain (10-11 April 2019)<sup>8</sup>. The major takeaways from these workshops can be summarized as follows:

- Ocean action is a critical component of climate action, and ocean-related mitigation and adaptation measures can help countries accelerate and increase their climate ambition.
- There is widespread interest in strengthening the links between climate change and ocean change, in the scientific and political fields, in order to further success in both areas, including recognition that NDCs can play a role in helping to increase countries’ ambitions.
- There is a need to strengthen the science-policy relationship for better informed decision-making. In some cases, there is also a need for increased understanding of the interlinkages between the ocean and mitigation and adaptation. More research efforts are needed to better understand future ocean responses to climate change, as well as how the ocean can contribute to climate solutions throughout the coming century.
- However, these gaps should not prevent immediate action, or the identification and the strengthening of co-benefits derived from such action. Similarly, provisions in the Paris Rulebook and other instruments should not preclude ocean action if scientific standards, such as for accounting and additionality, are met.
- A dedicated effort is necessary to better reflect the importance of the ocean in the climate system, as a means of raising domestic and international ambition for climate change mitigation and adaptation.
- A systematic consideration and, where relevant, inclusion of ocean-related measures could be a way to ensure ocean-climate interlinkages are better taken into account in revised NDCs and other climate instruments.
- Ocean and climate practitioners should engage in strategic dialogue to identify such possible synergies and avenues for mutual reinforcement of their efforts in the future. This includes the need to break down “silos” within international conventions, organizations, governmental departments, academia and other entities.
- Comprehensive guidelines would be beneficial in assisting the systematic and effective inclusion of ocean-related measures within NDCs.
- Holding a “Blue COP” is a unique opportunity to highlight the ocean in the climate agenda and to realize significant progress through concrete actions.
- If NDCs offer an opportunity to address the ocean-climate-biodiversity nexus, they may also

1 Second Because the Ocean Declaration, Marrakech, 2016: <https://www.becausetheocean.org/second-because-the-ocean-declaration/>

2 See for example, <https://www.wri.org/publication/ndc-enhancement-by-2020-produced-by-wri> on options for enhancing NDCs

3 Read “Launch of COP25 by Chile’s President Sebastian Piñera and COP25 President Carolina Schmidt”, 11 April 2019: <https://unfccc.int/news/president-sebastian-pinera-and-minister-carolina-schmidt-launch-cop25-climate-change-summit>

4 Watch the COP25 President video address at the Madrid “Before the Blue COP” Madrid workshop, April 2019: <https://www.becausetheocean.org/before-the-blue-cop-madrid-workshop-opens/>

5 See: [https://www.becausetheocean.org/wp-content/uploads/2018/11/Ocean\\_Climate\\_Bulletin\\_Because\\_the\\_Ocean.pdf](https://www.becausetheocean.org/wp-content/uploads/2018/11/Ocean_Climate_Bulletin_Because_the_Ocean.pdf)

6 See: [https://www.becausetheocean.org/wp-content/uploads/2018/11/Bonn\\_workshop\\_COP23\\_Because\\_the\\_Ocean.pdf](https://www.becausetheocean.org/wp-content/uploads/2018/11/Bonn_workshop_COP23_Because_the_Ocean.pdf)

7 [https://www.becausetheocean.org/wp-content/uploads/2018/11/Santiago\\_workshop\\_ENG\\_Because\\_the\\_Ocean.pdf](https://www.becausetheocean.org/wp-content/uploads/2018/11/Santiago_workshop_ENG_Because_the_Ocean.pdf)

8 <https://www.becausetheocean.org/the-madrid-workshop/>

enhance developing countries' access to financial support to better implement ocean-related actions.

- Several countries share concerns that focusing on the development of a dedicated UNFCCC “ocean” agenda item could entail an undesirable risk of delaying meaningful action. European participants to the Madrid Workshop appeared more inclined to the adoption of a new political initiative, which could be promoted by like-minded countries at COP25.

One additional regional workshop is being held in Suva, Fiji on 6-7 May 2019 for the purposes of collecting views, recommendations and options which can assist governments in incorporating ocean-related measures into their NDCs and at the same time explore other options. These will be collated by the Because the Ocean Secretariat in consultation with partners, and published to coincide around the time of the launch of the Special Report on Ocean and the Cryosphere of the Intergovernmental Panel on Climate Change (IPCC) scheduled in Monaco in September 2019.

The Suva workshop will be immediately followed by an Ocean and Climate Negotiators Symposium where some of the questions identified in this Discussion Paper are also likely to be addressed.

This paper is meant to stimulate thinking in relation to the topics to be discussed during the Suva workshop, including actions to mitigate climate change, improve the resilience of coastal communities and livelihoods, increase the conservation of marine ecosystems and ensure adaptation measures in the face of climate change impacts. It is an updated version of a previous Discussion Paper that was prepared prior to and discussed at the Madrid workshop in April 2019.

Regarding mitigation, examples include: ocean-based low-impact renewable energy technologies, decarbonized shipping, sustainable fishing and aquaculture activities, and the conservation and restoration of coastal, marine and polar ecosystems that contain and sequester carbon. While it is sometimes said that maybe shipping and ocean-based renewable energy are not “ocean issues” per se (although offshore wind and tidal installations and shipping affect the ocean environment in a number of ways), they are important factors at the nexus of climate and ocean. In the Pacific, it is suggested that consideration be given to a Pacific Green Shipping Bond Initiative to help reduce and decarbonise emissions, requiring a thorough change in shipping infrastructure with inter-regional planning and links.

Regarding adaptation and conservation, the emphasis will be on building resilience, for example through the designation and management of climate smart Marine Protected Areas (MPAs) as a response to climate change, addressing ocean acidification through local actions in addition to reducing CO<sub>2</sub> globally (reducing nutrient runoff and pollution), improving the enforcement of fisheries regulation and the sustainability of fisheries under threat from climate impacts, strengthening coastal resilience (sea level rise adaptation, conserving coastal and marine ecosystems) and protection of coral reefs as a natural bar-

rier against storm surges and extreme weather, including consideration of climate smart insurance projects. In this context, attention could be given to PSIDS plans to increase their MPAs and coastal management ambitions in the run up to the second UN Ocean Conference in Lisbon and CBD COP15, both in 2020, including via a “Common reef” project within the Pacific with connected EEZs.

The Suva meeting can also examine effects on the economy related to climate change such as impacts on ocean-related eco-tourism investments, impacts of increased ocean acidification and deoxygenation and the current and needed response to these phenomena, as well as “blue carbon” economies and their contribution in carbon sequestration. Discussions should reflect the latest knowledge on open ocean phytoplankton carbon sequestration, and the science of ocean-related geoengineering impacts and risks.

## The Suva, Fiji Workshop

Conducted under the Chatham House Rule whereby individual statements are not attributed, five substantive workshop sessions will take place on 6 and 7 May. Workshop sessions will cover the following topics:

- Setting the scene:
  - State of Knowledge: From Climate Change to Ocean Change
  - The ocean in NDCs
- The Ocean in NDCs: Challenges and Opportunities
  - Experts views
  - Governments views
- National perspectives on options for incorporating the ocean into NDCs
- Going further
- The Tools

## State of Knowledge: Climate Change and the Ocean

The adoption of the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCCC) will set out the latest scientific knowledge on climate change and ocean.

While this report is still being developed, recent information in the grey literature suggests a number of reasons for alarm:

- The ocean is warming much faster than previously thought – around 40% more than previous IPCC estimates, with forecasted global impacts that include augmented sea level rise and the release from melting permafrost of methane, a potent greenhouse gas.
- The rate of Arctic ice loss has tripled since the

mid-1980s, driven primarily by melting in Greenland.

- The rate of Antarctic ice loss has tripled in the last decade. A large cavity in the Thwaites glacier in West Antarctica was recently discovered, signalling increased instability.
- The ocean appears to be more acidic than at any time over the last 2 million years with significant consequences for coral reefs, shellfish and other sea life.
- The circulation system of the North Atlantic Ocean – the Atlantic Meridional Overturning Circulation, or AMOC – is slowing down with potentially major implications for climate and weather in the northern hemisphere.
- Oxygen depletion in the ocean resulting from climate change has increased dramatically since the 1950s resulting in an increasing number and size of dead zones.

#### Points for discussion:

- The IPCC SROCC is crucial as it will provide the most recent scientific knowledge, and link it to accurate confidence levels. What can be done to build from its release in Monaco in September 2019, and how can optimum use be made of the Special Report in the run up to and at the Blue COP25?
- Under what circumstances/for which ecosystems is there enough knowledge to ensure the environmental integrity and accountability of potential ocean-related mitigation measures to be included in NDCs? What further steps are needed to improve our knowledge for other systems?
- Are there certain ocean-related mitigation measures that could be prioritized in NDCs, where sufficient knowledge is available? What standards/safeguards should be put in place to ensure that there are no perverse incentives resulting in lack of climate action in other sectors?
- How can the anthropogenicity of the results of possible mitigation measures be assessed?
- Considering that intended adaptation measures (not quantified) can be part of NDCs, what ocean adaptation measures could be effective in responding to the growing number of impacts? How can/should these be reflected in NDCs or other instruments?
- Are NDCs the only way to undertake ocean-related measures to fight climate change? Can Governments undertake these measures under broader strategies for environmental preservation? How can other UNFCCC instruments, such as NAPs and Adaptation Communications be considered to link ocean and climate action?
- How can the regional sea conventions and their accumulated scientific knowledge be better used in relation to climate change?

- Is there additional knowledge (beyond NDCs) needed to inform the Transparency Framework and the Global Stocktake?
- What regional and collaborative efforts can be projected to address ocean change?
- Can there be a regional commitment towards ocean research and observation systems?

## The Ocean in NDCs: Challenges and Opportunities

The consideration of mitigation and adaptation measures related to the ocean are garnering increased attention and the momentum is expected to increase, especially after the IPCC Special Report on the Ocean and the Cryosphere in a Changing Climate is released in September 2019, around the same time as the UN SG Climate Summit in New York, the 2019 Our Ocean Conference in Oslo, and COP25 in Santiago. Although scientific work needs to continue to further inform policy discussions in the context of the Climate Change Convention on potential of ocean-related measures in support of the Paris Agreement goals, there is already a strong awareness on the need for ocean-related action in the context of NDCs.<sup>9</sup> With regard to certain issues (in particular to marine ecosystems and species that serve as natural carbon sinks<sup>10</sup>) the pros and the cons need to be very carefully considered to ensure that the final conclusions contribute to climate goals and the environmental integrity of the system, align with best available science and the precautionary principle, and are backed by a robust reporting and accounting of anthropogenic emissions and removals, which are key principles of the Paris Agreement. Other options for climate mitigation, i.e. ocean-based geo-engineering schemes, are also increasingly being considered, but are, in the opinion of many, a potential Pandora's Box that we open at our peril.

The converse is also true: economic exploitation of coastal and ocean resources may lead to increased greenhouse gas emissions and/or diminish the capacity of the ocean to serve as a natural carbon sink. Mangrove deforestation to facilitate coastal development, overfishing (particularly as fleets travel further offshore and use fishing gear that require higher fuel consumption), oil and gas drilling, shipping and – in the not too distant future apparently – deep-seabed mining (not to mention potentially adverse consequences of geo-engineering schemes) make achieving the goals of the Paris Agreement more difficult.

There are also challenges that have been identified with including ocean action in NDCs:

- In some cases, quantifying impacts of certain mitigation measures in terms of CO<sub>2</sub> avoided or sequestered, and demonstrating anthropogenicity are still far from reliable, and run the risk of endangering the environmental integrity and credibility of the NDC as a whole.
- In addition, accounting for mitigation effects of

<sup>9</sup> 70% of the original NDCs already contain references to the ocean, Scripps, 2017.

<sup>10</sup> Most importantly mangroves, seagrasses, and salt marshes.

the ocean could be used to replace mitigation measures in other sectors where there is more knowledge, and where more accuracy of results in GHG reduction is possible.

- There could be problems associated with trans-boundary waters and the right to access resources from them (CO<sub>2</sub> in this case).
- Expertise exists in silos – climate negotiators and policy experts do not always grasp the linkages with ocean policy, and vice versa.
- The fragmented international governance structure to deal with the geoengineering techniques is a disadvantage to ensure that such techniques are fully assessed and understood.

But the opportunities afforded by overcoming these challenges are enormous. New technologies will bring economic benefits (for example ocean-based renewable energy development and emissions-free shipping). Offshore wind and other ocean-based energy developments can substitute for climate-damaging fossil fuels. Marine protected areas and other measures to improve the health and sustainability of fisheries will contribute to increased economic and food security. Healthy ocean and coastal ecosystems can help sustain a healthy tourism industry.

Perhaps most importantly, including ambitious ocean action in NDCs will contribute to building visible momentum towards higher ambition in the five-year cycles to come, potentially bringing in new constituencies to push for greater action.

#### Points for discussion:

- What are the main challenges and opportunities of including ocean measures in NDCs, while respecting the national determination of NDCs, and ensuring the environmental integrity of Parties' own NDCs?
- How can we ensure that these potential measures complement and reinforce work that is already taking place elsewhere (e.g. IMO or CBD)?
- How can we ensure that science and knowledge are sufficient to ensure sound and integrated results, and are available to those who could apply them?
- Does the ocean need to be better anchored in the work of the UNFCCC, and if so, how? Could a climate/ocean checklist of options be developed to assist with the identification of potential ocean-related elements that could be considered, in a nationally determined manner, when designing NDCs? Do such tools already exist? If so, to what extent are they being used by governments?
- Are there any other options to improve ocean related measures in relation to climate change response that could be promoted, outside the NDCs? For example, should we consider how ocean issues are reflected in the Transparency Framework, in the Global Stocktake, the Warsaw Mechanisms, the Nairobi Work Programme, the Agenda 2030 Sustainable Development Goals (SDG14 especially)?
- Can there be a role for Regional Blue Carbon frameworks?

- Outside of the UNFCCC framework, is it possible to take advantage of the fact that the CBD is elaborating the post-2020 biodiversity framework, especially considering current discussions on updating the global target on MPAs?
- Is it possible to start with a 'learning by doing' process before the link between NDCs and the ocean is consolidated?

## National perspectives on Options for Incorporating the Ocean into NDCs

When it comes to mitigating climate change through ocean action, investments in marine renewable energy and decarbonizing the shipping industry generally come to mind, along with the protection and restoration of blue carbon habitats, such as mangroves, salt marshes and seagrass.

Protecting marine ecosystems through the use of ecosystem approach area-based management tools such as MPAs, as well as Integrated Coastal Zone Management, will not necessarily contribute substantially to the large-scale mitigation of CO<sub>2</sub> emissions but are key components of adaptation if designed with climate impacts in mind. Climate impacts are likely to lead to the reduction or destruction of ecosystem services on which large parts of humanity depend for food and livelihoods. If designed with climate impacts in mind, MPAs and other measures can be important tools for strengthening the resilience of ocean, coastal and polar ecosystems.

Three quarters of current NDCs include plans for adaptation, and in a study released in 2017,<sup>11</sup> researchers from Scripps institution of Oceanography found that 70% of 161 INDCs submitted by Parties to the Paris Agreement contained references to the ocean. However few of these go beyond a simple mention of the importance of the ocean, as shown in a review by the Stockholm Environment Institute. For example, few include MPAs as a tool for shoring up ocean communities and ecosystems in the face of climate impacts. However it is worth noting that the re-submission of NDCs in 2020 coincides with the agreed deadline to comply with the commitment contained in Aichi Biodiversity Target 11 and SDG14 Target 5 to conserve by 2020 at least 10 percent of coastal and marine areas.

#### Points for discussion:

- Are any government considering introducing ocean elements within their respective NDCs in 2020?
- How are they thinking to go about it?
- *What would they need? What are the roadblocks? Capacity and silos issues?*
- *What ocean-related issues could be under consid-*

11 "Ocean Commitments under the Paris Agreement", by Gallo, Victor, Levin in Nature Climate Change, Vol. 7. <https://scripps.ucsd.edu/biblio/ocean-commitments-under-paris-agreement>

eration? (ocean-based renewables, low carbon shipping, MPAs, mangroves, blue carbon sinks conservation consistent with Paris Agreement environmental integrity, coral reefs, sea level rise, acidification, fisheries adaptation?, etc.)

- Is cross-countries or regional coordination needed or desirable?
- How can effective ocean planning minimize harmful ocean use while maximizing benefits from activities like offshore renewable energy development?
- How could area-based management tools, including MPAs and “climate-smart” MPAs, be better used to contribute to mitigation and adaptation efforts and increase the conservation and restoration of coastal, marine and polar ecosystems which sequester carbon and/or support coastal communities?
- Can actions under the jurisdiction or control of countries (for example flag States) in areas beyond the national jurisdiction be included within the NDCs, and could there be any recognition or incentive provided under the UNFCCC?
- Focusing on the ocean-climate nexus, can synergies be identified and bridges built with the BBNJ framework under negotiation?
- How can climate-ready fisheries management support the carbon sequestration functions of coastal blue carbon habitats and increase resilience for coastal communities?

Greenhouse gases (GHGs) resulting in atmospheric and planetary surface warming have been considered collectively in the UN climate regime from the beginning. However, this has often been done without deeper consideration of the particularly damaging impact CO<sub>2</sub> in particular has on the ocean.

For example, the Global Warming Potential (GWP) of non-CO<sub>2</sub> GHGs is significantly higher than that of CO<sub>2</sub>. As a consequence, Parties may choose to address climate targets by focusing on non-CO<sub>2</sub> GHGs such as methane. However, a preference to cut non-CO<sub>2</sub> GHG emissions and focus less on CO<sub>2</sub> emissions still leaves the ocean at increasing risk of acidification, which is driven by CO<sub>2</sub> specifically. Accounting for GHG emissions in a way that considers both warming and acidification would help address the growing risk to the ocean from CO<sub>2</sub> emissions specifically and allow Parties to understand tradeoffs they may be making.

#### Points for discussion:

Could ocean acidification impacts be incorporated into existing targets and how?

- How can we evaluate the potential impact of ocean acidification on economically and culturally important marine species and resources, and the communities that depend on them? Is there for example a role for the Commonwealth Action Group?
- How can we incorporate this information into the Global Stock take, NDCs or other climate action efforts?

- What adaptive measures can be included in NDCs, in order to mitigate the impacts of ocean acidification on shorelines, marine ecosystems and coastal communities?

The agenda item on national Perspectives is intended to provide space to share views (coming both from ocean and climate perspectives) on existing needs to explore what steps can be taken to advance the development of ambitious climate action in order to minimize the adverse effects of climate change on the ocean and to contribute to its protection and conservation.

## Going Further

Under this agenda item, we intend to arrange several tables each with a mix of government representatives and experts/resource persons for cross-fertilization on one particular theme each:

Blue energy, blue carbon mitigation and sequestration, ocean-based industries emission reductions (shipping, etc.), adaptation through MPAs, fisheries and aquaculture management and adaptation, coastal protection, response to ocean acidification.

The tables will report to the plenary on key issues emerging, to begin a facilitated Q&A session.

We intend to divide this session in two so that each table can consider different issues, so that everyone benefits from a wide array of views. (For example, if Table A covers Blue energy in the first half of this agenda item, in the second half it could cover MPAs, etc.)

#### Points for discussion:

- What are the experiences in developing climate actions that minimize the adverse effects of climate change in the ocean and to contribute to its protection and conservation?
- Are there common experiences/lessons to be learned?
- What can the experts and advocates in the room do to support ocean-related government action within their climate strategies, including incorporating relevant Talanoa Dialogue conclusions around the Pacific region?
- Beside or beyond NDCs, what other measures and actions at the corner of climate and ocean action could be envisaged at COP25?

## The Tools

This session will be made up of three panels of 2 to 3 persons to introduce each of the following themes (5 minutes each): Science and baseline, finance, and strategy coherence, followed by facilitated dialogues on each topics.

## Points for discussion:

- What information is required to begin drawing ocean elements within NDCs?
- What type of information would be most useful to include in recommendations over further guidance on these issues stemming from these discussions?
- What additional information must be sought or reached in the process?
- Can additional sources of funding for management and enforcement be identified and acquired thanks to the integration of ocean-related action within NDCs?
- Is there a risk of duplication of efforts? How can this be avoided?
- What are the linkages with other instruments, such as the CBD, the SDGs, Regional Seas, BBNJ, etc.?
- What are the opportunities to foster interlinkages between the two agendas provided by the launch of the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, the UNSG Climate Summit, Our Ocean Conference, and COP25 in Chile (including the pre-COP in Costa Rica), the second UN Ocean Conference in Lisbon in 2020, the CBD COP15 in Beijing, and the Decade of Ocean Science for Sustainable Development?
- What climate-related measures could be incorporated into NDCs that would strengthen coastal resilience (including sea level rise adaptation), bearing in mind that Adaptation Communications and actions designed for implementing mitigation measures may be included within NDCs? How can the PSIDS make use of or development an adequate regional framework to work in this direction?

The workshop will end with a presentation of identified Take Aways to participants and a senior representative of the government of Fiji (and the Special envoy of the UN Secretary General Ambassador Peter Thomson if he can take a flight on time).

Conducted under the Chatham House Rule (like the rest of the workshop,) that closing session will be an opportunity for workshop participants to receive feedback and advice from high level representatives as a sounding board.

## Because the Ocean

