

Submission on the relevance of the ocean in the global response to climate change

Chile has the honour to submit its considerations in response to the call for submissions included in document FCCC/APA/2016/L.3, with a particular view of the role of the ocean in the climate action that Parties can undertake as part of their Nationally Determined Contributions.

Preliminary considerations

The ocean is a carbon sink that captures 25% of the anthropogenic CO₂ emitted to the atmosphere and absorbs more than 90% of the extra heat generated by global warming.

Nevertheless, these processes come at a considerable cost. The IPCC in its Fifth Assessment Report has indicated that the ocean, due to its natural role as sink and climate regulator, is already suffering serious changes such as warming, acidification, de-oxygenation, and sea-level rise. Not only these changes affect marine ecosystems, but also they have severe consequences for the services they provide, ultimately threatening livelihoods, economic sectors and food security, undermining the very objectives of the Convention and the Paris Agreement.

The ocean system should be integrated in the narrative for long-term mitigation action. A better understanding of the effects of climate change in the ocean would therefore be a significant tool to encourage Parties in enhancing their climate ambition.

The Ocean is explicitly recognized by the Convention in its paragraph 4.1d, which indicates that all Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall:

Art. 4.1 d) "Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems"

The importance of this provision has been also highlighted in the Paris Agreement, that has been referenced in article 5.1, related to the conservation and enhancement of carbon sinks and reservoirs. Furthermore, the Paris Agreement makes an explicit indication in its Preamble of the "importance of ensuring the integrity of all ecosystems, including oceans", creating a very solid conceptual framework to strengthen the presence of the ocean in its implementation.



While this obligation of “conserving and enhancing” the ocean is established in the Convention itself, there is a clear deficit in the proper implementation of this provision.

The ocean under the NDCs

Chile is convinced that, in order to successfully implement the Paris Agreement in a manner that ensures long-term climate action, Parties should consider including the ocean in their Nationally Determined Contributions, both under adaptation and/or mitigation angles.

a) *Mitigation*. The inclusion of the ocean in NDCs suggested in this submission has the objective of contributing to its conservation through Parties’ national climate policies and international cooperation.

Bearing this in mind, it is important to underline that the central strategy to conserve the ocean from acidification and warming needs to be based in far-reaching, ambitious mitigation action, considering that the main cause of acidification and other damaging processes is the CO₂ absorption that occurs naturally.

It is therefore important that wrong incentives are avoided. In more concrete terms, integrating the ocean in NDCs cannot result in crediting Parties for the chemical absorption of CO₂ that takes place in their jurisdictional waters.

For the same reason, the ocean should not be subject to international transfers of mitigation outcomes under article 6 of the Paris Agreement, unless invoking article 6.8, which refers to international collaboration and non-market mechanisms.

One exception to this non-crediting rule could be coastal ecosystems that capture CO₂ as the result of biological processes, as opposed to the chemical process that occurs in open waters that contributes to acidification. This is relevant for mangroves, kelp forests and other ecosystems that have relevant potential for capturing greenhouse gases.

b) *Adaptation*. On the other hand, many Parties have included an adaptation component in their INDCs, and a number of them have given special consideration to ocean-related socio-economic impacts. This could also be particularly useful for Parties’ adaptation communications as expressed in Article 7.10 of the Paris Agreement, that can also be part of NDCs.

In many cases further research is needed in order to define efficient adaptation policies to preserve some marine ecosystems and the services they provide. At the same time, in some activities, like fisheries, there is already a considerable amount of evidence to back immediate and focused action. In this regard, as a starting point,



Parties could consider climate change impacts on their fisheries sector and its corresponding adaptation measures, including as a component of their NDCs.

Additional considerations:

As expressed before, there is a significant gap in research to understand the role of marine ecosystems in carbon sequestration, and the potential mitigation and adaptation co-benefits that may arise from conservation measures such as Marine Protected Areas (MPAs).

In this regard, we look forward to the upcoming IPCC Special Report on Climate Change, Oceans and Cryosphere, which will provide valuable insights on this topic, and should serve the purpose of informing Parties on how to better protect their coastal marine ecosystems.

It is important to indicate that the current shortages of scientific knowledge must not be a deterrent for action, especially considering the precautionary principle that has been enshrined in Article 3.3 of the Convention.

In their nature, NDCs are applicable within the waters of national jurisdiction of sovereign states Parties to the Convention. However, given the dynamic processes occurring in open waters, through sea currents and other interactions, it is very relevant that the ocean beyond national jurisdiction is also monitored and preserved, which is a matter that all Parties could undertake under cooperative actions in the light of the global response to climate change.

Conclusions

Chile is of the view that the most effective way to address the gap of implementation of Art. 4.1d of the Convention and related provisions in the Paris Agreement is that Parties include the ocean in their NDCs, as an integral part of their climate policies.

In this regard, it would be very beneficial that Parties have the possibility to discuss both its mitigation and adaptation aspects, and share their views and experiences in a formal and collaborative manner.

The inclusion of ocean-related topics in Parties' NDCs should lead, in Chile's view, to an open debate under the Subsidiary Bodies of the Convention that would eventually provide Parties with specific guidance in this topic, in the context of their efforts to implement the Paris Agreement.