

**WRITTEN STATEMENT OF THE PORTUGUESE REPUBLIC SUBMITTED TO THE
INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA**

in

***Case No. 31, Request for an Advisory Opinion submitted by the Commission of Small Island
States on Climate Change and International Law (Request for Advisory Opinion submitted to the
Tribunal)***

I. INTRODUCTION

1. On December 12, 2022, the Commission of Small Island States on Climate Change and International Law submitted to the International Tribunal for the Law of the Sea (hereinafter referred to as “ITLOS”) a request for an advisory opinion on the following questions (hereinafter referred to as the “Request”):¹

What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea (the “UNCLOS”), including under Part XII:

- (a)* to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere?
 - (b)* to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?
2. The Registrar of ITLOS has included the Request in the ITLOS Case List as Case No. 31 under the title *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal)*.
 3. The Portuguese Republic is a State Party to the United Nations Convention on the Law of the Sea (hereinafter referred to as “UNCLOS”).² Accordingly, ITLOS invited the Portuguese Republic to submit a written statement on the Request by no later than May 16, 2023, pursuant to

¹ The Request was lodged on the basis of Article 21 of the Statute of ITLOS and Article 138 of the Rules of ITLOS, in conjunction with Article 2(2) of the Agreement for the Establishment of the Commission of Small Island States on Climate Change and International Law. The text of the Request is available at https://www.itlos.org/fileadmin/itlos/documents/cases/31/Request_for_Advisory_Opinion_COSIS_12.12.22.pdf (accessed on June 1, 2023).

² United Nations Convention on the Law of the Sea (Montego Bay, December 10, 1982), 1833 UNTS 3.

Article 133(3) of the Rules of ITLOS.³ By Order of February 15, 2023, the President of ITLOS extended the time-limit for the submission of such statements by one month to June 16, 2023.⁴

4. Any interpretation of the obligations of State Parties under UNCLOS is likely to have a direct impact on them. Therefore, participation in the proceedings before ITLOS would provide the Portuguese Republic with the opportunity to contribute to the clarification and explanation of its position on the interpretation of UNCLOS in the context of the Request.
5. Since the scope of the following observations is limited in content by the Request,⁵ they will not address issues that fall outside that scope, including the issue of responsibility and compensation under international law if the relevant primary international obligations are breached.
6. In its written statement, the Portuguese Republic aims to clarify what international obligations under UNCLOS State Parties have, if any, relating to (i) the prevention, reduction, and control of pollution of the marine environment in relation to the deleterious effects resulting, or likely to result, from climate change caused by anthropogenic emissions of greenhouse gasses into the atmosphere; and (ii) the protection and preservation of the marine environment in relation to climate change impacts.
7. The structure of the written statement is as follows: In Section II, there is a brief overview of the central role of the oceans in addressing climate change. This overview is largely factual in nature and based on available scientific evidence. The Portuguese Republic recognizes that any advisory opinion issued by ITLOS will be legal in nature. However, many of the international treaties relevant to the response to the Request expressly refer to the best available scientific evidence as one of the bases for determining the international obligations of subjects of international law, particularly States. Accordingly, Portugal believes that ITLOS must necessarily consider in its legal determinations what science says about the central role of the oceans in addressing climate change. Section II is intended to contribute to this effort.

³ See, International Tribunal for the Law of the Sea, Order 2022/4, dated December 16, 2022, p. 3, available at https://www.itlos.org/fileadmin/itlos/documents/cases/31/C31_Order_2022-4_16.12.2022.pdf (accessed on June 1, 2023).

⁴ See, International Tribunal for the Law of the Sea, Order 2023/1, dated February 15, 2023, p. 2, available at https://www.itlos.org/fileadmin/itlos/documents/cases/31/C31_Order_2023-1_15.02.2023_Readable.pdf (accessed on June 1, 2023).

⁵ The questions in the Request must have a legal nature. According to the International Court of Justice, “[...] questions ‘framed in terms of law and rais[ing] problems of international law [...] are by their very nature susceptible of a reply based on law’ [Accordance with International Law of the Unilateral Declaration of Independence in Respect of Kosovo, *Advisory Opinion*, July 22, 2010, para. 25; *Western Sahara, Advisory Opinion*, ICJ Report 1975, para. 15].

8. Section III addresses what the obligations to preserve and protect the marine environment specifically require from State Parties to UNCLOS. In this respect, it should be noted that the questions that constitute the Request are partially similar to the wording of Articles 192 and 194(1) of UNCLOS. Therefore, these legal provisions are central to answering such questions, in addition to Articles 207 and 212 of UNCLOS. However, the interpretation of these provisions will not be isolated. Instead, determining what exactly they require of State Parties to UNCLOS involves a complex interpretive exercise that seeks consistency and coherence with other branches of international law, including international environment law and climate change law.
9. In Section IV, the Portuguese Republic will provide some concluding observations based on the findings and conclusions of the previous sections.

II. THE CENTRAL ROLE OF THE OCEANS IN ADDRESSING CLIMATE CHANGE

10. The oceans play a critical role in the impact of climate change on humankind. This statement is now scientifically accepted and supported by significant research findings. One of the characteristics of water is its tremendous ability to store heat because of its physical properties. The oceans have a heat storage capacity 1.200 times greater than the atmosphere. Because they cover a large portion of the Earth's surface, they are one of the main components of the climate system. They act as a thermostat controlling the phenomena of absorption and radiation of heat through currents.
11. The oceans are an important reservoir of CO₂, but the absorption of GHG leads to ocean warming and acidification. The ocean absorbs about a quarter of the CO₂ that is released into the atmosphere by human activities. Human activities—primarily through greenhouse gasses (hereinafter referred to as “GHG”) emissions—have clearly caused global warming, with global surface temperatures of 1.1°C over 1850-1900 in 2011-2020.
12. In recent decades, the occurrence and severity of extreme events in the climate system, including the oceans, have increased—primarily in response to human-induced climate change. Prolonged events of extremely high seawater temperatures (hereinafter referred to as “MHWs”) occur throughout the ocean and have severe impacts on ecosystem distribution and cause mass mortality of marine organisms. MHWs are expected to become longer lasting and more intense in the future, making them a major threat to marine ecosystems, with critical socioeconomic impacts on fisheries and aquaculture.

13. If this trend is not halted, humanity will face serious challenges in terms of water availability, crop production, animal and livestock health, floods and droughts, ocean acidification, or global sea level rise, to name a few. Air quality is also highly dependent on the oceans, as together with tropical forests, they are one of the lungs of the earth, producing about 50% of atmospheric oxygen through photosynthesis of marine plankton. As for the oceans in particular, the IPCC 2023 report showed that global ocean surface temperatures have been steadily increasing since the 1970s, and that human-induced CO₂ emissions are the main cause, as is ocean acidification.
14. Thermal expansion of the water column, combined with melting ice caps, is contributing to a steady rise in mean global sea level, and it is highly likely that this trend will continue - up to 1 meter in 2100 at current greenhouse gas emissions. This sea level rise will not only have devastating consequences for iconic species such as polar bears and penguins but will also have a huge impact on coastal communities, including megacities and hazardous energy facilities.
15. Continued ocean warming has negative impacts on marine ecosystems, marine species, and humanity, which directly or indirectly relies on the ocean for animal protein consumption. The primary (net) production of the oceans accounts for about 45% of global production, although the biomass they produce is only about 1% of the total primary producers of the biosphere. For this reason, the oceans are an important link in the carbon cycle, which is highly dependent on net primary production. Every day, a large amount of inorganic carbon is sequestered by phytoplankton in the surface layers of the oceans and transferred to other trophic levels through predation by zooplankton and sedimentation of organic material.
16. Changes in ocean circulation patterns and upwelling of nutrients due to changes in ocean temperature result in drastic changes in primary production in the marine environment, affecting food chains and ultimately impacting our social and economic livelihoods. Ocean acidification has negative impacts on marine life, especially organisms that rely on calcification (e.g., corals, molluscs, and crabs). Heat also triggers stress responses in organisms, as evidenced by the bleaching of coral reefs at elevated water temperatures, leading to increased mortality risk and putting pressure on the entire ecosystem. Temperature rise and acidification lead to food insecurity by (i) affecting bioaccumulation and excretion patterns of contaminants in marine organisms, including emerging contaminants, by altering the physical and chemical properties of seawater, leading to food insecurity; (ii) increasing the incidence of disease in marine organisms,

affecting both wild resources and farmed species; and (iii) affecting the metabolism and physiological responses of animals.

III. LAW OF THE SEA, INTERNATIONAL ENVIRONMENTAL LAW AND CLIMATE CHANGE LAW

A. *The openness of UNCLOS to other international rules*

17. The all-encompassing nature and purpose of UNCLOS are undeniable. Its preamble is compelling evidence of this, when recognizing that “[...] the problems of the ocean space are closely interrelated and need to be considered as a whole.”⁶ The ambitious scope of UNCLOS is the result of a desire to establish

[...] a legal order for the seas and oceans which [...] will promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment.⁷

18. UNCLOS is generally recognized as a living treaty rather than a self-contained legal system.⁸ This means that UNCLOS must be interpreted also in light of other international legal instruments and regimes. This is particularly important when UNCLOS provisions do not clearly regulate certain areas of substantive law,⁹ such as climate change law. In fact, the phenomenon of climate change was not taken into account during the negotiations of UNCLOS. For example, sea level rise in the context of climate change, as the International Law Commission noted, was not “perceived as an issue that needed to be addressed.”¹⁰ This is essential—particularly in interpreting Part XII—for answering the questions of the Request.
19. In this respect, there is a constant tension between ensuring integrity and coherence, on the one hand, and upholding that UNCLOS is able to accompany the evolving circumstances of its scope,

⁶ Recital No. 3 of the Preamble of UNCLOS. See also, Recital No. 1 of the Preamble of UNCLOS.

⁷ Recital No. 4 of the Preamble of UNCLOS.

⁸ Alan Boyle, “Further Development of the 1982 Convention on the Law of the Sea: Mechanisms for Change”, 54 *International & Comparative Law Quarterly* 3 (2005), p. 565; Jill Barrett and Richard Barnes (eds), *Law of the sea: UNCLOS as a living treaty*, British Institute of International and Comparative Law (London, 2016). See also, *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission*, Separate Opinion of Judge Lucky, April 2, 2015, ITLOS Report, p. 96, para. 18.

⁹ Richard Barnes, David Freestone, and David M. Ong., “The Law of the Sea: Progress and Prospects”, in David Freestone, Richard Barnes, and David Ong (eds), *The Law of the Sea: Progress and Prospects* (Oxford, 2006), p. 2.

¹⁰ See also, General Assembly, *Sea-level rise in relation to international law: First issues paper by Bogdan Aurescu and Nilüfer Oral, Co-Chairs of the Study Group on sea-level rise in relation to international law*, February 28, 2020, pp. 40-41, para. 104(a), available at: undocs.org/en/A/CN.4/740.

on the other. The openness of UNCLOS essentially means that the interpretation of its provisions must never be undertaken in isolation. There are three different ways through which UNCLOS can absorb exogenous influence. *First*, the consideration of subsequent agreements and subsequent practice and other international rules that may be applicable between the Parties.¹¹ In other words, the interpretation and application of international instruments must be carried out “within the framework of the entire legal system prevailing at the time of the interpretation.”¹² *Second*, the use of *rules of reference*. The legal relevance of legal reasoning is similar to the previously referred methodology. It refers the interpreter to international rules and standards outside the framework of the legal instrument in question. The difference is that it does so explicitly.¹³ *Third*, the flexibility of an international instrument also depends on the wording of its provisions. Provisions that are broader and more general are more susceptible to the influence of time and thus to evolutionary interpretation. In each of these cases, it should be noted that integrity and coherence require that any interpretation be fully consistent with the principles and objectives embodied in the respective instruments.¹⁴

20. As noted above, the subject of the Request deals directly with the phenomenon of climate change. In the Request, one question is broader in scope, while the other is more specific. The second question is more general as it seeks to determine the obligations of State Parties with respect to the protection and preservation of the marine environment in relation to climate change impacts. The first question is less general in that it addresses obligations to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change.
21. In this context, there are three set of provisions that open UNCLOS to outside influence for the purposes of its interpretation. *First*, Articles 192 and 194 of UNCLOS. These constitute the

¹¹ See, Article 237 and 311 of UNCLOS. See also, Article 31(3)(c) of the Vienna Convention on the Law of Treaties (hereinafter referred to as “VCLT”) [Vienna Convention on the Law of Treaties (Vienna, May 23, 1969), 1155 UNTS 331].

¹² *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, I.C.J. Reports 1971*, p. 19, para. 53. See also, *Aegean Sea Continental Shelf, Judgment, I.C.J. Reports 1978*, pp. 34-35, para. 80. It should not be disregarded the relevance of soft law instruments for the purpose of evolutionary interpretation. See, on this issue, Alan Boyle, *ob. cit.*, pp. 572-574. See also, General Assembly resolution 73/202, *Subsequent agreements and subsequent practice in relation to the interpretation of treaties*, A/RES/73/202 (January 3, 2019), available at undocs.org/en/A/RES/73/202.

¹³ See, for example, Articles 207(1) and 212(1) of UNCLOS.

¹⁴ Richard Barnes, David Freestone, and David M. Ong., *ob. cit.*, p. 5.

general umbrella obligations of Part XII and are characterised by broad and general terms. Accordingly, their interpretation implies that the corresponding normative content evolves over time. *Second*, Section 5 of Part XII contains source-specific obligations that explicitly refer to internationally agreed rules, standards and recommended practices and procedures.¹⁵ *Finally*, Articles 237 and 311(3) of UNCLOS expressly confirm that the interpretation of Part XII of UNCLOS requires coordination and integration with other rules of international law. Any interpretation must always, nevertheless, be consistent with the general principles and objectives of UNCLOS.

22. In this context, the United Nations Framework Convention on Climate Change (hereinafter referred to as “UNFCCC”),¹⁶ the Paris Agreement,¹⁷ and the Convention for the Protection of the Marine Environment of the North-East Atlantic (hereinafter referred to as “**OSPAR Convention**”)¹⁸ can be considered three of the most important international instruments for the purposes of answering the questions in the Request.¹⁹
23. However, it must be taken into account that these written observations are not exhaustive. In this regard, the consideration of the above instruments is without prejudice to the importance of other instruments and regimes for the same purpose, including *inter alia* the United Nations Convention on Biological Diversity and the measures and actions adopted under the International Maritime Organization (hereinafter referred to as “**IMO**”).
24. Be that as it may, it is necessary to understand what the main features and obligations under the UNFCCC, the Paris Agreement, and the OSPAR Convention are. The following three subsections are an attempt to do that.

¹⁵ See, Articles 207(1) and 212(1) of UNCLOS.

¹⁶ United Nations Framework Convention on Climate Change (New York, May 9, 1992), 1771 UNTS 107.

¹⁷ Paris Agreement (Paris, December 12, 2015), 3156 UNTS 79.

¹⁸ Convention for the protection of the marine environment of the North-East Atlantic (Paris, September 22, 1992), 2354 UNTS 67.

¹⁹ From a methodological point of view, the importance of the UNFCCC and the Paris Agreement derives *inter alia* from the number of States Parties they have. It should be noted that UNCLOS, the Paris Agreement, and the UNFCCC have 169, 195, and 198 State parties respectively. Of the 169 State parties to UNCLOS, only Yemen has not ratified the Paris Agreement.

(1) *The UNFCCC*

25. The objectives of the UNFCCC are well-defined.²⁰ Climate change is a common concern of humankind and human activities have been contributing to this worrying trend.²¹ The preamble to the UNFCCC clearly summarises this as follows:

[...] human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind.

26. In order to protect current and future generations,²² it is necessary to address this issue. Accordingly, the UNFCCC provides the general framework for addressing climate change. This is clear not only from the official name of the instrument, but also from its Article 2. As such, all instruments adopted by the Conference of the Parties must be aligned with the ultimate objective of the UNFCCC.²³ That is, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.²⁴
27. In addition, the UNFCCC provides the definition of many concepts related to climate change. In this way, it provides legal clarity by ensuring that international action to address climate change does not depend on uncertainty about their meanings. Accordingly, the UNFCCC defines the concepts of (i) adverse impacts of climate change;²⁵ (ii) climate change;²⁶ (iii) climate system;²⁷

²⁰ Before the UNFCCC, there were many other international instruments is based on many other international political or legal instruments.

²¹ See, Recital No. 2 of the Preamble to the UNFCCC.

²² See, Recital No. 23 of the Preamble to the UNFCCC.

²³ Among these instruments, the Kyoto Protocol and the Paris Agreement are currently the most relevant. The Conference of the Parties was established by Article 7 of the UNFCCC.

²⁴ See, Article 2 of the UNFCCC.

²⁵ Under Article 1(1) of the UNFCCC, the concept of *adverse effects of climate change* means

changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare.

²⁶ Under Article 1(2) of the UNFCCC, the concept of *climate change* means “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”

²⁷ Under Article 1(3) of the UNFCCC, the concept of *climate system* means “the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions.”

(iv) emissions and greenhouse gasses,²⁸ (v) reservoir;²⁹ (vi) sink;³⁰ and (vii) source.³¹ Understanding the meaning of each of these concepts is essential to answering the questions posed in the Request.

28. In this context, the UNFCCC reflects a shared and multilateral will to address this global challenge. The framework within which the Parties are committed to do so follows a set of important principles and ideas. Understanding their scope and content is critical, as they will play an important role in subsequent international agreements on climate change.
29. *First*, the UNFCCC recognizes that success in meeting this challenge depends essentially on international cooperation and the effective and appropriate participation of the entire international community.³²
30. *Second*, it further recognizes that the responsibility for climate change is not evenly distributed. Rather, the UNFCCC notes that the contribution of developed and developing countries to global GHG emissions varies widely. Accordingly, international cooperation to address climate change must be based on a mechanism of differentiated responsibility that also reflects the varying capabilities and economic and social conditions of nations.³³
31. *Third*, the Parties—particularly developed countries—are generally obligated to take material steps to anticipate, prevent or minimize the causes of climate change and its adverse impacts.³⁴ Policies and measures adopted to achieve this objective should be integrated into national development programs and should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.³⁵

²⁸ Under Article 1(4) and (5) of the UNFCCC, the concepts of *emissions* and *greenhouse gasses*—when read together—mean the release of gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation, and/or their precursors, into the atmosphere over a specified area and period of time.

²⁹ Under Article 1(7) of the UNFCCC, the concept of *reservoir* means “a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored.”

³⁰ Under Article 1(8) of the UNFCCC, the concept of *sink* means “a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored.”

³¹ Under Article 1(9) of the UNFCCC, the concept of *source* means “any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.”

³² Although climate change is portrayed as a global challenge that requires international cooperation, the principle of sovereignty and the jurisdiction of States remain central to addressing the shared challenge of climate change.

³³ See, Articles 3(1), (2), and (4), and 4 of the UNFCCC. See also, Recitals No. 3 and 6 of the Preamble to the UNFCCC. See, with respect to State parties that were undergoing the process of transition to a market economy, Article 4(6) of the UNFCCC.

³⁴ See, Article 3(3) and 4(1) and (2) of the UNFCCC.

³⁵ See, Article 3(4) and (5) of the UNFCCC.

32. Overall, the UNFCCC establishes two groups of Parties. In so doing, it also creates a number of general obligations for all Parties,³⁶ and a number of specific obligations for developed country Parties only.³⁷ In no case are these obligations linked to tangible and measurable individual targets. This also means that developed country State Parties and States identified in Annex I to the UNFCCC are not bound to achieve specific results. Instead, the language is more general in that it only creates obligations (of conduct) for State Parties to develop and implement national policies aimed at limiting GHG emissions and protecting sinks and reservoirs.³⁸
33. In order to answer the questions posed in the Request, it is not necessary to go into detail on each and every obligation that Parties have to fulfil under the UNFCCC. It is sufficient to underline the overarching principle and goal of reducing GHG emissions because of their contribution to climate change and the resulting negative impacts on the climate system. In brief, the Dutch Supreme Court characterizes the obligations under the UNFCCC as follows:
- to protect the climate system, also in the interest of future generations, based on the principle of equity and in accordance with their responsibilities and capabilities, giving full consideration to developing countries that are particularly vulnerable to climate change or that would have to bear a disproportionate burden under the Convention;
 - to take precautionary measures to anticipate the causes of climate change and to prevent these causes as much as possible, and not to postpone such measures citing a lack of full scientific certainty as a reason.³⁹
34. However, the UNFCCC makes relatively little reference to the oceans.⁴⁰ Article 4(1)(d) is the exception by stating that all Parties have the obligation

[to] 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.

³⁶ See, Article 4(1) of the UNFCCC. In fulfilling these obligations State parties must consider the situation of State parties, particularly developing countries, with economies that are vulnerable to the adverse effects of the implementation of measures to respond to climate change [see, Article 4(10) of the UNFCCC].

³⁷ See, Article 4(2) of the UNFCCC. These State parties are listed in Annex I to the UNFCCC.

³⁸ See, for example, Article 4(2)(a) of the UNFCCC.

³⁹ *Urgenda Foundation v. The State of the Netherlands*, ECLI:NL:GHDHA:2018:2610, Ruling of October 9, 2018, unofficial translation, p. 4, para. 8.

⁴⁰ See also, Recital No. 4 of the Preamble to the UNFCCC. The centrality of oceans in addressing climate change is also greatly underestimated in subsequent international instruments, namely the Kyoto Protocol and the Paris Agreement.

This provision recognizes the critical role of the oceans as sinks and reservoirs.⁴¹ As noted above,⁴² these are essential for controlling GHG in the atmosphere. It is further evidence that the overall well-being of the ocean decisively impacts climate change.

(2) *The Paris Agreement*

35. The UNFCCC did not provide tangible or measurable targets in terms of concentrations of GHG emissions. In this context, the Kyoto Protocol to the UNFCCC (hereinafter referred to as “**Kyoto Protocol**”)⁴³ was intended to fill this gap by introducing caps on GHG emissions of certain States and committing others to reduction targets.⁴⁴ Less developed States were not included in its scope. The conclusion of the Paris Agreement has, however, further changed the landscape of international environmental law and climate change law. It is truly a global instrument, as it imposes obligations on all Parties.
36. As the Kyoto Protocol, the Paris Agreement contributes to improve the implementation of the UNFCCC and aims “[...] to strengthen the global response to the threat of climate change.”⁴⁵ For this purpose, it addresses “[...] the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge.”⁴⁶ It is therefore undeniable that the Paris Agreement, which aims to do just that, is also relevant for this purpose.⁴⁷ It purports to do so on the basis of a variety of legal technicalities and mechanisms.
37. *First*, Article 2(1) of the Paris Agreement establishes the core international obligations as follows:
- (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;

⁴¹ The oceans are additionally mentioned in Recital No. 13 of the Preamble to the UNFCCC, which stresses the “importance of ensuring the integrity of all ecosystems, including oceans [...].”

⁴² See, Section II above.

⁴³ Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, December 11, 1997), 2303 UNTS 162.

⁴⁴ See, Article 2 of, and Annex B to, the Kyoto Protocol. This heavier burden on certain States follows the principle of common but differentiated responsibility and respective capabilities. This also

⁴⁵ See, Article 2(1) of the Paris Agreement.

⁴⁶ See, Preamble of the Paris Agreement.

⁴⁷ More specifically, the Paris Agreement also (i) calls for an intensification and strengthening of reduction efforts up to 2020 in order to achieve the 2030 targets (40% reduction); (ii) notes that the use of fossil fuels must be ceased soon, as this is a major cause of excessive CO₂ emissions; (iii) recognizes that developed countries are expected to financially support developing countries in reducing their emissions.

- (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and
- (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

38. The obligation to hold the increase in global average temperature is necessarily collective. No State party to the Paris Agreement is obligated to achieve this threshold on its own.⁴⁸ This is a key feature of the Paris Agreement, as it also provides for *collective*, rather than *individual*, international obligations.⁴⁹ However, these obligations are twofold. On the one hand, the obligation to hold the increase in global average temperature to well below 2°C above pre-industrial levels is clearly one of result. On the other hand, Parties have only committed to make efforts to limit the temperature increase to 1.5°C above pre-industrial levels.⁵⁰
39. In each case, the obligations are those whose fulfilment requires the contribution of more than one party. The size of the group of subjects of international law that have collective international obligations may, of course, vary. They may be small or large. In the case of the Paris Agreement, the international obligation embodied in Article 2(1)(a) is simultaneously shared by and owed to almost the entire international community *as if it were one*.⁵¹ However, as in the UNFCCC, the Paris Agreement also reflects the principle of equity and common but differentiated responsibilities and respective capabilities among Parties.⁵²

⁴⁸ This is not because of the wording of the provision in question. Rather, it is a normative necessity. Holding the increase in global average temperature under the Paris Agreement is a goal that requires joint efforts and international cooperation.

⁴⁹ See, for example, Article 4(1) of the Paris Agreement, in which “[...] Parties [to the Paris Agreement] aim to reach global peaking of greenhouse gas emissions as soon as possible [...] and to undertake rapid reductions thereafter in accordance with best available science.”

⁵⁰ As the Dutch Supreme Court explained in *Urgenda Foundation v. The State of the Netherlands*,

[t]here has been a general consensus in the climate science community and the world community for some time that the global temperature should not exceed 2° C. If the concentration of greenhouse gases has not exceeded 450 ppm in the year 2100, there is a reasonable chance that this 2° C target will be achieved. However, the insight has developed over the past few years that a safe temperature rise should not exceed 1.5° C, which comes with a lower ppm level, namely 430 ppm. With these starting points in mind, there is limited room (‘budget’) for greenhouse gas emissions, and particularly for CO₂ emissions. This budget is also referred to as the ‘carbon budget’, ‘CO₂ budget’ or ‘carbon dioxide budget’.

[ECLI:NL:GHDHA:2018:2610, Ruling of October 9, 2018. unofficial translation, p. 3, para. 3.5].

⁵¹ At the time of the submission of this written statement, the Paris Agreement has 195 Parties.

⁵² See, Articles 2(2), 4(3), 4(19) of the Paris Agreement. See also, Recital No. 3 of the Preamble to the Paris Agreement.

40. To this end, the Paris Agreement could have established specific obligations of result with clear and objective goals for each State party. It did not. This does not mean, however, that the Parties to the Paris Agreement are free to act as they see fit with no normative constraints. Indeed, the collective obligation to hold the increase in global average temperature to well below 2°C necessarily imposes certain international obligations of conduct on Parties. In other words, the way in which they act—within whatever framework—must aim at this collective objective.
41. In addition, Parties have specific *individual* obligations of result under the Paris Agreement. Among others,⁵³ Parties are required to submit every five years their nationally determined contributions (hereinafter referred to as “NDCs”).⁵⁴ The NDCs reflect the efforts Parties decide to undertake, must progress over time, and reflect more ambitious goals.⁵⁵ Parties have wide discretion in determining their content and pursue their implementation.⁵⁶ But discretion is not synonymous with unfettered freedom.⁵⁷ Rather, NDCs must be designed and implemented (i) on the basis of good faith, (ii) with a view to achieving the overarching goal of the Paris Agreement, and (iii) be in line with the principles, rules, and guidelines contained throughout the Paris Agreement.⁵⁸
42. *Second*, Article 5(1) of the Paris Agreement also establishes that action should be taken to conserve and enhance, as appropriate, sinks and reservoirs of GHG.⁵⁹ In particular, it states as follows:

Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1 (d), of the [UNFCCC], including forests.

43. Nevertheless, as in the UNFCCC, the oceans do not have an express and prominent status in the Paris Agreement. In fact, there is no direct reference to the oceans, only to the forests. In this

⁵³ See, for example, Articles 13(7) to (9) of the Paris Agreement. These are mainly obligations to provide information, including (i) a national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases; (ii) information to track progress made in implementing and achieving its NDCs; (iii) information related to climate change impacts and adaptation; (iv) information on financial, technology transfer and capacity-building support provided to developing parties

⁵⁴ See, Article 3 of the Paris Agreement.

⁵⁵ See, Articles 3 and 4(3) of the Paris Agreement. The UNFCCC Secretariat estimates a 2.7° C temperature rise if State parties to the Paris Agreement comply with the NDCs submitted in the first round.

⁵⁶ The wording of Articles 4(2) and (3) of the Paris Agreement limit the legal force of NDCs. *First*, parties to the Paris Agreement must submit NDCs that they intend to achieve. *Second*, successive NDCs ought to reflect the highest possible ambition of the submitting party.

⁵⁷ See, Article 4(9) of the Paris Agreement.

⁵⁸ See, Articles 3-4, 7, 9-11, and 13 of the Paris Agreement.

⁵⁹ See, Article 5(1) of the Paris Agreement.

respect, Parties to the Paris Agreement are encouraged to take action to implement and support the existing framework under the UNFCCC with regard to forests. For that purpose, they are encouraged to implement and support

[...] policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries; and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests, while reaffirming the importance of incentivizing, as appropriate, non-carbon benefits associated with such approaches.⁶⁰

44. As regards the oceans, the only direct mention is in the recognition of “[...] the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity [...]”⁶¹ There are other cases in which the reference to the oceans is implicit. Despite this apparent underestimation, the reduction of GHG emissions is essential for the protection and preservation of the marine environment. As discussed above,⁶² the small numbers of direct or implicit references to the oceans in international climate change instruments stands in stark contrast to the role they actually play in addressing climate change.
45. Be that as it may, there can be no doubts that the reference to *forests* is meant to be merely illustrative. The word “including” in Article 5(1) of the Paris Agreement warrants no other reasonable interpretation. Even if this were not the case, however, there is a direct reference to Article 4(1)(d) of the UNFCCC, the scope of which explicitly includes the oceans. Therefore, it would be arbitrary and inappropriate to exclude the oceans from the scope of the international obligation of Article 5(1) of the Paris Agreement.
46. *Finally*, the Paris Agreement emphasizes the need to ensure the integrity of ecosystems, including oceans, and the protection of biodiversity.⁶³ Accordingly, the legal weight of this reference appears to be merely contextual⁶⁴ and tied to international obligations under other international treaties. That is, the obligation to ensure ecosystem integrity and biodiversity protection does not flow directly from the Paris Agreement. However, the inclusion of this recital provides valuable

⁶⁰ See, Article 5(2) of the Paris Agreement.

⁶¹ See, recital 13 of the preamble of the Paris Agreement.

⁶² See, Section II above.

⁶³ See, Recital No. 13 of the Preamble to the Paris Agreement. Studies show that ecosystem integrity and biodiversity protection will come under increasing pressure and potential exploitation of marine species will be impacted if the goals enshrined in Article 2(1)(a) of the Paris Agreement are not met. See, J. P. Gattuso et al., *Contrasting futures for ocean and society from different anthropogenic CO₂ emissions scenarios*, Science 349, aac4722 (2015).

⁶⁴ See, Article 31(2) of the VCLT.

context for interpreting the Paris Agreement and for defining its place and priorities in the international legal order.

(3) *The OSPAR Convention*

47. As noted above,⁶⁵ State Parties to UNCLOS may also conclude binding regional instruments in furtherance of the general principles of UNCLOS.⁶⁶ References to regional instruments may risk fragmentation when interpreting a truly universal instrument such as UNCLOS. This alone should be a reason for caution, even though the risk of fragmentation exists in any legal system. In the case of UNCLOS, however, consideration of regional instruments is essential. *First*, several provisions of UNCLOS itself direct State Parties to establish global and regional rules, standards, and recommended practices and procedures to prevent, reduce, and control pollution of the marine environment.⁶⁷ *Second*, there is no evidence that regional cooperation has hindered the integrity and universal character of UNCLOS.⁶⁸
48. The OSPAR Convention is one such regional instrument,⁶⁹ the territorial scope of which covers the North-East Atlantic.⁷⁰ For the purpose of answering the question in the Request, it recognizes several important conceptual ideas and objectives. *First*, that the marine environment and the fauna and flora which it supports are of vital importance to all nations.⁷¹ *Second*, that concerted action at national, regional, and global levels is essential to prevent and eliminate marine pollution.⁷² *Third*, more importantly, it recognises that

⁶⁵ See, Subsection III(A) above.

⁶⁶ See, Article 237(1) of UNCLOS.

⁶⁷ See, Articles 207(3) and 212(3) of UNCLOS.

⁶⁸ Alan Boyle, *ob. cit.*, p. 575.

⁶⁹ The contracting parties to the OSPAR Convention are Belgium, Denmark, Finland, France, the European Union, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom. It replaced the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft [(Oslo, February 15, 1972), 932 UNTS 3] and the Convention for the Prevention of Marine Pollution from Land-based Sources [(Paris, June 4, 1974), 1546 UNTS 103]. However, decisions, recommendations and all other agreements adopted under the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft or the Convention for the Prevention of Marine Pollution from Land-based Sources shall continue to be applicable, unaltered in their legal nature, to the extent that they are compatible with, or not explicitly terminated by, the Convention, any decisions or, in the case of existing recommendations, any recommendations adopted thereunder [see, Article 31(2) of the OSPAR Convention].

⁷⁰ See, with respect to the maritime area covered by the OSPAR Convention, Article 1(a) of the OSPAR Convention.

⁷¹ See, Recital No. 1 of the Preamble to the OSPAR Convention.

⁷² See, Recitals No. 2, 7 and 8 of the Preamble to the OSPAR Convention. The definition of the term *pollution* can be found in Article 1(d) of the OSPAR Convention.

it may be desirable to adopt, on the regional level, more stringent measures with respect to the prevention and elimination of pollution of the marine environment or with respect to the protection of the marine environment against the adverse effects of human activities than are provided for in international conventions or agreements with a global scope.

49. There is no question that the OSPAR Convention is in tandem with the objectives of UNCLOS with respect to the preservation and protection of the marine environment. In particular, State Parties to the OSPAR Convention have the general obligation to take

all possible steps to prevent and eliminate pollution and shall take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected.⁷³

To this end, they must adopt programs and measures that take full account of the use of the latest technological developments and practices to fully prevent and eliminate pollution.⁷⁴ In addition, State Parties to the OSPAR Convention are required to harmonize their policies and strategies.⁷⁵

50. On the question of the organization of the OSPAR Convention, it follows a simple structure similar to that of Part XII of UNCLOS. *First*, after establishing a general and overarching provision covering the entire subject matter of the OSPAR Convention,⁷⁶ other more specific legal regimes are established. These regimes vary depending on the sources of pollution.⁷⁷ Accordingly, there are special regimes on (i) pollution from land-based sources;⁷⁸ (ii) pollution by dumping or incineration;⁷⁹ (iii) pollution from offshore sources;⁸⁰ (iv) transboundary pollution;⁸¹ and (v) pollution from other sources.⁸² Each of these provisions impose several obligations of conduct on the State Parties to the OSPAR Convention.
51. *Second*, it establishes several obligations of result, primarily related to assessing the quality of the marine environment.⁸³ Specifically, State Parties to the OSPAR Convention must (i) periodically undertake and publish joint assessments of the quality status of the marine environment and its

⁷³ See, Article 2(1)(a) of the OSPAR Convention.

⁷⁴ See, Articles 2(1)(b) and 2(3)(a) and (b) of the OSPAR Convention.

⁷⁵ See, Article 2(1)(b) of the OSPAR Convention.

⁷⁶ See, Article 2 of the OSPAR Convention.

⁷⁷ The OSPAR Convention does not provide a definition of the concept of *source*. To this end, Article 1(9) of the UNFCCC is particularly useful. It defines the concept as “any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.”

⁷⁸ See, Article 3 of, and Annex I to, the OSPAR Convention.

⁷⁹ See, Article 4 of, and Annex II to, the OSPAR Convention.

⁸⁰ See, Article 5 of, and Annex III to, the OSPAR Convention.

⁸¹ See, Article 21 of the OSPAR Convention.

⁸² See, Article 7 of the OSPAR Convention.

⁸³ See, Article 6 of, and Annex IV to, the OSPAR Convention.

development;⁸⁴ and (ii) include in these assessments an evaluation of the effectiveness of the measures taken and planned to protect the marine environment and the identification of priorities for action.⁸⁵

52. *Third*, there are other general obligations of conduct. The most important is the one concerning access to information. Specifically, State Parties to the OSPAR Convention are required to ensure that their authorities make available information on (i) the state of the maritime area; (ii) activities or measures adversely affecting or likely to affect it; and (iii) on activities or measures introduced in accordance with the OSPAR Convention.⁸⁶
53. *Finally*, in the context of the OSPAR Convention, the Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2030 (hereinafter referred to as the “**OSPAR Strategy**”)⁸⁷ should be taken into account. The OSPAR Strategy shares the common vision of “[...] a clean, healthy and biologically diverse North-East Atlantic Ocean, which is productive, used sustainably and resilient to climate change and ocean acidification.”⁸⁸ To this end, integrating climate change policies in the North-East Atlantic is a mandatory.
54. *First*, State Parties to the OSPAR Convention follow the ecosystem approach. As explained in the OSPAR Strategy, this approach is explained as follows:

This is the comprehensive integrated management of human activities based on the best available scientific knowledge of the ecosystem and its dynamics, in order to identify and take action on drivers, activities and pressures that adversely affect the health of marine ecosystems. The ecosystem approach thereby achieves the sustainable use of ecosystem goods and services and the maintenance of ecosystem integrity. The ecosystem approach takes into consideration cumulative effects and is implemented through a continuous cycle of (i) setting and coordinating ecological objectives and associated targets and indicators, (ii) ongoing management and (iii) regular updates of ecosystem knowledge, research and advice. Monitoring, assessment and adaptive management are essential elements for implementing the ecosystem approach.

55. This approach also means that State Parties to the OSPAR Convention apply *inter alia* (i) the precautionary principle; (ii) the use of best available techniques and best environmental practices, including, where appropriate, clean technology; (iii) the principle that preventive action

⁸⁴ See, Article 6(a) of the OSPAR Convention.

⁸⁵ See, Article 6(b) of the OSPAR Convention.

⁸⁶ See, Article 9(1) and (2) of the OSPAR Convention.

⁸⁷ Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2030, Agreement 2021-02e, OSPAR 21/13/1, Annex 22, available at <https://www.ospar.org/documents?d=46382> (accessed on June 12, 2023).

⁸⁸ *Ibid.*, p. 3.

should be taken; (iv) the principle that priority is given to environmental damage being rectified at source.

56. *Second*, the OSPAR Strategy notes that climate change is causing adverse and possibly irreversible effects to the ocean. It reads in relevant part as follows:

Climate change is also causing fundamental and possibly irreversible changes to the ocean. These changes include warming of the sea, rising sea levels and loss of oxygen. Increased levels of carbon dioxide are also causing the ocean to become more acidic. All these changes are severely impacting on the species and habitats that share our seas, with significant risks for productivity and the long-term viability of ecosystems.

57. *Third*, the OSPAR Strategy sets out a number of strategic objectives. For the purpose of addressing climate change, Strategic Objectives No. 2, 3, 5, 6, 10, 11, and 12 are of paramount importance for the issue of climate change. They encompass many different issues, including (i) preventing pollution by hazardous substances; (ii) protecting and conserving marine biodiversity and ecosystems; (iii) restoring degraded habitats to safeguard their ecosystem function and resilience to climate change; (iv) raising awareness of climate change and ocean acidification; (v) facilitating adaptation to the effects of climate change and ocean acidification; and (vi) mitigating the adverse effects of climate change, including by safeguarding the role of the marine environment as a natural carbon store.⁸⁹ *Finally*, for each of the above Strategic Objectives, the State Parties to the OSPAR Convention have agreed upon a number of operational objectives. Accordingly, Strategic Objectives No. 2, 5, 6, 10, 11, and 12 translate into a total number of 27 operational objectives.⁹⁰

58. The last three subsections aimed to provide an overview of the evolution of the international environmental law and climate change law landscape. This preliminary step is essential to lay the ground for the later consideration of how the UNFCCC, the Paris Agreement, and the OSPAR Convention play a role in determining the obligations of State Parties to UNCLOS under Part XII of UNCLOS.
59. At this stage, it is clear that answering the questions posed in the Request requires a consistent and coherent interpretation of the provisions of UNCLOS in light of international environmental

⁸⁹ Ibid., pp. 3-5.

⁹⁰ Ibid., pp. 9-14.

and climate change law. This is a feature that necessarily accompanies the openness and flexibility of UNCLOS. Based on the foregoing, the following subsections identify and address each of these provisions, namely (i) Articles 192 and 194 of UNCLOS [**Subsection B(1)**]; (ii) Article 194 of UNCLOS dealing with pollution from any source [**Subsection B(2)**]; (iii) Article 207 of UNCLOS dealing with pollution from land-based sources [**Subsection B(3)**]; and (iv) Article 212 of UNCLOS dealing with pollution from or through the atmosphere [**Subsection B(4)**].

B. *The obligations to preserve and protect the marine environment under UNCLOS*

(1) *Articles 192 of UNCLOS*

60. As noted above, there are two main overarching provisions with respect to the preservation and protection of the marine environment in UNCLOS: Articles 192 and 194. The former represents the primary and general obligation of Part XII of UNCLOS.⁹¹ In addition, it gives effect to the desire expressed in the preamble to UNCLOS to protect and preserve the marine environment.⁹²
61. A reading of Article 192 of UNCLOS—together with other international rules—raises an important question with respect to the nature of the obligations it establishes.⁹³ The arbitral tribunal in the *South China Sea Arbitration* touched upon this issue. It clarified that the obligation in Article 192 of UNCLOS encompasses both negative and positive obligations.⁹⁴ In particular, it noted that

[t]his “general obligation” extends both to “protection” of the marine environment from future damage and “preservation” in the sense of maintaining or improving its present condition. Article 192 thus entails the positive obligation to take active measures to protect and preserve

⁹¹ It should be noted, however, that Article 192 of UNCLOS does not specify the type of harm from which Parties must protect and preserve the marine environment. In the absence of such a specification, the only interpretation that is consistent with the objective and principles of UNCLOS implies consideration of all types of harm, including harm caused by climate change, such as ocean warming, sea level rise, and ocean acidification. All of these are caused by GHG emissions into the atmosphere.

⁹² Recital No. 4 of the Preamble to UNCLOS reads as follows:

Recognizing the desirability of establishing through this Convention, with due regard for the sovereignty of all States, a legal order for the seas and oceans which [...] will promote [...] the study, protection and preservation of the marine environment.

⁹³ Another question concerns the meaning of marine environment. UNCLOS does not define it. It is uncontroversial, however, that the term includes (i) living resources; (ii) marine life; and (iii) rare and fragile ecosystems. See, on this issue, Myron H. Nordquist, *United Nations Convention on the Law of the Sea 1982. A Commentary*, Martinus Nijhoff Publishers (London, 1991), Center for Oceans Law and Policy, University of Virginia, Volume IV, pp. 42-43.

⁹⁴ See, expressing a similar understanding, Myron H. Nordquist, Myron H. Nordquist, *ob. cit.*, pp. 39-40.

the marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment.⁹⁵

62. In this framework, there should be no doubt that the general obligation to protect and preserve the marine environment necessarily includes positive and negative obligations of conduct. ITLOS further confirmed this understanding in *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (Request for Advisory Opinion submitted to the Tribunal)* as follows:

As article 192 applies to all maritime areas, including those encompassed by exclusive economic zones, the flag State is under an obligation *to ensure compliance* by vessels flying its flag with the relevant conservation measures concerning living resources enacted by the coastal State for its exclusive economic zone because, as concluded by the Tribunal, they constitute an integral element in the protection and preservation of the marine environment.⁹⁶

The flag State has the obligation to take necessary measures, including those of enforcement, *to ensure compliance* by vessels flying its flag with the laws and regulations enacted by the SRFC Member States concerning marine living resources within their exclusive economic zones for purposes of conservation and management of these resources.⁹⁷

63. In this case, the obligation arising from Article 192 is interpreted as an obligation *to ensure compliance*. As to the meaning of this phrase, the Seabed Disputes Chamber provided valuable guidance in *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area*. In particular, it noted that

The sponsoring State's obligation "to ensure" is not an obligation to achieve, in each and every case, the result that the sponsored contractor complies with the aforementioned obligations. Rather, it is an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result. To utilize the terminology current in international law, this obligation may be characterized as an obligation "of conduct" and not "of result", and as an obligation of "due diligence."⁹⁸

⁹⁵ *The Republic of the Philippines v. The People's Republic of China (South China Sea Arbitration)*, PCA Case No. 2013-19, Award, July 12, 2016, para. 941. In a similar line, Myron H. Nordquist, *ob. cit.*, p. 40.

⁹⁶ ITLOS Case No. 21, *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (Request for Advisory Opinion submitted to the Tribunal)*, Advisory Opinion of April 2, 2015, p. 37, para. 120 [our emphasis].

⁹⁷ *Ibid.*, p. 63 [our emphasis].

⁹⁸ ITLOS Case No. 17, *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area*, Advisory Opinion, April 2, 2015, pp. 40-41, paras. 108 and 110. There should be no question as to the differences between these two non-contentious cases. However, ITLOS noted as follows:

Although the relationship between sponsoring States and contractors is not entirely comparable to that existing between the flag State and vessels flying its flag which are engaged in fishing activities in the exclusive economic zone of the coastal State, the Tribunal holds the view that the clarifications provided by the Seabed Disputes Chamber regarding the meaning of the expression "responsibility to ensure" and the interrelationship between the notions of

64. The openness of UNCLOS to other applicable rules of international law and standards proves essential in determining what the obligations arising from Article 192 actually requires. Among these rules, the precautionary principle⁹⁹ and the mechanism of environmental impact assessment appear particularly relevant to the protection and preservation of the marine environment.¹⁰⁰ However, it is necessary to consider whether Article 192 goes beyond the customary law principle of prevention of environmental harm. More specifically, one should determine whether State Parties have other different obligations in nature and substance—and if so, what they are, what is their nature, and what they require of State Parties. This proves to be fundamental for thorough answers to the questions posed in the Request. For this purpose, the inherent flexibility of UNCLOS proves once again essential. It is on this basis that the above legal determinations should be made.¹⁰¹
65. In this regard, the legal regimes and objectives enshrined in the UNFCCC, the Paris Agreement, and the OSPAR Convention are of paramount importance,¹⁰² due to the threat of climate change

obligations “of due diligence” and obligations “of conduct” referred to in paragraph 129 are fully applicable in the present case.

ITLOS Case No. 21, *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (Request for Advisory Opinion submitted to the Tribunal)*, Advisory Opinion of April 2, 2015, p. 38, para. 125.

ITLOS has further clarified that the precise content of due diligence obligations depends on the circumstances of each case. Such variation depends *inter alia* on the level of risk associated with the activity in question and the capabilities of States.

⁹⁹ Under Article 196 of UNCLOS, the duty to avoid significant harm extends to the development and use of new technologies whose impact on the marine environment is not yet clear. See, in this context, Principle 15 of the 1992 Rio Declaration on Environment and Development. See also, Article 3 of the UNFCCC. For State parties to the OSPAR Convention, the precautionary principle is also a conventional principle. Article 2(2)(a) of the OSPAR Convention reads as follows:

[The Contracting Parties shall apply] the precautionary principle, by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects.

¹⁰⁰ See, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, *Judgment*, *I.C.J. Reports 2010*, p. 83, para. 204. General international law does not specify the scope and content of the environmental impact assessment. As a result, it should be carefully considered to which GHG-related activities the EIA requirement would apply specifically. In other words, whether this requirement is applicable to national policies or also to individual projects with GHG emissions—and if so at what threshold.

¹⁰¹ *The Republic of the Philippines v. The People’s Republic of China (South China Sea Arbitration)*, PCA Case No. 2013-19, Award, July 12, 2016, para. 941.

¹⁰² The Paris Agreement and the regular meetings of the UN Climate Change Conference reflect the most authoritative, recent, and dynamic expression of States’ understanding of their legal obligations with respect to climate change.

to the marine environment.¹⁰³ To this end, the legal regime resulting from the Paris Agreement and the tangible and measurable targets set forth in its Article 2(1)(a) provide valuable guidance. As noted above,¹⁰⁴ the Paris Agreement establishes a specific and innovative obligation in this provision. On the one hand, it is undoubtedly an obligation of result—at least in part.¹⁰⁵ However, the threshold it sets cannot be met by any one state or group of states alone. This feature makes compliance with the provision dependent on collective cooperation.

66. It is undeniable that the entry into force of the Paris Agreement—with its normative specificities, caveats, and innovations—changed the landscape of international climate change law. This paradigm shift resulted primarily from the introduction of clear and objective targets for the entire international community. That is, to hold the increase in global average temperature to well below 2° C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5° C above pre-industrial levels.¹⁰⁶
67. Prior to the entry into force of the Paris Agreement, such measurable targets did not exist for all State Parties.¹⁰⁷ This meant that they necessarily had greater discretion in meeting their obligations under Part XII of UNCLOS. Under the Paris Agreement, States are now collectively required to achieve certain agreed-upon goals, which they must actively consider and reflect in their national policies and priorities and the measures they adopt. In order to do so, they must go beyond mere due diligence obligations.¹⁰⁸ This also means that State Parties are no longer required to design these policies and priorities based on hypothetical scenarios. Rather, these targets reflect the upper limit above which scientific evidence indicates that the well-being of the marine environment and ecosystems is at complete risk. It is on this basis that the discretion of State Parties enjoyed under Article 192 of UNCLOS is now more limited and must be legally assessed.¹⁰⁹

¹⁰³ See, Section III[A(2)] above.

¹⁰⁴ See, Subsection III(7) above.

¹⁰⁵ See, Subsection III(7) above.

¹⁰⁶ See, fn.50 above.

¹⁰⁷ Before the Paris Agreement came into force, only the States listed in Annex B of the Kyoto Protocol had to comply with caps on their GHG emissions and committed to reduction targets.

¹⁰⁸ See, on the meaning of due diligence obligation, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, *I.C.J. Reports 2010*, p. 69, para. 197. See also, ITLOS Case No. 17, *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area*, Advisory Opinion, April 2, 2015, p. 43, para. 117.

¹⁰⁹ See, on the degree of discretion that State parties enjoy, the reasoning of, and the criteria used by, the Dutch Supreme Court in *Urgenda Foundation v. The State of the Netherlands* [ECLI:NL:GHDHA:2018:2610, Ruling of October 9,

68. Finally, the OSPAR Convention is an essential piece of the puzzle for the reasons stated above. Unlike the Paris Agreement, the OSPAR Convention does not set tangible or measurable targets. However, it can provide valuable guidance to State Parties to UNCLOS in identifying relevant policies and measures to preserve and protect the environment. In addition to the OSPAR Convention itself, the OSPAR Strategy contains a number of strategic and operational objectives that are worth taking into consideration.

69. The general obligation of conduct contained in Article 192 of UNCLOS is further developed and translated into other, more specific provisions in Part XII of UNCLOS.¹¹⁰ This is the case of Article 194, 207, and 212. An analysis of their legal regimes can be found below.¹¹¹ However, there is a common element in each of these provisions, namely the concept of pollution. The difference lies in the sources of that pollution they consider—from any source, from land, or from or through the atmosphere. So, we need to define what the term marine pollution actually means before we get into the specific legal provisions.

70. Article 1(1)(4) of UNCLOS is essential to understanding this issue. It reads as follows:

“pollution of the marine environment” means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

71. For the purposes of answering the questions posed in the Request, the issue is whether GHG emissions meet the requirements provided in this definition. More specifically, whether they constitute a substance or energy that, when introduced into the marine environment, has or may

2018, unofficial translation, pp. 13-15 and 18, paras. 46-53 and 71]. It should be noted that, in the legal analysis and assessment carried out, Articles 2 and 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms served as the main source for the obligations of the Dutch State. That is, they were not carried out within the framework of UNCLOS. In any case, on the issue of discretion of the Dutch State, the Dutch Supreme Court concluded in relevant part that:

[...] up till now the State has done too little to prevent a dangerous climate change and is doing too little to catch up, or at least in the short term (up to end-2020). Targets for 2030 and beyond do not take away from the fact that a dangerous situation is imminent, which requires interventions being taken now.

¹¹⁰ See, for a detailed analysis of Articles 207 and 212 of UNCLOS, Subsections

¹¹¹ See, Subsections B(2), B(3), and B(4).

have adverse impacts.¹¹² For illustrative purposes, the definition identifies several situations that reflect these effects, namely (i) harm to living resources and marine life; (ii) danger to human health; (iii) interference with maritime activities, including fishing and other legitimate uses of the sea; (iv) degradation of the quality of seawater; and (v) degradation of amenities.

72. *First*, it should be noted that this definition expressly includes anthropogenic substances or energy that have been *indirectly* introduced into the marine environment. This is helpful in dispelling any doubts as to whether substances or energy produced on land and first released into the atmosphere are included in the definition. *Second*, there is ample evidence that climate change and anthropogenic GHG emissions go hand in hand, and that there is a causal link between them and harmful effects on the marine environment. Among others, anthropogenic GHG emissions contribute to ocean warming and acidification on a scale harmful to humanity.¹¹³ These, in turn, are harmful to living resources and marine life and dangerous to human health, interfere with maritime activities, and contribute to the degradation of the quality of seawater and amenities.
73. Based on the foregoing, it is now necessary to determine what obligations State Parties to UNCLOS have under Articles 194, 207, and 212. This is the subject-matter of the following subsections.

(2) *Article 194 of UNCLOS*

74. As noted above,¹¹⁴ the first question of the Request reflects, in part, the language used in Article 194(1) of UNCLOS. Its analysis is therefore essential. This provision establishes that State Parties to UNCLOS must take, individually or jointly as appropriate,

all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.¹¹⁵

75. The wording is similarly broad compared to Article 192 of UNCLOS. On the one hand, it does not contain quantifiable targets and leaves a wide margin of discretion to State Parties to find and implement the best ways and means to meet these targets. On the other hand, measures taken by

¹¹² The definition further includes

¹¹³ See, Section II above.

¹¹⁴ See, Section I above.

¹¹⁵ See, Article 194(1) of UNCLOS.

States Parties must aim to prevent, reduce and control pollution of the marine environment *from all sources*. To this end, Article 194(3) of UNCLOS provides an illustrative list of sources of pollution in respect of which it is essential that States Parties take measures to minimize their impact *to the fullest possible extent*.

76. This is, however, just an illustrative list. Accordingly, considering the close link between anthropogenic GHG emissions, climate change, and the well-being of the marine environment, Article 194(1) of UNCLOS also imposes an obligation to States Parties to prevent, reduce and control anthropogenic GHG emissions from all sources.¹¹⁶ In this context, State Parties must pay special care for rare or fragile ecosystems as well as the habitat of depleted, threatened, or endangered species and other forms of marine life.¹¹⁷
77. This general and broad legal framework further translates into other, more specific obligations. These in turn require States Parties to ensure that (i) activities under their jurisdiction or control are so conducted in a manner that does not cause pollution to other States and their environment; (ii) pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas in which they exercise sovereign rights in accordance with this Convention.¹¹⁸ Interestingly, this formulation is also used in the UNFCCC.¹¹⁹
78. Similarly, determining what these obligations actually imply for the State Parties requires an integrative and complementary interpretation of the legal provisions in question, especially Article 194(1), (3), and (5) of UNCLOS. This task must again be carried out in light of the UNFCCC, the Paris Agreement, and the OSPAR Convention. The validity of any interpretative outcome depends, of course, on its being consistent with the objectives and purposes of UNCLOS.¹²⁰
79. The tangible and measurable targets set out in Article 2(1)(a) of the Paris Agreement are as important as they are for Article 192 of UNCLOS. They reduce the margin of discretion that State Parties enjoy under Article 194(1) of UNCLOS in preventing, reducing, and controlling the

¹¹⁶ See, Article 194(1) of UNCLOS. In doing so, they must use the best practicable means available to them and in accordance with their capabilities and strive to harmonize their policies in this regard.

¹¹⁷ See, Article 194(5) of UNCLOS.

¹¹⁸ See, Article 194(2) of UNCLOS.

¹¹⁹ See, Recital No. 8 of the Preamble to the UNFCCC.

¹²⁰ See, for example, Article 194(4) of UNCLOS. In carrying out their obligations under Articles 192 and 194, “[...] States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention.” As noted above, Article 237 and 311 of UNCLOS further confirm the need for compatibility between interpretive outcomes based on other international law rules and UNCLOS.

pollution of the marine environment from any source. The collective nature of the obligation contained in Article 2(1)(a) is not enough to negate this conclusion.

80. *Finally*, the more detailed obligations resulting from the OSPAR Convention. As discussed above,¹²¹ this regional international instrument aims to protect the marine environment from pollution from a variety of sources, including land-based pollution, dumping or incineration, offshore resources. Each of these provisions is relevant to fulfilling the general obligation under Article 194 of UNCLOS, in addition to the strategic and operational obligations included in the OSPAR Strategy dealing with pollution and its effects.¹²²

(3) *Article 207 of UNCLOS*

81. Article 207 of UNCLOS is part of Section 5 of Part XII of UNCLOS, which deals with international rules and national legislation to prevent, reduce, and control pollution of the marine environment. It aims to complement and supplement Article 194 of UNCLOS. For the purpose of answering the questions in the Request, Article 207(1), (2) and (4) of UNCLOS are particularly relevant. They read as follows:

1. States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.
2. States shall take other measures as may be necessary to prevent, reduce and control such pollution. [...]
4. Laws, regulations, measures, rules, standards and recommended practices and procedures referred to in paragraphs 1, 2 and 4 shall include those designed to minimize, to the fullest extent possible, the release of toxic, harmful or noxious substances, especially those which are persistent, into the marine environment.

82. The interpretation of these provisions raises several questions about their scope, nature, and purpose. *First*, the scope of these provisions is more specific in that they apply only to pollution from land-based sources. In other words, they each aim to reflect more accurately the broader obligations of Articles 192 and 194 of UNCLOS. *Second*, Article 207 contains several obligations of conduct that require States Parties to adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources. *Third*, the design and

¹²¹ See, Subsection II[A(3)].

¹²² See, Strategic Objectives No. 2 and 3 and their respective operational objectives.

implementation of such laws and regulations must take into account internationally agreed rules, standards, and recommended practices and procedures.

83. The last part of Article 207(1) consists of a rule of reference that explicitly instructs State Parties to take into account other international rules.¹²³ The justification for taking the broader international legal framework into account in interpretation is not done implicitly or through a general rule of reference. This is an alternative technique to that used in interpreting Articles 192 and 194 of UNCLOS. In other words, the relevance of the UNFCCC, the Paris Agreement, and the OSPAR Convention derives directly from Article 207(1) of UNCLOS.
84. However, the impact of these international instruments remains one and the same. *First*, the Paris Agreement reduces the degree of discretion that States Parties have under Article 207 of UNCLOS. That is, the collective objective of the Paris Agreement is now a fundamental piece of the puzzle in ensuring that land-based pollution does not produce global temperature increases that the Paris Agreement seeks to prevent. Law and regulations to prevent, reduce, and control pollution of the marine environment from land-based sources must be directed toward this goal and be entirely enforced.¹²⁴ As a result, laws and regulations that blatantly hinder or disregard the objective of the Paris Agreement may amount to a violation of Article 207 of UNCLOS. The same applies to the full failure to enact laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources.¹²⁵
85. *Finally*, the OSPAR Convention is equally relevant in this respect, particularly Article 3 of, and Annex I to, the OSPAR Convention. These provisions are fully in line with the objectives and

¹²³ Article 207(3) of UNCLOS goes so far as to require States Parties

[to] endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment from land-based sources, taking into account characteristic regional features, the economic capacity of developing States and their need for economic development.

This is evidence that UNCLOS is not only open to outside influence, but that it directs State parties to supplement its legal framework through global and regional rules, standards and recommended practices and procedures. Moreover, State parties to UNCLOS have the obligation to adopt laws and regulations and take other measures necessary to implement applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the marine environment from land-based sources [e.g., Article 213 of UNCLOS]. There is an equivalent provision in Article 212(3) and 222 of UNCLOS, which deals with pollution from and through the atmosphere. See also, Article 197 of UNCLOS.

¹²⁴ See, Article 213 of UNCLOS.

¹²⁵ The validity of this interpretation is independent of the question of whether compliance with the Paris Agreement is being warranted through UNCLOS. Rather, the question is whether the collective obligation of the Paris Agreement is legally relevant to determine the obligations of States parties to UNCLOS under UNCLOS.

purposes of UNCLOS. As noted above,¹²⁶ they deal specifically with pollution from land-based sources. In this regard, it is similarly relevant to consider the strategic and operational obligations included in the OSPAR Strategy dealing with pollution and its effects.¹²⁷

(4) *Article 212 of UNCLOS*

86. Article 212 of UNCLOS is also part of Section 5 of Part XII of UNCLOS. It aims to complete the obligation arising from Article 194(3)(a) of UNCLOS. Its nature, *ratione loci*,¹²⁸ and purpose are similar to those of Article 207 of UNCLOS. The scope differs in that it relates to pollution from or through the atmosphere. Article 207(1) reads as follows:

States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere, applicable to the air space under their sovereignty and to vessels flying their flag or vessels or aircraft of their registry, taking into account internationally agreed rules, standards and recommended practices and procedures and the safety of air navigation.

87. This clear similarity means that the interpretation of Article 212 does not raise new questions.¹²⁹ Accordingly, Article 212(1) of UNCLOS also requires State Parties to UNCLOS to adopt laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere. It is clear from the wording of the provision that it refers specifically to laws and regulations applicable to the airspace under their sovereignty and to vessels flying their flag or vessels or aircraft of their registry. In developing such laws and regulations, State Parties to UNCLOS must take into account internationally agreed rules, standards and recommended practices and procedures and the safety of air navigation.¹³⁰
88. Once again, the Paris Agreement plays an important role in reducing the degree of discretion of the Parties. As noted earlier, it has set a collective target for holding the increase in global average temperature. This target must guide the Parties in fulfilling their obligation under Article 212(1) of UNCLOS. That is, the laws and regulations adopted under this provision must be ambitious enough to achieve this goal. Failure to do so—either through outright omission or inadequacy to

¹²⁶ See, Subsection III(14) above.

¹²⁷ See, Strategic Objectives No. 2 and 3 and their respective operational objectives.

¹²⁸ The land territory, internal waters, and territorial waters, as well as the airspace above these areas

¹²⁹ The only exception would be the issue of a possible overlap with Article 207 of UNCLOS. After all, some land-based pollution does reach the oceans through the atmosphere. However, in cases where there is an apparent overlap, the obligations arising from these provisions are identical. As a result, compliance with them would require the application of the same conduct by State parties to UNCLOS.

¹³⁰ See, fn.123 above. See also, Article 222 of UNCLOS.

meet that target—or to comply with such laws and regulations when they exist amounts to a violation of Article 212(1) of UNCLOS.¹³¹

89. *Finally*, the OSPAR Convention can also provide State Parties to UNCLOS valuable guidance on the obligations contained in Article 212(1) of UNCLOS. Similar to Article 207(1) of UNCLOS, the strategic and operational obligations of the OSPAR Strategy dealing with pollution and its effects are particularly relevant.

IV. CONCLUDING OBSERVATIONS

90. Unlike at the time of the UNCLOS negotiations, the nexus between the ocean and climate is now well established from a scientific point of view. On the one hand, the fight against climate change is inextricably linked to preserving the well-being of the ocean. On the other hand, all efforts to combat global warming will be ineffective if the effects of climate change on the oceans and their influence on climate change are neglected.
91. As a living treaty, UNCLOS is subject to evolutionary interpretation. This is fundamental for the purposes of having a comprehensive and up-to-date legal regime for the oceans. Therefore, other international legal instruments and regimes have to be taken into account when interpreting UNCLOS, particularly international environmental and climate change rules. To this end, the UNFCCC, the Paris Agreement, and the OSPAR Convention are three of the most relevant international instruments.
92. Part XII of UNCLOS addresses the protection and preservation of the marine environment. The answers to the questions posed in the Request are closely linked to the obligations arising from the provisions of this Part. The structure of Part XII of UNCLOS resembles an inverted pyramid. At the lowest level, Article 192 of UNCLOS establishes the overarching and general obligation that informs the entire Part XII. At a second level is Article 194 of UNCLOS, among other provisions. Article 194 focuses on the obligation of State Parties to adopt measures to prevent, reduce and control pollution of the marine environment. In this case, the scope of the provision is broad enough to include any source of pollution of the marine environment. At the third level, there are many other provisions that seek to develop the provisions of the previous

¹³¹ See, Article 222 of UNCLOS.

levels, including Articles 192 and 194. These written observations focus also on Articles 207, 212, 213, and 222 of UNCLOS.

93. All in all, the interpretation of these provisions justifies the conclusion that UNCLOS lays down obligations to (i) protect and preserve the marine environment; and (ii) prevent, reduce and control pollution in the marine environment, in view of the deleterious effects of climate change caused by anthropogenic GHG emissions. For this purpose, the Paris Agreement lowers the threshold and the level of discretion that States Parties have under Part XII of UNCLOS. This is true even if the Paris Agreement does not go beyond imposing a collective obligation of result on the Parties. The Paris Agreement should be considered as a minimum standard for compliance with Part XII of UNCLOS as concerns the deleterious effects of climate change, without imposing more stringent obligations than those agreed thereunder.
94. Moreover, these legal regimes interpreted together require States Parties—acting individually and in the context of international cooperation— to endeavour do everything in their power, in accordance with the principle of common but differentiated responsibilities, to (i) address the adverse impacts of climate change; and (ii) preserve and protect the marine environment, particularly taking into account the abovementioned nexus between the ocean and the climate system. In this regard, the Portuguese Republic—as a member of the European Union and in its national capacity—has adopted an ambitious approach to combating climate change, including not only by complying with Articles 192, 194, 207, 212, 213 and 222 of UNCLOS, but also by adopting higher standards than those required by UNCLOS.

Berlin, June 16, 2023

ON BEHALF OF THE PORTUGUESE REPUBLIC



Ambassador Francisco Ribeiro de Menezes