2025 Annual Grotius Lecture

British Institute of International and Comparative Law

The Advisory Opinion of ITLOS on Climate Change: A Landmark Decision

27 March 2025

H.E. Judge Tomas Heidar

President of the International Tribunal for the Law of the Sea

Excellencies, distinguished guests,

It is a great pleasure to address you today. I wish to thank the British Institute of International and Comparative Law and Ms Kristin Hausler for convening this exceptional event and for inviting me to discuss the key features and findings of the Advisory Opinion on Climate Change, which was delivered by the International Tribunal for the Law of the Sea ("the Tribunal") on 21 May of last year.

The Advisory Opinion, which was rendered at the request of the Commission of Small Island States on Climate Change and International Law ("COSIS"), has been hailed as a landmark development in international law. Notably, it is the first time that an international court or tribunal has issued an advisory opinion addressing States Parties' obligations to combat climate change under the United Nations Convention on the Law of the Sea ("the Convention"). In so doing, the Tribunal was afforded an opportunity to shed light on crucial legal issues concerning the nexus between the

ocean and climate change, a phenomenon which has aptly been described by the United Nations General Assembly as “one of the greatest challenges of our time”.[1]

Over the course of my lecture, I will explore the key features of the Advisory Opinion and its core legal findings. First, I will discuss the central role of science in the Advisory Opinion and how it is interwoven with the legal reasoning of the Tribunal. Following that, I will demonstrate how the Advisory Opinion reaffirms the continued relevance of the Convention in the face of contemporary challenges to the law of the sea, with reference to the Tribunal’s finding that anthropogenic greenhouse gas emissions (“GHG emissions”) constitute pollution of the marine environment under the Convention. Third, I will examine how the Tribunal interpreted the Convention in relation to other relevant rules of international law, including the United Nations Framework Convention on Climate Change (“UNFCCC”) and the Paris Agreement. Finally, I will take a closer look at the specific obligations incumbent on States Parties to the Convention, as set out in the Advisory Opinion, including the legal nature of these obligations.

Before discussing the Tribunal’s findings, it bears recalling the procedural history of the case. In a meeting which took place on 26 August 2022, COSIS decided to refer the two legal questions to the Tribunal for an advisory opinion.

The first question was formulated as follows:

> What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea ([…]), 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?

The second question read as follows:

[1] See United Nations General Assembly, A/RES/67/210 of 21 December 2012.

> What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea ([…]), including under Part XII:
> (b) to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?

By letter dated 12 December 2022, the Co-Chairs of COSIS, H.E. Mr Gaston Browne, Prime Minister of Antigua and Barbuda, and H.E. Mr Kausea Natano, Prime Minister of Tuvalu, transmitted the request for an advisory opinion to the Tribunal. The request was filed with the Registry of the Tribunal on that same day and entered into the List of cases as Case No. 31. In these proceedings, 31 States Parties and eight intergovernmental organizations filed written statements within the time-limit fixed by the President of the Tribunal. After the expiry of this time-limit, further written statements were received from three States Parties and one intergovernmental organization. With regard to the oral proceedings, a public hearing was held from 11 to 25 September 2023, during which delegations from 33 States Parties and four intergovernmental organizations made oral statements.

It is worth underscoring that States Parties from all five regional groups of the United Nations submitted written observation and/or took part in the hearing. This broad participation and widespread interest in the proceedings bear testimony to the importance of the legal issues that were brought before the Tribunal. Following deliberations, the Tribunal delivered its Advisory Opinion, which was adopted by unanimity, on 21 May 2024.

Having canvassed the procedural history of the proceedings, I would like to now draw your attention to the contents of the Advisory Opinion. It is noteworthy that the Tribunal, before responding to the questions submitted by COSIS, engaged in a detailed examination of the precise scope of the request that it had received. I wish to highlight several observations made by the Tribunal in this respect. Firstly, the Tribunal was mindful that it was requested to render an advisory opinion on the specific obligations of States Parties under the Convention. In order to identify these obligations and clarify their content, it found that it would have to interpret the

Convention and, in doing so, also take into account external rules, as appropriate.[2] Secondly, the request was found to be limited to primary obligations of States Parties. However, the Tribunal explained that, to the extent necessary to clarify the scope and nature of primary obligations, it might have to refer to responsibility and liability.[3] Thirdly, although the request mentions sea level rise in both questions, the Tribunal reached the conclusion that the relationship between sea level rise and existing maritime claims or entitlements was not included.[4] Fourthly, it found that the obligation to protect and preserve the marine environment, which is the focus of the second question, encompasses the obligation to prevent, reduce and control marine pollution, with which the first question is concerned.[5]

At present, I will turn to the first notable feature of the Advisory Opinion, as mentioned during my opening remarks, namely the close attention paid to the science of climate change and its relationship with the ocean. In fact, science may be said to form a leitmotif throughout the Advisory Opinion. Noting that "[t]he phenomenon of climate change is central to the Request and the questions contained therein necessarily have scientific aspects",[6] the Tribunal decided to devote an entire section of its Advisory Opinion to the scientific background of the case.[7] In this section, the Tribunal made ample use of the reports of the Intergovernmental Panel on Climate Change ("the IPCC"). Established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC is mandated to provide "internationally coordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies".[8] Reflecting its widely recognized scientific expertise, the Tribunal emphasized the authority of the IPCC reports, observing that most participants in the proceedings recognized these reports "as authoritative

[2] *Request for Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law, Advisory Opinion, 21 May 2024,* para. 142.
[3] *Ibid*., para. 148.
[4] *Ibid*., paras. 149-150.
[5] *Ibid*., para. 152.
[6] *Ibid*., para. 46.
[7] *Ibid*., para. 45.
[8] See United Nations General Assembly, A/RES/43/53 of 6 December 1988.

assessments of the scientific knowledge on climate change" and that "none of the participants challenged the authoritative value of these reports".[9]

Relying on the IPCC reports, the Tribunal proceeded to provide information on the oceanic uptake of CO_2 and the deleterious effects of anthropogenic GHG emissions on the ocean. Furthermore, in addressing the relevant IPCC reports, the Tribunal not only summarized their content, but also explained procedural and methodological matters, such as the process of review and endorsement by the IPCC member countries and the varying confidence levels used to indicate the assessed likelihood of an outcome or result.

By drawing upon the work of the IPCC, the Tribunal was able to place its legal analysis on sound scientific footing. The interconnected nature of law and science is particularly apparent in the Tribunal's treatment of obligations under the Convention requiring States Parties to take into account "the best available science". In this regard, reference may be made to the view expressed by the Tribunal that "[w]ith regard to climate change and ocean acidification, the best available science is found in the works of the IPCC which reflect the scientific consensus" and that "the assessments of the IPCC relating to climate-related risks and climate change mitigation deserve particular consideration."[10]

Having surveyed some key scientific facets of the case, let us now explore a second aspect of the Advisory Opinion, which is the reaffirmation of the continued relevance of the Convention in addressing contemporary challenges to the law of the sea. Designed with foresight, the Convention incorporates mechanisms and features that enable its provisions to adapt to scientific, economic, political, and environmental changes. As a result, the Convention, which was concluded over four decades ago, has managed to stand the test of time.

The general and open-ended terms found in many of the provisions of the Convention are among the features that give the Convention its "future-proof" quality.

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[9] *Request for Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law, Advisory Opinion, 21 May 2024,* para. 51.
[10] *Ibid*., para. 208.

Through the interpretation and application of these terms, international courts and tribunals may provide crucial clarifications and contribute to the development of the law of the sea. The Advisory Opinion on climate change offers an excellent illustration of this point. The questions submitted by COSIS refer to, *inter alia*, "climate change", "GHG emissions", and "ocean acidification". It may be noted that none of these concepts appear in the text of the Convention. Nonetheless, the Tribunal demonstrated that the absence of such terminology does not place these phenomena beyond the scope of the Convention.

This observation holds particularly true if we consider the Tribunal's interpretation of the notion of "pollution of the marine environment", as found in article 1, paragraph 1, subparagraph 4, of the Convention, and its application to anthropogenic GHGs. Allow me to read out this provision:

> For the purposes of this Convention … "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.

The Tribunal found that this definition consists of three cumulative criteria: first, there must be a substance or energy; second, this substance or energy must be introduced by humans, directly or indirectly, into the marine environment; and third, such introduction must result or be likely to result in deleterious effects.[11]

After noting that one of the forms of energy is thermal energy or heat and that GHGs are substances,[12] the Tribunal determined that the first criterion was met. It then proceeded to the second criterion. In considering how the word "introduction" should be applied in the present case, the Tribunal relied on the IPCC reports, finding that, "[a]ccording to the science", GHGs "are directly introduced by humans into the marine environment" and "humans indirectly introduce energy into the marine

[11] *Ibid*., para. 161.
[12] *Ibid*., paras. 163-164.

environment through anthropogenic GHG emissions".[13] On the basis of these findings, the Tribunal concluded that the second criterion was also satisfied.[14]

In the Tribunal's analysis of the third criterion of the definition, science yet again played a significant role. With reference to the effects of climate change as set out in the IPCC reports, the Tribunal stated that "climate change, including ocean warming and sea level rise, and ocean acidification … produce multiple deleterious effects on the marine environment and beyond."[15] It further observed that "adverse effects of climate change are recognized by international climate treaties."[16] Relying on these findings, the Tribunal reached the conclusion that the third criterion was also satisfied and, therefore, anthropogenic GHG emissions constitute pollution of the marine environment under the Convention.[17] Accordingly, the Advisory Opinion has brought climate change into the realm of the Convention, in particular with regard to its pollution-related provisions.

While the general and open-ended terms found in the Convention contribute significantly to its continued relevance in light of changing circumstances, there are other factors that help solidify the Convention's enduring pertinence. This leads us to a third prominent aspect of the Advisory Opinion: the Tribunal's approach to interpreting the Convention and the relationship between the Convention and external rules. The Tribunal explicitly acknowledged the significance of coordination and harmonization between the Convention and external rules, noting that this is essential "to clarify, and to inform the meaning of, the provisions of the Convention and to ensure that the Convention serves as a living instrument."[18] The relationship between the provisions of Part XII of the Convention, entitled "Protection and Preservation of the Marine Environment", and external rules was found to be of particular relevance in this case.

[13] *Ibid*., para. 172.
[14] *Ibid*., para. 173.
[15] *Ibid*., para. 175.
[16] *Ibid*., para. 175.
[17] *Ibid*., paras. 178-179.
[18] *Ibid*., para. 130.

In this regard, the Tribunal offered useful clarifications by clearly categorizing three distinct mechanisms through which a relationship between the provisions of Part XII of the Convention and external rules is formed. These mechanisms are the rules of reference contained in Part XII of the Convention, article 237 of the Convention, and the method of interpretation, as reflected in article 31, paragraph 3(c), of the Vienna Convention on the Law of Treaties ("the Vienna Convention"), requiring that account be taken, together with the context, of any relevant rules of international law applicable in the relations between the parties.

The Tribunal also went beyond mere categorization by either illuminating the rationale underlying these mechanisms or explaining their scope. Accordingly, it described article 237 of the Convention, which clarifies the relationship between Part XII of the Convention and other treaties relating to the protection and preservation of the marine environment, as "reflect[ing] the need for consistency and mutual supportiveness between the applicable rules."[19] Furthermore, the Tribunal noted that the rules of reference, contained in Part XII of UNCLOS, and article 237 "demonstrate the openness of Part XII to other treaty regimes."[20] With respect to the method of interpretation reflected in article 31, paragraph 3(c), of the Vienna Convention, the Tribunal specified that the term "any relevant rules of international law" includes both relevant rules of treaty law and customary law.

Following its explanation of the interpretation of the Convention and the relationship between the Convention and external rules, the Tribunal proceeded to identify external rules which may be deemed relevant in the present case. In particular, reference was made to the extensive treaty regime addressing climate change, including the UNFCCC and the Paris Agreement. It is also worth noting that an entire section of the Advisory Opinion covers the climate change treaty regime as part of the background of the case.

A prime example of how the relationship between the Convention and external rules operates in practice can be found in the Tribunal's assessment of the obligation

[19] *Ibid*., para. 133.
[20] *Ibid*., para. 134.

to take necessary measures under article 194, paragraph 1, of the Convention. It may be recalled that article 194 is the primary provision in the marine pollution regime set out in Part XII and provides for obligations to prevent, reduce and control marine pollution applicable to any source.[21]

Article 194, paragraph 1, of the Convention reads:

> States shall 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 that 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.

In order to assess what necessary measures must be taken under this provision, the Tribunal opined that relevant international rules and standards found in various climate-related treaties and instruments, in particular the UNFCCC and the Parties Agreement, serve as reference point.[22] The Tribunal noted, however, that there was a divergence of views among participants in the proceedings as to the relationship between the obligations under the Convention, on the one hand, and the obligations and commitments contained in the Paris Agreement, on the other.[23]

It was contented by some participants that the UNFCCC and the Paris Agreement are *lex specialis* in respect of the obligations of States Parties under the more general provisions of the Convention. In the same vein, several participants took the view that, as concerns obligations regarding the effect of climate change, the Convention does not by itself impose more stringent commitments than those laid down in the UNFCCC and the Paris Agreement.[24]

The Tribunal reached a different conclusion on this matter. I find it fitting to quote from a noteworthy passage of the Advisory Opinion, which underscores the

[21] *Ibid*., para. 193.
[22] *Ibid*., para. 214.
[23] *Ibid*., para. 219.
[24] *Ibid*., para. 220.

importance of the Convention as a distinct legal framework for addressing climate change impacts on the marine environment:

> The Tribunal does not consider that the obligation under article 194, paragraph 1, of the Convention would be satisfied simply by complying with the obligations and commitments under the Paris Agreement. The Convention and the Paris Agreement are separate agreements, with separate sets of obligations. While the Paris Agreement complements the Convention in relation to the obligation to regulate marine pollution from anthropogenic GHG emissions, the former does not supersede the latter. Article 194, paragraph 1, imposes upon States a legal obligation to take all necessary measures to prevent, reduce and control marine pollution from anthropogenic GHG emissions, including measures to reduce such emissions. If a State fails to comply with this obligation, international responsibility would be engaged for that State.[25]

Building on this analysis, I would now like to develop a fourth point, namely the Tribunal's findings with regard to the specific obligations of States Parties to the Convention. In responding to the first question submitted by COSIS, the Tribunal, after concluding that anthropogenic GHG emissions constitute pollution of the marine environment, found that the most crucial obligations lie in article 194 of the Convention, which is applicable to any source of marine pollution.

The focus of the Tribunal was the first two paragraphs of article 194 of the Convention. As I have just mentioned, article 194, paragraph 1, imposes upon States Parties an obligation to take all necessary measures to prevent, reduce and control marine pollution from any source, regardless of the specific sources of such pollution.[26] The Tribunal concluded that, under this provision, States Parties "have the specific obligations to take all necessary measures to prevent, reduce and control marine pollution from anthropogenic GHG emissions and to endeavour to harmonize their policies in this connection."[27] Those measures include, in particular, those to reduce GHG emissions.[28] Additionally, the Tribunal found that the nature of this

[25] *Ibid*., para. 223.
[26] *Ibid*., para. 197.
[27] *Ibid*., paras. 243 and 441(3)(b).
[28] *Ibid*., para. 441(3)(b).

obligation to take all necessary measures is one of due diligence, which is a matter that I will discuss later on in my lecture.

The obligation under article 194, paragraph 2, of the Convention in relation to anthropogenic GHG emissions was the next focus of the Tribunal. This provision sets out the obligation of States Parties in the situation of transboundary pollution.[29] As determined by the Tribunal, under this provision, States Parties have the specific obligation to "take all measures necessary to ensure that anthropogenic GHG emissions under their jurisdiction or control do not cause damage to other States and their environment, and that pollution from such emissions under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights."[30] Here too, the Tribunal found that it is an obligation of due diligence.

It was contented by some participants in the proceedings that GHG emissions are not activities of the kind to which article 194, paragraph 2, is directed. According to this view, given that GHG emissions from the territory of one State will contribute to the volume of emissions in the atmosphere for decades to come, this provision cannot sensibly be interpreted as requiring States to ensure that such emissions do not spread to the territory of another State or on to the high seas.[31] However, the Tribunal reached a different conclusion: since anthropogenic GHG emissions into the atmosphere fall under the definition of pollution of the marine environment, article 194 thus applies to such emissions. The Tribunal pointed out that, while it is acknowledged that it would be difficult to specify how such emissions from one State cause damage to other States, this difficulty has more to do with establishing the causation between such emissions and damage caused, rather than excluding the application of article 194, paragraph 2, from such emissions.[32]

The remainder of the Tribunal's answer to the first question focused on the obligations with respect to the specific sources of pollution provided for in sections 5 and 6 of Part XII of the Convention and other relevant obligations under sections 2, 3

[29] *Ibid*., para. 244.
[30] *Ibid*., paras. 258 and 441(3)(c).
[31] *Ibid*., para. 251.
[32] *Ibid*., para. 252.

and 4 of Part XII.[33] In terms of specific sources of pollution, the Tribunal found that marine pollution from anthropogenic GHG emissions can be characterized as pollution from land-based sources, pollution from vessels or pollution from or through the atmosphere.[34] It is worth noting that the Tribunal addressed not only States Parties' duties to adopt national legislation and establish international rules and standards to prevent, reduce and control marine pollution from GHG emissions from the aforementioned sources, but also their enforcement.[35] With respect to other relevant obligations under sections 2, 3 and 4 of Part XII, the Tribunal opined on the specific obligations incumbent on States Parties in the areas of global and regional cooperation, technical assistance, and monitoring and environmental assessment.[36]

In responding to the second question, the Tribunal confined its observations to the specific obligations to protect and preserve the marine environment that were not previously identified in its response to the first question.[37] Importantly, the Tribunal offered detailed analysis of the obligation under article 192 of the Convention to protect and preserve the marine environment. It concluded that, States Parties have a "general obligation … to protect and preserve the marine environment" under article 192, which applies to all maritime areas and can be invoked to combat any form of degradation of the marine environment, including climate change impacts and ocean acidification, and that "[w]here the marine environment has been degraded, this may require restoring marine habitats and ecosystems."[38] This obligation was also found to be one of due diligence.[39]

Looking to other provisions of the Convention, the Tribunal confirmed that States Parties have specific obligations under article 194, paragraph 5, of the Convention "to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life from climate change impacts and ocean acidification."[40] Consideration was also given to

[33] *Ibid*., para. 192.
[34] *Ibid*., paras. 264 and 441(3)(e).
[35] *Ibid*., para. 441(3)(f) to (i).
[36] *Ibid*., para. 441(3)(j) to (l).
[37] *Ibid*., para. 372.
[38] *Ibid*., paras. 400 and 441(4)(b).
[39] *Ibid*., paras. 400 and 441(4)(c).
[40] *Ibid*., paras. 406 and 441(4)(d).

the specific obligations of States Parties under articles 61 and 119 to take measures necessary to conserve "living marine resources threatened by climate change impacts and ocean acidification."[41] Moreover, the Tribunal held that the obligations to seek to agree under article 63, paragraph 1, and to cooperate under article 64, paragraph 1, require States Parties, *inter alia*, "to consult with one another in good faith with a view to adopting effective measures necessary to coordinate and ensure the conservation and development of shared stocks".[42] Finally, the Tribunal found that, under article 196, States Parties have the specific obligation to take appropriate measures "to prevent, reduce and control pollution from the introduction of non-indigenous species due to the effects of climate change and ocean acidification which may cause significant and harmful changes to the marine environment."[43]

In the final section of its answer to the second question submitted by COSIS, the Tribunal examined the matter of area-based management tools. It recognized that area-based management tools, including marine protected areas, may serve as a potential response strategy to climate change.[44] The Tribunal further noted that while the term "marine protected area" is not explicitly found in the Convention, Part XII does not preclude States from adopting more stringent measures to protect and preserve the marine environment, provided they remain consistent with the Convention and other rules of international law.[45]

The Tribunal's conclusions on the specific obligations of States Parties under the Convention provide a comprehensive assessment of the legal framework for addressing climate change impacts on the marine environment. However, it is equally important to grasp the nature of these obligations. This brings us to the final part of my speech: the "due diligence" nature of certain key obligations identified by the Tribunal.

A due diligence obligation is generally understood as "an obligation of conduct on the part of a subject of law", where "[a] breach of these obligations consists not in failing to achieve the desired result but in failing to take the necessary, diligent steps

[41] *Ibid*., paras. 418 and 441(4)(e).
[42] *Ibid*., paras. 428 and 441(4)(f).
[43] *Ibid*., paras. 436 and 441(4)(g).
[44] Ibid., para. 438.
[45] Ibid., paras. 439-440.

towards that end."[46] In earlier cases, the Tribunal had the opportunity to clarify and develop the concept of due diligence. In its Advisory Opinion concerning the responsibilities and obligations of States with respect to activities in the Area, the Seabed Disputes Chamber stated that the notion of obligations "of due diligence" is connected with that of obligations "of conduct".[47] It also explained that such an obligation requires States "to deploy adequate means, to exercise best possible efforts, to do the utmost" to obtain the intended result.[48] In its Advisory Opinion given at the request of the Sub-Regional Fisheries Commission, the Tribunal identified and explained the content of due diligence obligations of a flag State with respect to the prevention of illegal, unreported and unregulated fishing by ships flying its flag.[49]

Pivoting back to the Advisory Opinion on climate change, it may be noted that the Tribunal clarified that several obligations of States Parties regarding climate change are of a due diligence nature, notably those under article 194, paragraphs 1 and 2, as well as article 192 of the Convention. With regard to article 194, paragraph 1, the Tribunal pointed out that "what is required of States under this provision is not to guarantee the prevention, reduction and control of marine pollution at all times but to make their best efforts to achieve such result. In the words of the Seabed Disputes Chamber, this is 'an obligation of conduct', and not 'an obligation of result'."[50] Therefore, it is the conduct of a State, not the result, that will determine whether the State has complied with its obligation under article 194, paragraph 1, of the Convention.

Having explained what is meant by a due diligence obligation, the Tribunal expounded on the means through which a State fulfils such an obligation. The Tribunal held that a due diligence obligation requires a State to "put in place a national system, including legislation, administrative procedures and an enforcement mechanism necessary to regulate the activities in question", and to "exercise adequate vigilance

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[46] Timo Koivurova & Krittika Singh, "Due Diligence", paras. 1 and 2, in *Max Planck Encyclopedias of International Law*.
[47] *Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion*, *1 February 2011, ITLOS Reports 2011,* p. 10, at p. 41, para. 111.
[48] *Ibid*., para. 110.
[49] *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 2 April 2015, ITLOS Reports 2015*, p. 4, at p. 40, para. 129.
[50] *Request for Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law, Advisory Opinion, 21 May 2024*, para. 233.

to make such a system function efficiently, with a view to achieving the intended objective."[51]

The Tribunal also determined the standard of several due diligence obligations under the Convention, starting with article 194, paragraph 1, of the Convention. After pointing out that the standard of due diligence varies depending on the particular circumstances, the Tribunal emphasized that the standard that States must apply in relation to marine pollution from anthropogenic GHG emissions needs to be stringent, since "[b]est available science informs that anthropogenic GHG emissions pose a high risk in terms of foreseeability and severity of harm to the marine environment."[52] Here we can once more discern how science supports the legal reasoning and findings of the Tribunal. By using the term "stringent", the Tribunal placed the level of due diligence with regard to GHG emissions at a heightened level. In this regard, it may be useful to point out that the Tribunal concluded its overview of the scientific background to the case with the observation that climate change "represents an existential threat and raises human rights concerns".[53]

Similar to the aforementioned analysis of article 194, paragraph 1, of the Convention, the Tribunal further concluded that the due diligence obligations under articles 194, paragraph 2, as well as 192 are subject to a stringent standard.[54] It is noteworthy in this regard that the standard of due diligence under article 194, paragraph 2, can be even more stringent than that under article 194, paragraph 1, since "transboundary pollution affect[s] the environment of other States".[55]

Excellencies, distinguished guests,

The Tribunal's Advisory Opinion on Climate Change marks a milestone in clarifying the obligations of States Parties under the Convention. By reaffirming the Convention as a living instrument capable of addressing evolving environmental threats, the Advisory Opinion provides much-needed legal precision regarding the

[51] *Ibid*., para. 235.
[52] *Ibid*., para. 241.
[53] *Ibid*., paras. 66 and 122.
[54] *Ibid*., paras. 258 and 400.
[55] *Ibid*., paras. 256 and 258.

obligations of States Parties to prevent, reduce, and control marine pollution caused by anthropogenic GHG emissions, as well as to protect and preserve the marine environment in the face of climate change impacts and ocean acidification.

I have now come to the end of my lecture. I wish to reiterate my appreciation to the British Institute of International and Comparative Law and Ms Kristin Hausler for organizing this annual Grotius Lecture and for their hospitality. I look forward to the interesting discussions ahead and thank you for your kind attention.