INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA

Case No. 31

REQUEST FOR AN ADVISORY OPINION SUBMITTED BY THE COMMISSION OF SMALL ISLAND STATES ON CLIMATE CHANGE AND INTERNATIONAL LAW



WRITTEN STATEMENT OF THE REPUBLIC OF MAURITIUS

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I. <u>INTRODUCTION</u>

- 1. The Republic of Mauritius ("Mauritius") submits this Written Statement in the matter of the Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law ("COSIS" or "the Commission") in accordance with the Orders of the International Tribunal for the Law of the Sea ("ITLOS" or "the Tribunal") dated 16 December 2022 and 15 February 2023.
- 2. By letter dated 12 December 2022, the co-chairs of the Commission transmitted to ITLOS a request for an advisory opinion, pursuant to a decision of COSIS' members made on 26 August 2022 ("the Request"). The following two-part question was referred to the Tribunal:
 - "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?"
- 3. Mauritius is acutely conscious of the existential threat posed by the effects of climate change, particularly for small island developing States. It is for this reason that Mauritius participates in these proceedings, recognising the valuable contribution the Tribunal has made with respect to the interpretation and application of the UN Convention on the Law of the Sea 1982 ("UNCLOS" or "the Convention"). Mauritius is confident that an Advisory Opinion rendered by the Tribunal in response to this Request can assist States Parties' understanding of their obligations under the Convention to: (i) prevent, reduce and control pollution of the marine environment; and (ii) protect and preserve the marine environment.
- 4. For the purpose of assisting the Tribunal in rendering an Advisory Opinion in response to the Request, Mauritius' Written Statement is in five parts.
 - a. **Section II** addresses the Tribunal's jurisdiction and its discretionary power with respect to advisory opinions. Mauritius considers that the Tribunal plainly has jurisdiction to render the advisory opinion requested by the Commission and that there is no reason it should decline to exercise its discretionary power to do so.
 - b. **Section III** sets out the factual context, having regard to the best available scientific evidence as to the causes of climate change, the impacts of climate change on the marine environment, and the reduction in greenhouse gas ("GHG") emissions required to address the threat.
 - c. **Section IV** addresses the legal nature of the relationship between UNCLOS and other rules of international law relevant to climate change, in particular the

relationship between UNCLOS, the 1992 United Nations Framework Convention on Climate Change ("UNFCCC") and the 2015 Paris Agreement ("Paris Agreement").

- d. **Section V** sets out Mauritius' understanding of the specific obligations of UNCLOS States Parties referred to in the Request in the light of the factual and scientific context and of the legal nature of the relationship between UNCLOS, the UNFCCC and the Paris Agreement, as well as other relevant rules and principles of international law.
- e. **Section VI** concludes this Written Statement by summarising Mauritius' submissions.

II. JURISDICTION AND DISCRETION

A. Jurisdiction

5. Article 21 of the ITLOS Statute states:

"The jurisdiction of the Tribunal comprises all disputes and all applications submitted to it in accordance with this Convention and all matters specifically provided for in any other agreement which confers jurisdiction on the Tribunal."

- 6. Article 138 of the ITLOS Rules provides:
 - "1. The Tribunal may give an advisory opinion on a legal question if an international agreement related to the purposes of the Convention specifically provides for the submission to the Tribunal of a request for such an opinion.
 - 2. A request for an advisory opinion shall be transmitted to the Tribunal by whatever body is authorized by or in accordance with the agreement to make the request to the Tribunal.
 - 3. The Tribunal shall apply *mutatis mutandis* articles 130 to 137."
 - 7. In its Advisory Opinion of 2 April 2015, the Tribunal determined that it had jurisdiction to give the advisory opinion requested by the Sub-Regional Fisheries Commission ("SRFC Advisory Opinion").¹ In the view of the Tribunal, the legal basis of its advisory jurisdiction is found in the combined effect of Article 21 of its Statute and "any other agreement" conferring jurisdiction on the Tribunal.² The Tribunal further considered that the words "all matters" in Article 21 of the ITLOS Statute should not be interpreted restrictively, as applying only to "disputes" because, if that were the case, Article 21 would have used the word "disputes" instead of the wider term "all matters".³ According to the Tribunal, the words "all matters" must mean something more than only "disputes"

¹ Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 5 April 2015, ITLOS Reports 2015, p.4 (hereinafter "SRFC Advisory Opinion").

² *Ibid.*, para. 58.

³ *Ibid.*, para. 56.

and, that "must include advisory opinions, if specifically provided for in 'any other agreement which confers jurisdiction on the Tribunal". ⁴ The Tribunal further clarified:

- "... that the expression 'all matters specifically provided for in any other agreement which confers jurisdiction on the Tribunal' does not by itself establish the advisory jurisdiction of the Tribunal. In terms of article 21 of the Statute, it is the 'other agreement' which confers such jurisdiction on the Tribunal. When the 'other agreement' confers advisory jurisdiction on the Tribunal, the Tribunal then is rendered competent to exercise such jurisdiction with regard to 'all matters' specifically provided for in the 'other agreement'. Article 21 and the 'other agreement' conferring jurisdiction on the Tribunal are interconnected and constitute the substantive legal basis of the advisory jurisdiction of the Tribunal."
- 8. In this regard, Articles 2(1) and (2) of the Agreement establishing the Commission ("COSIS Agreement") state that:
 - "1. The activities of the Commission shall include *inter alia* assisting Small Island States to promote and contribute to the definition, implementation, and progressive development of rules and principles of international law concerning climate change, in particular the protection and preservation of the marine environment, including through the jurisprudence of international courts and tribunals.
 - 2. Having regard to the fundamental importance of oceans as sinks and reservoirs of greenhouse gases and the direct relevance of the marine environment to the adverse effects of climate change on Small Island States, the Commission shall be authorized to request advisory opinions from the International Tribunal for the Law of the Sea ("ITLOS") on any legal question within the scope of the 1982 United Nations Convention on the Law of the Sea, consistent with Article 21 of the ITLOS Statute and Article 138 of its Rules."
- 9. The *SRFC Advisory Opinion* sets out the necessary prerequisites and scope of the Tribunal's jurisdiction in advisory proceedings. As noted by the Tribunal, Article 138 of the Rules "furnishes the prerequisites that need to be satisfied before the Tribunal can exercise its advisory jurisdiction." The Tribunal explained that:

"These prerequisites are: an international agreement related to the purposes of the Convention specifically provides for the submission to the Tribunal of a request for an advisory opinion; the request must be transmitted to the Tribunal by a body authorized by or in accordance with the agreement mentioned above; and such an opinion may be given on 'a legal question'."

⁵ *Ibid.*, para. 58.

⁴ Ibid.

⁶ *Ibid.*, para. 59.

⁷ *Ibid.*, para. 60.

- 10. Applying these prerequisites to the Request in this case, Mauritius considers that all of them are met:
 - a. An international agreement related to the purpose of UNCLOS: the COSIS Agreement is an international agreement which expressly provides for the submission of the Request to the Tribunal. Mauritius notes that the Preamble of the COSIS Agreement refers to UNCLOS, and the Commission's mandate includes the promotion of and contribution to the development of rules and principles related to the protection of the marine environment (see Article 1(3) and 2(1) of the COSIS Agreement).
 - b. **Transmission of the request**: the Request was transmitted to the Tribunal by the co-chairs of the Commission pursuant to Article 3(3) of the COSIS Agreement following a unanimous decision of its Members on 26 August 2022, in accordance with Article 3(5).
 - c. **Legal question**: a legal question is one which is "framed in terms of law", so raises "problems of international law" and is "by its very nature susceptible of a reply based on law". This is the approach adopted by the Tribunal in the *SFRC Advisory Opinion*, which noted in relation to the SFRC's request that: "[t]hese questions have been framed in terms of law. To respond to these questions, the Tribunal will be called upon to interpret the relevant provisions of the Convention and of the MCA Convention and to identify other relevant rules of international law." Mauritius considers that the same can be said of the present Request.
- 11. In addition to the above prerequisites, the Tribunal in its *SRFC Advisory Opinion* considered whether the scope of its advisory jurisdiction extended to the questions posed by SRFC. The Tribunal noted: "Article 21 of the Statute lays down that such jurisdiction extends to 'all matters specially provided for in any other agreement which confers jurisdiction on the Tribunal." Accordingly, it was necessary for the Tribunal to "assess whether the questions posed by the SRFC constitute matters which fall within the framework of the MCA Convention." In determining whether the questions submitted by the SRFC met this condition, the Tribunal did not adopt too high a threshold. In its view:

"The questions need not necessarily be limited to the interpretation or application of any specific provision of the MCA Convention. It is enough if

¹⁰ Legal consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, ICJ Reports 2004, p.136, para. 37.

⁸ Western Sahara, Advisory Opinion, ICJ Reports 1975, p.12, para. 15.

⁹ Ibid.

¹¹ SRFC Advisory Opinion, para. 65. The MCA Convention is the Convention on the Determination of the Minimal Conditions for Access and Exploitation of Marine Resources within the Maritime Areas under Jurisdiction of the Member States of the SRFC.

¹² *Ibid.* para 67.

¹³ Ibid.

¹⁴ As noted in P. Chandrasekhara Rao and P. Gautier, *The International Tribunal for the Law of the Sea: Law, Practice and Procedure* (Edward Elgar Publishing 2018), para. 3.218.

these questions have, in the words of the ICJ, a 'sufficient connection' (see *Legality of the Use by a State of Nuclear Weapons in Armed Conflict*, Advisory Opinion, I.C.J. Reports 1996, p. 66, at p. 77, para. 22) with the purposes and principles of the MCA Convention. In this respect, there is no reason why the words 'all matters specifically provided for in any other agreement' in article 21 of the Statute should be interpreted restrictively." ¹⁵

12. Applying this broad approach to the COSIS Agreement, Mauritius is of the view that the Request meets the test of sufficient connectivity. The subject matter of the two-part question posed is climate change and its impact on the marine environment; the COSIS Agreement is an international agreement concerned with addressing the impact of climate change: see *e.g.*, Articles 1(3) and 2(1).

B. Discretion

13. Article 138(1) of the ITLOS Rules states that "the Tribunal may give an advisory opinion" (emphasis added). As noted by P. Chandrasekhara Rao and P. Gautier, this wording indicates that the Tribunal possesses a discretionary power to render advisory opinions. In the *SRFC Advisory Opinion*, the Tribunal confirmed this interpretation, noting that Article 138(1) of the ITLOS Rules "should be interpreted to mean that the Tribunal has a discretionary power to refuse to give an advisory opinion even if the conditions of jurisdiction are satisfied." It also noted, relying on the jurisprudence of the International Court of Justice, that:

"It is well settled that a request for an advisory opinion should not in principle be refused except for 'compelling reasons' (see *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, I.C.J. Reports 1996, p. 226, at p. 235, para. 14). The question is whether there are compelling reasons in this case why the Tribunal should not give the advisory opinion which the SRFC has requested." ¹⁸

14. Mauritius considers that there are no compelling reasons for which the Tribunal should refuse the Request. In particular, the Request is plainly clear enough to enable the Tribunal to deliver an advisory opinion and is couched firmly in terms of *lex lata*, not requiring the Tribunal to take a position on matters beyond the scope of its judicial functions.¹⁹

¹⁵ SRFC Advisory Opinion, para. 68.

¹⁶ P. Chandrasekhara Rao and P. Gautier, *The International Tribunal for the Law of the Sea: Law, Practice and Procedure* (Edward Elgar Publishing 2018), para. 3.225.

¹⁷ SRFC Advisory Opinion, para. 71.

¹⁸ *Ibid*.

¹⁹ *Ibid*, paras. 72-73.

III. THE FACTUAL AND SCIENTIFIC CONTEXT

- 15. The scientific evidence as to the threat to the marine environment posed by climate change, and the steps required to address that threat, is clearly established. Mauritius invites the Tribunal to so state, in its Advisory Opinion.
- 16. Accordingly, the substantive implications of the concern for the protection of the marine environment from the impacts of climate change, shared by UNCLOS and the UNFCCC/Paris Agreement, are directly related to the scientific evidence. That evidence is relevant to:
 - a. the assessment of the impacts of climate change on the marine environment; and
 - b. the action required to address the threat of climate change, in particular through the reduction of GHG emissions.

A. Impacts on the marine environment

- 17. Human communities in close connection with coastal environments are particularly exposed to ocean and cryosphere change, such as sea level rise, extreme sea level and shrinking cryosphere. For Mauritius, one of 37 Small Island Developing States recognised by the United Nations ("SIDS"), the impacts of climate change, including those related to the marine environment, are already underway, severe and predicted to become much worse.
- 18. The Intergovernmental Panel on Climate Change ("IPCC") is an organization of governments that are members of the United Nations or the World Meteorological Organization. The IPCC currently has 195 members, including Mauritius. It is tasked with assessing the science on climate change. It does so by relying on world's most respected scientists to conduct regular assessment cycles, each year assessing thousands of scientific papers. Its reports provide an authoritative and comprehensive summary of what is known about the drivers of climate change, its impacts and future risks, and how adaptation and migration can reduce those risks.
- 19. As is clear from scientific evidence presented by the IPCC and accepted internationally, climate change poses a grave and potentially catastrophic threat to the marine environment. The IPCC has reported that climate change has already caused "substantial damages, and increasingly irreversible losses" including in coastal and open ocean ecosystems.²⁰ The impacts of global warming on the marine environment include ocean warming, ocean acidification and sea level rise.²¹ Fragile marine ecosystems, including warm water coral reefs, will be gravely affected and in some cases lost entirely.²²

²⁰ Synthesis Report of the IPCC Sixth Assessment Report, Summary for Policy Makers, A.2.3 (high confidence), available at: https://report.ipcc.ch/ar6syr/pdf/IPCC AR6 SYR SPM.pdf (last accessed 13 June 2023) (hereinafter "IPCC AR6 SYN").

²¹ IPCC AR6 SYN, B.1.3.

²² IPCC AR6 SYN, B.3.2.

20. The nature and scale of the impact of climate change on the marine environment is evident from the IPCC's Special Report on the Ocean and Cryosphere in a Changing Climate ("SROCC").²³ This report is unequivocal in its findings as to the severity of the impact:

"It is virtually certain that the global ocean has warmed unabated since 1970 and has taken up more than 90% of the excess heat in the climate system (high confidence)."²⁴

"Over the 21st century, the ocean is projected to transition to unprecedented conditions with increased temperatures (virtually certain), greater upper ocean stratification (very likely), further acidification (virtually certain), oxygen decline (medium confidence), and altered net primary production (low confidence). Marine heatwaves (very high confidence) and extreme El Niño and La Niña events (medium confidence) are projected to become more frequent. The Atlantic Meridional Overturning Circulation (AMOC) is projected to weaken (very likely). The rates and magnitudes of these changes will be smaller under scenarios with low greenhouse gas emissions (very likely)."²⁵

"Global mean sea level (GMSL) is rising, with acceleration in recent decades due to increasing rates of ice loss from the Greenland and Antarctic ice sheets (very high confidence), as well as continued glacier mass loss and ocean thermal expansion. Increases in tropical cyclone winds and rainfall, and increases in extreme waves, combined with relative sea level rise, exacerbate extreme sea level events and coastal hazards (high confidence)."²⁶

"A decrease in global biomass of marine animal communities, their production, and fisheries catch potential, and a shift in species composition are projected over the 21st century in ocean ecosystems from the surface to the deep seafloor under all emission scenarios (medium confidence). The rate and magnitude of decline are projected to be highest in the tropics (high confidence)... Ocean acidification (medium confidence), oxygen loss (medium confidence) and reduced sea ice extent (medium confidence) as well as non-climatic human activities (medium confidence) have the potential to exacerbate these warming-induced ecosystem impacts."²⁷

21. At the request of the Parties to the Paris Agreement, the IPPC presented, in 2018, its Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways ("SR 1.5").²⁸ In SR 1.5, the IPCC concluded that there is a high risk of very significantly worse outcomes if temperature

²³ IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, Summary for Policymakers, available at: https://www.ipcc.ch/srocc/ (last accessed 13 June 2023) (hereinafter: "SROCC").

²⁴ SROCC, A2.

²⁵ *Ibid.*, B2.

²⁶ *Ibid.*, A3.

²⁷ *Ibid.*, B5.

²⁸ IPCC Special Report on Global Warming of 1.5°C, available at: https://www.ipcc.ch/sr15/download/ (last accessed 13 June 2023) (hereinafter "SR 1.5").

increases exceed 1.5°C and that even a global temperature increase of 1.5°C will cause extreme harms. Specifically in relation to the marine environment, the IPCC concluded that:

"Limiting global warming to 1.5°C compared to 2°C is projected to reduce increases in ocean temperature as well as associated increases in ocean acidity and decreases in ocean oxygen levels (high confidence). Consequently, limiting global warming to 1.5°C is projected to reduce risks to marine biodiversity, fisheries, and ecosystems, and their functions and services to humans, as illustrated by recent changes to Arctic sea ice and warm-water coral reef ecosystems (high confidence)."²⁹

B. Impacts on Mauritius

- 22. Mauritius has already prepared a vulnerability assessment of the relevant sectors for the main island of Mauritius and Rodrigues. This assessment reveals that Mauritius is particularly susceptible to changes in precipitation and climate change induced weather events. Mauritius faces numerous challenges, including coastal degradation, marine pollution and coral bleaching. It is one of the most exposed nations to natural hazards due to its geographical location in an active tropical cyclone basin. Mauritius has not yet been able to carry out such an assessment with respect to the Chagos Archipelago, which remains under the unlawful occupation of the United Kingdom. The Chagos Archipelago is extremely susceptible to the effects of climate change. It comprises of approximately 56 high tide features, totalling 52.07km² and with a coastline of 293.28km. The terrain is flat and low lying, on average only 1m to 2m above mean sea level.
- 23. Sea level rise is projected to be of the order of 49cm by 2100.³⁰ On-site observations carried out by Mauritius Meteorological Services at Port Louis (on the main Island of Mauritius) reveal long-term sea level rise of 4.7mm per year between 1987 and 2020. Compared to the decade 1991-2000, the mean sea level for the main Island of Mauritius has increased by 11.9mm during the last decade 2011-2020. For Rodrigues Island, the mean sea level has increased by 6.4 mm per year for the same period.

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²⁹ *Ibid.*, Summary for Policymakers B.4.

³⁰ Updated National Climate Change Adaptation Policy Framework of the Republic of Mauritius (2021), p.21, available at: https://unfccc.int/NDCREG (last accessed 13 June 2023).

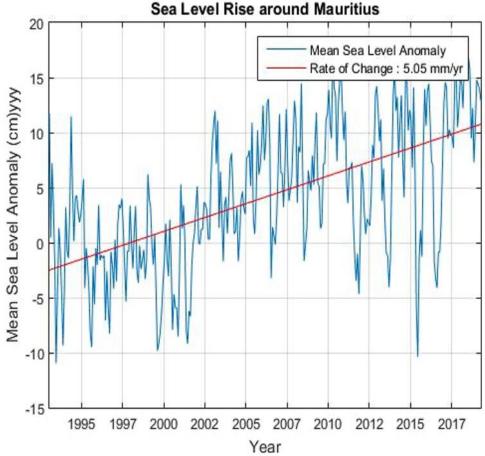


Figure 1

24. As shown in Figure 1 (immediately above) satellite data shows that from 1993 to 2019, the rate of sea level rise has been approximately 5.05 mm per year around the Island of Mauritius. Similarly, for Rodrigues and Agalega, the rate of change of sea-level rise is 4.84mm per year and 3.40mm per year (respectively), which is considerably higher than the average rate of change of the sea level rise in the Indian Ocean (2.81mm per year).

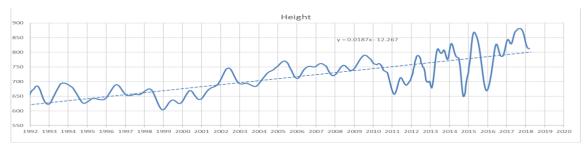


Figure 2

25. Figure 2 (immediately above) depicts data of sea-surface height obtained by the Mauritian Department for Continental Shelf, Maritime Zones Administration & Exploration ("CSMZAE") over the period 1992-2018.³¹ From 2014 to 2018, the seasurface height increased by an average of 6.8mm per year.

³¹ Datasets used: GLORYS2 (1992-2009); PSY3 (2011-2018).

- 26. CSMZAE analysis shows that episodes of peak sea surface temperature above 29°C were non-existent before 2003. By 2015, sea surface temperature in Mauritius peaked at 30°C, putting Mauritius above the global average for sea surface temperature rise. This has resulted in significant coral bleaching events in Mauritius, notably in 2018/2019 when 60% of coral around the Island of Mauritius was subjected to bleaching. Lagoon corals and the reef barrier around the Island of Mauritius have suffered from recurrent coral bleaching events due to increasing sea surface temperature, leading to a decrease in their protective function against the forces of high waves and their sand regeneration capacity.
- 27. In relation to extreme events, the Republic of Mauritius is regularly impacted by cyclones and associated hazards, such as torrential rains and flash floods, which result in widespread disruptions including evacuations and power outages, damage to infrastructure, substantial economic losses, and loss of life. Data from Mauritius Meteorological Services shows that in each decade between 1960 and 2009, the average annual number of cyclones has doubled. In the fisheries sector, climate change in Mauritius is already causing erratic and lowered productivity through increased surface sea temperature and sea-level rise. This is consistent with the findings of the IPCC in its SROCC:

"Future shifts in fish distribution and decreases in their abundance and fisheries catch potential due to climate change are projected to affect income, livelihoods, and food security of marine resource-dependent communities (medium confidence)."³²

- 28. The coastal zone of the Republic of Mauritius is a valuable national asset with an estimated total annual economic value of USD \$33 million (in 2010). However, coastal areas are shrinking dramatically due to rising sea levels and accelerated beach erosion. As a result of increasing impacts of climate change and sea level rise, accentuated beach erosion has shrunk the width of the beaches around certain coastal areas by up to 20m over the last few decades leading to loss of beach space and damage to infrastructure.
- 29. Furthermore, coastal zones are highly vulnerable to hazard events associated with cyclones, flooding, storm surges and heavy swells that are predicted to become more frequent and intense over time.

C. Action required to address the threat of climate change

- 30. In adopting the Paris Agreement, the Parties emphasised with "serious concern" the urgent need to address the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual GHG emissions by 2020 and aggregate emission pathways consistent with achieving the Paris Agreement temperature goal. Parties also recognised that "deep reductions" in global emissions would be required in order to achieve the ultimate objective of the UNFCCC.³³
- 31. In 2018 the IPCC confirmed that limiting global warming to 1.5°C above pre-industrial levels will require deep emissions reductions and rapid, far-reaching and unprecedented

³² SROCC, Summary for Policymakers, B.8. See also: 3.2.4, 3.4.3, 5.4.1, 5.4.2 and 6.4.

³³ See 6th and 9th Recitals of the Preamble to the Adoption Decision.

changes to all sectors.³⁴ The level of GHG emissions reductions required to meet the temperature target is calculated by way of a global carbon budget. The IPCC's SR 1.5 concludes that for a 66% chance of not exceeding 1.5°C, a carbon budget of 420 gigatonnes of carbon dioxide ("GtCO2") remains, whereas for a 50% chance, 580 GtCO2 remains.³⁵

32. In 2022, UNEP published the 13th Emission Gap Report ("EGR").³⁶ The annual EGRs provide an overview of the difference between predicted GHG emissions and what these should be in order to avert the worst impacts of climate change. The 2022 EGR, entitled *The Closing Window* opened with the following:

"This [EGR] is testimony to inadequate action on the global climate crisis, and is a call for the rapid transformation of societies. Since the twenty-sixth [UNFCCC] Conference of the Parties (COP 26), there has been very limited progress in reducing the immense emissions gap for 2030, the gap between the emissions reductions promised and the emissions reductions needed to achieve the temperature goal of the Paris Agreement." ³⁷

- 33. The 2022 EGR noted that global GHG emissions for 2021 showed a slight increase compared to 2019, suggesting that global emissions in 2021 would be similar to, or even break, record 2019 levels.³⁸ The Report also noted that without additional action, current policies will lead to global warming of 2.8°C during this century. Implementation of unconditional and conditional nationally determined contributions under the Paris Agreement reduces this to a rise of 2.6°C and 2.4°C respectively. The Report stated that "wide-ranging, large-scale, rapid and systemic transformation is now essential" to achieve the Paris Agreement temperature goal.³⁹
- 34. The November 2019 UNEP Production Gap Report ("PGR")⁴⁰ concluded that "the world is on track to produce far more coal, oil and gas than is consistent with limiting warming to 1.5°C or 2°C, creating a 'production gap' that makes climate goals much harder to reach." The Report noted that emissions from fossil fuels would need to decline rapidly, by approximately 6% per year to remain on a 1.5°C-compatible pathway, and by roughly 2% per year to remain on a 2°C-compatible one, and that: "Barring dramatic, unexpected advances in carbon capture and storage (CCS) technology, these declines mean that most of the world's proven fossil fuel reserves must be left unburned...".⁴¹ The UNEP 2021

³⁴ SR1.5, Summary for Policymakers, C.2.

³⁵ *Ibid.*, Summary for Policymakers, C.1.3

³⁶ UNEP, Emissions Gap Report (2022), available at: https://www.unep.org/resources/emissions-gap-report-2022 (last accessed 13 June 2023) (hereinafter "EGR").

³⁷ UNEP, The Closing Window (2022), Executive Summary, p.IV, available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/40932/EGR2022_ESEN.pdf?sequence=8&isAllowed=y (last accessed 13 June 2023).

³⁸ EGR, Executive Summary, p.IV.

³⁹ *Ibid.*, p.X.

⁴⁰ UNEP, Production Gap Report (2019), available at: https://www.unep.org/resources/report/production-gap-report-2019 (last accessed 13 June 2023).

⁴¹ *Ibid.*, p.8.

PGR⁴² found that "[a] significant course correction... is needed if the world is to get on track with an equitable, low-carbon recovery that is consistent with the Paris Agreement goals."⁴³

- 35. In 2021 the International Energy Agency ("IEA") published *Net Zero by 2050: A Roadmap for the Global Energy Sector* setting out a global pathway to net-zero emissions by 2050 that, in the light of the emissions gap, requires "all governments to significantly strengthen and then successfully implement their energy and climate policies." The Report states that under that pathway: "Beyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our pathway, and no new coal mines or mine extensions are required." ⁴⁵
- 36. In its most recent Assessment Report, the IPCC has highlighted the grave risks posed, including to the marine environment, by the current "implementation gap" in policies to address climate change. Without a strengthening of policies, global warming of 2.2-3.5°C is projected by 2100.⁴⁶ The IPCC points out that delayed mitigation action will further increase global warming, losses and damages will rise, and additional human and natural systems will reach adaptation limits.⁴⁷ The latest scientific evidence indicates that:

"Due to relative sea level rise, current 1-in-100 year extreme sea level events are projected to occur at least annually in more than half of all tide gauge locations by 2100 under all considered scenarios (high confidence). Other projected regional changes include intensification of tropical cyclones and/or extratropical storms (medium confidence)."

37. The IPCC further notes that:

"Every increment of global warming will intensify multiple and concurrent hazards (high confidence). Deep, rapid, and sustained reductions in [GHG] emissions would lead to a discernible slowdown in global warming within around two decades, and also to discernible changes in atmospheric composition within a few years (high confidence)."

⁴² UNEP, Production Gap Report (2021), available at https://productiongap.org/2021report/ (last accessed 13 June 2023).

⁴³ *Ibid.*, p.33.

⁴⁴ IEA, Net Zero by 2050: A Roadmap for the Global Energy Sector (2021), available at: https://www.iea.org/reports/net-zero-by-2050 (last accessed 13 June 2023), p.13.

⁴⁵ *Ibid.*, p.21, p.23 and p.51.

⁴⁶ IPCC AR6 SYN, A4.4, B6.2 (medium confidence).

⁴⁷ *Ibid.*, C2.2 (high confidence).

⁴⁸ *Ibid.*, B.1.4.

⁴⁹ *Ibid.*, B.1.

IV. THE LEGAL FRAMEWORK: UNCLOS AND CLIMATE CHANGE

- 38. It is against the factual and scientific background that the legal framework falls to be assessed.
- 39. Article 293(1) of UNCLOS states that:

"A court or tribunal having jurisdiction under this section shall apply this Convention and other rules of international law not incompatible with this Convention."

- 40. The Tribunal can, and should, apply UNFCC and the Paris Agreement because these instruments lay down rules of international law which are plainly relevant to the marine environment and are not incompatible with UNCLOS.
- 41. The Tribunal has affirmed that the obligation to protect and preserve the marine environment is a fundamental principle of UNCLOS, as enshrined in Articles 192 and 193 of the Convention and referred to in the fourth paragraph of its Preamble.⁵⁰ The Tribunal has also confirmed that living resources and marine life are part of the marine environment.⁵¹
- 42. The protection of the marine environment from climate change and its consequences is a matter of common concern as between UNCLOS and the treaties which establish the international climate regime. The UNFCCC and the Paris Agreement, in addressing the general threat posed by climate change to "natural ecosystems and humankind" are also directly concerned with the protection of the marine environment. The Preamble to the Paris Agreement confirms the importance of ensuring the integrity of all ecosystems, including oceans. Article 5(1) of the Paris Agreement provides that Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of GHGs as referred to in Article 4(1)(d) of the UNFCCC, which include oceans as well as coastal and marine ecosystems. The nature of the relationship between the Convention and the international climate regime thus originates in their shared concern for the protection and preservation of the marine environment from the impacts of climate change.
- 43. Both UNCLOS and the UNFCCC/Paris Agreement refer to scientific evidence as informing the interpretation of their objects and obligations. UNCLOS requires Parties to act on the basis of best available scientific evidence, including in the protection of the marine environment (see for example Articles 61, 119, 200-201, 204 and 234 of the Convention). The Preamble to the UNFCCC recognises that steps required to understand and address climate change will be environmentally, socially and economically most effective if they are based on relevant scientific, technical and economic considerations and continually re-evaluated in the light of new findings in these areas. The UNFCCC refers to scientific evidence as the basis for action across a range of areas. The Paris Agreement expressly provides that Parties take individual and collective action in

⁵² UNFCCC Preamble.

⁵⁰ SRFC Advisory Opinion, para. 216.

⁵¹ Ibid.

- relation to mitigation and adaptation (and that such action is evaluated in a global stocktake) on the basis of "best available science".⁵³
- 44. Mauritius considers that the interpretation and application of Part XII of UNCLOS is to be undertaken on the basis of scientific evidence, and in light of the evolving understanding of the grave and urgent threat posed by climate change to the marine environment, as outlined in **Section III** above. The Convention is a living instrument, which is framed to allow for the development of specific standards and rules, including those required under Part XII to protect the marine environment. It follows that the interpretation and application of UNCLOS, and in particular of Part XII, must be informed by the law which addresses the threat of climate change, bearing in mind that the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment. ⁵⁵
- 45. This is consistent with the general rule of interpretation in Article 31(3)(c) of the Vienna Convention on the Law of Treaties ("VCLT"), which requires that account shall be taken, together with the context, of "any relevant rules of international law applicable in the relations between the parties." The UNFCCC and Paris Agreement clearly establish such relevant rules for the great majority of Parties and some relevant rules also apply as customary international law (addressed at para. 48 below). The Study Group of the International Law Commission ("ILC"), in its 2006 Report on the Fragmentation of International Law, concluded that Article 31(3)(c) of VCLT reflects the reality that international law is a dynamic legal system and that "[r]ules of international law subsequent to the treaty to be interpreted may be taken into account especially where the concepts used in the treaty are open or evolving." ⁵⁶ The ILC Study Group took the view that this was particularly the case where the concept: "(a) is one which implies taking into account subsequent technical, economic or legal developments; (b) sets up an obligation for further progressive development for the parties; or (c) has a very general nature or is expressed in such general terms that it must take into account changing circumstances." These elements are present in both UNCLOS and the UNFCCC/Paris Agreement. The need to assess risks to the environment on a continuous basis in interpreting treaty provisions was recognised by the ICJ in Gabcikovo-Nagymaros Project (Hungary v Slovakia).⁵⁷
- 46. The ILC Study Group also concluded that: "[i]t is a generally accepted principle that when several norms bear on a single issue they should, to the extent possible, be interpreted so as to give rise to a single set of compatible obligations." As UNCLOS and the UNFCCC/Paris Agreement clearly bear on a single issue in relation to the

⁵³ Articles 4(1), 7(5) and 14(1).

⁵⁴ SRFC Advisory Opinion, Separate Opinion of Judge Lucky, para 18.

⁵⁵ Legality of the Threat of Use of Nuclear Weapons, Advisory Opinion, ICJ Reports 1996, p. 226, para. 29.

⁵⁶ ILC, Fragmentation of International Law: Difficulties Arising From the Diversification and Expansion of International Law, A/CN.4/L.702 (18 July 2006), available at: https://legal.un.org/ilc/documentation/english/a_cn4_1702.pdf (last accessed 13 June 2023) (hereinafter "ILC Report on Fragmentation of International Law").

⁵⁷ Gabcikovo-Nagymaros Project (Hungary v Slovakia), ICJ Reports 1997, para. 112.

⁵⁸ ILC Report on Fragmentation of International Law, p.8.

protection of the marine environment from climate change, a relationship based on systemic integration and a harmonised approach will ensure that this protection is considered in a coherent and effective way, in light of the international goals of preventing dangerous anthropogenic interference with the climate system (Article 2 of UNFCCC; Article 2 of the Paris Agreement) and the duty to protect and preserve the marine environment (Article 192 of UNCLOS).

- 47. This is the appropriate basis on which to consider the relationship between the two treaty regimes. In so far as the *lex specialis* rule is applied, UNCLOS should be considered the *lex specialis* for the protection of the marine environment, whereas the UNFCCC/Paris Agreement is the *lex specialis* for preventing dangerous climate change. For the purposes of the Request in this case, where the two regimes have objects and rules which overlap, the approach of systemic integration is appropriate.⁵⁹ The rule of *lex posteriori* under Article 30 of VCLT raises the issue of whether the treaties in question are "successive" within the meaning of the rule, since UNCLOS is accepted to be constitutional in nature and the UNFCCC is a framework Convention, developed and strengthened by the Paris Agreement. In addition, although the two regimes do not have the "same subject matter", there is overlapping concern with the protection of the marine environment from climate change. An approach of mutual accommodation and respect of rights is therefore appropriate.⁶⁰
- 48. The Tribunal has consistently adopted the approach of seeking coherence between the Convention and other rules of international law.⁶¹ In this context, the Tribunal regularly has regard to customary international law in considering the scope of obligations under UNCLOS.⁶² The international climate regime itself reflects customary international law, including the principles of prevention and precaution, which are relevant to the implementation of both the UNFCCC/Paris Agreement and UNCLOS.
- 49. Article 237 of UNCLOS, in addressing obligations under other conventions concerning the protection and preservation of the marine environment, indicates that a harmonised approach is to be adopted. Part XII is stated to be without prejudice to agreements which "may be concluded in furtherance of the general principles set forth in the Convention". Furthermore: "[s]pecific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention." These provisions indicate that in the context of a subsequent regime with shared objectives and which is of direct relevance to protection of the marine environment as is the case with the UNFCCC and the Paris Agreement the starting point is an integrated approach which maximises the effectiveness and coherence of both regimes.

⁵⁹ ILC Report on Fragmentation of International Law, paras. 17 and 18.

⁶⁰ ILC Report on Fragmentation of International Law, para. 28.

⁶¹ Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p.10, para. 169 (and the cases cited therein) (hereinafter "Advisory Opinion on Activities in the Area").

⁶² *Ibid.*, paras. 145-147.

⁶³ Article 237(1).

⁶⁴ Article 237(2).

50. Article 311(2) of UNCLOS provides that the Convention shall not alter the rights and obligations of States Parties which arise from other compatible agreements which do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under UNCLOS. The UNFCCC and Paris Agreement are clearly compatible agreements, given the shared objects and purposes as outlined in para. 42 above. Furthermore, Article 293(1) of UNCLOS states that:

"A court or tribunal having jurisdiction under this section shall apply this Convention and other rules of international law not incompatible with this Convention."

- 51. The overlap in the objects, purposes and obligations laid down under both regimes as regards the protection of the marine environment supports a relationship based on systemic integration and harmonised interpretation, ensuring that the protection of the marine environment is addressed in a coherent and effective way. Given the clear scientific evidence of potentially catastrophic climate change impacts on the marine environment, the Tribunal should consider the urgent need to comply with relevant specific obligations under Part XII, taking into account Article 201 (scientific criteria for Regulations).
- 52. The elements of the Paris Agreement, as the strengthened response to the threat of climate change, which are of most direct relevance to the coherent and a harmonious interpretation of Part XII of UNCLOS, are as follows:

A. Temperature goal

- 53. The Paris Agreement sets a temperature goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and "pursuing efforts" to limit the increase to 1.5°C on the basis that achievement of this goal would significantly reduce the risks and impacts of climate change. This goal constitutes a specific expression of the UNFCCC objective which is to prevent dangerous climate change. This temperature goal thus informs UNCLOS Parties in their implementation of Part XII since it has direct implications for the protection of the marine environment. A failure to have regard to this goal, and give effect to it, is incompatible with UNCLOS, and would expose a State Party to the risk of responsibility and liability.
- 54. It follows that all measures taken under Part XII must be informed by the specific pathways and scenarios presented by the IPCC as necessary to achieve that goal, bearing in mind the global carbon budget. If that budget is exceeded, the risks of overshooting the temperature goal and crossing environmental tipping points substantially increase the likelihood of irreversible harm to the marine environment.⁶⁷
- 55. In this context, having regard to Articles 192 and 194 of UNCLOS, scientific evidence confirms the commitment to limit the rise in global temperature to 1.5°C in relation to

⁶⁵ Paris Agreement, Article 2(1)(a).

⁶⁶ UNFCCC, Article 2.

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⁶⁷ As stated in IPCC AR6 SYN, B.3.2: "The likelihood and impacts of abrupt and/or irreversible changes in the climate system, including changes triggered when tipping points are reached, increase with further global warming (high confidence)".

the protection of the marine environment. In its SROCC Report, the IPCC underlined the risks associated with high emissions scenarios:

"Risks of severe impacts on biodiversity, structure and function of coastal ecosystems are projected to be higher for elevated temperatures under high compared to low emissions scenarios in the 21st century and beyond... The capacity of organisms and ecosystems to adjust and adapt is higher at lower emissions scenarios (high confidence). For sensitive ecosystems such as seagrass meadows and kelp forests, high risks are projected if global warming exceeds 2°C above pre-industrial temperature, combined with other climate-related hazards (high confidence). Warm-water corals are at high risk already and are projected to transition to very high risk even if global warming is limited to 1.5°C (very high confidence)."

B. Mitigation timetable

- 56. It is in the context of the urgent need to address the emissions gap (described in paras. 32-33 above) that the mitigation timetable is set out in Article 4(1) of the Paris Agreement. This includes: (i) reaching global peaking of GHG emissions as soon as possible, recognising that peaking will take longer for developing country Parties; and (ii) undertaking rapid reductions thereafter in accordance with the best available science, so as to achieve "a balance between anthropogenic emissions by sources and removals by sinks of [GHG] in the second half of this century [net zero], on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty." Parties are required to "prepare, communicate and maintain" successive nationally determined contributions ("NDCs") that they intend to achieve and to pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. ⁶⁹
- 57. This mitigation timetable is applicable to the implementation of Part XII of the Convention. In relation to NDCs, the measures included must be based in part on an assessment of the contribution to protecting the marine environment, having regard to the urgent need to address risks posed to fragile marine ecosystems. Measures taken under Part XII of UNCLOS must support and enable the deep reductions required to achieve the peaking of GHG emissions and reaching net zero. As set out in para. 77 below, this has implications for filling any gaps in the coverage of measures necessary to protect the marine environment under Part XII of UNCLOS. This is reinforced by the requirements for an increase in ambition and urgency under the Paris Agreement, given the current emission and production gaps and the dire consequences of missing the temperature goal for the protection of the marine environment.

C. Adaptation

58. The Paris Agreement establishes the global goal on adaptation which refers to strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development. Parties reference is made to the "urgent and immediate needs of those developing country Parties... particularly vulnerable to the

⁶⁸ SROCC, Summary for Policymakers, B.6.

⁶⁹ Paris Agreement, Article 4(2).

⁷⁰ Paris Agreement, Article 7(1).

adverse effects of climate change."⁷¹ As explained in paras. 22-29 above, Mauritius is among those countries that are particularly vulnerable to climate change, not least because of the impacts on the marine environment, including sea-level rise, extreme events, ocean warming and acidification.

- 59. In this context and adopting a harmonised approach, the express provision in the UNFCCC/Paris Agreement for developing States and vulnerable States to receive support in this regard is also relevant to the implementation of Part XII of UNCLOS. The adaptation framework established under the Paris Agreement is clearly relevant to obligations under Part XII of UNCLOS to protect and preserve the marine environment, including rare and fragile ecosystems. The Arbitral Tribunal in the 2015 UNCLOS arbitration regarding the United Kingdom's unlawful "Marine Protected Area" around the Chagos Archipelago held that the phrasing of Article 194(5) of UNCLOS confirms that Part XII is not limited to measures aimed strictly at controlling marine pollution, but extends to measures focussed primarily on conservation and the preservation of ecosystems. This approach supports an interpretation of Part XII which includes the protection of fragile marine ecosystems in the context of adaptation to climate change. The need to strengthen resilience and reduce vulnerability to the impacts of climate change should inform measures taken by Parties, whether individually or collectively, under Part XII of UNCLOS.
- 60. Parties to the Paris Agreement must, when taking action to address climate change, "respect, promote and consider" their respective obligations on human rights.⁷⁴ Human rights obligations are relevant in the context of measures required to address threats to life from climate impacts on the marine environment, such as the establishment of effective early warning systems and coastal defences which may form part of measures taken under the Convention more widely but also under Part XII. The IPCC has indicated that:

"Extreme sea level events that are historically rare (once per century in the recent past) are projected to occur frequently (at least once per year) at many locations by 2050 in all RCP scenarios, especially in tropical regions (high confidence). The increasing frequency of high water levels can have severe impacts in many locations depending on exposure (high confidence). Sea level rise is projected to continue beyond 2100 in all RCP scenarios..."⁷⁵

61. Adaptation measures have implications for both the positive and negative duties under Article 194 UNCLOS (see further paras. 63-64 below).

⁷¹ Paris Agreement, Article 7(2).

⁷² Paris Agreement, Article 7(2), 7(3), 7(6), 7(7), 7(13) and Article 9.

⁷³ Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom), Award of 18 March 2015, paras. 320 and 538.

⁷⁴ Paris Agreement, Preamble.

⁷⁵ SROCC, Summary for Policymakers, B3.

D. Finance flows

- 62. A core element in the Paris Agreement is the recognition of the importance of finance flows in addressing climate change. This has direct implications for the obligations laid down in Part XII of UNCLOS. The IPCC has noted that "[f]inancial, technological, institutional and other barriers exist for implementing responses to current and projected negative impacts of climate-related changes in the ocean and cryosphere, impeding resilience building and risk reduction measures". 77
- 63. Parties to the Paris Agreement must ensure that finance flows are consistent with a low emissions pathway and climate resilient development in so far as this relates to the marine environment. Developed Country Parties "shall provide financial resources to assist Developing Country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the UNFCCC". This is relevant both to the positive obligation under Part XII of the Convention to take steps to preserve and protect the marine environment as well as the negative obligation to refrain from taking harmful measures. However, as the IPCC has made clear: "[i]f climate goals are to be achieved, both adaptation and mitigation financing would need to increase many-fold". The Paris Agreement lays down both positive and negative obligations in relation to financing as indicated by the Standing Committee on Finance which stated in 2018 that:
 - "... it is ... important to ensure the consistency of finance flows as a whole (and of capital stock) pursuant to Article 2, paragraph 1(c), of the Paris Agreement. This does not mean that all finance flows have to achieve explicitly beneficial climate outcomes, but that they must reduce the likelihood of negative climate outcomes."81
- 64. In the context of UNCLOS, Parties must implement their climate related obligations under Part XII having regard to the finance provisions of the Paris Agreement and consider: (i) whether inadequate investment is hindering implementation of relevant obligations under Part XII; and (ii) whether finance flows are consistent with a low emissions pathway and climate resilient development, having regard to the protection of the marine environment. These reflect the positive and negative obligations under Article 192 identified by the Arbitral Tribunal in the *South China Sea Arbitration*. ⁸² In both cases, the responsibility of developed countries to assist developing States, and in particular climate vulnerable States, is paramount.

⁷⁶ Paris Agreement, Article 2(1)(c).

⁷⁷ SROCC, Summary for Policymakers, C.1.4 (high confidence).

⁷⁸ Paris Agreement, Article 2(1)(c) and 9).

⁷⁹ Paris Agreement, Article 2(1)(c) and 9 PA.

⁸⁰ IPCC AR6 SYN, C.7.

⁸¹ UNFCC, Summary and recommendations by the Standing Committee on Finance on the 2018 Biennial Assessment and Overview of Climate Finance Flows, para. 49, available at: https://unfccc.int/sites/default/files/resource/51904%20-%20UNFCCC%20BA%202018%20-%20Summary%20Final.pdf (last accessed 3 June 2023).

⁸² South China Sea Arbitration (Philippines v. China), Award of 12 July 2016, para. 941, (hereinafter: "South China Sea Arbitration").

E. Sinks

65. The Paris Agreement provides that Parties must take action to conserve and enhance, as appropriate, sinks and reservoirs of GHGs including those referred to in Article 4(1)(d) UNFCCC which includes oceans and the marine ecosystems. This express recognition of the importance of the oceans and marine environment as a sink reinforces the necessity of adopting measures under Article 194 and Part XII of the Convention more generally.

F. Loss and damage

66. It is evident from IPCC reports that climate change is already resulting in extensive loss and damage, including as a direct result from impacts on the marine environment. Parties to the Paris Agreement recognise the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change and the role of sustainable development in reducing the risk of loss and damage. ⁸³ Article 235(1) of UNCLOS states:

"States are responsible for the fulfilment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with international law."

67. The language of Article 235(1) is not limited to obligations contained in the Convention ("their international obligations"). Mauritius considers such obligations to include those under the Paris Agreement and UNFCCC, insofar as these are not incompatible with the Convention (Article 293 of UNCLOS).

G. Shared principles

68. UNCLOS, in particular Part XII, also shares certain key elements and principles with the UNFCCC/Paris Agreement including, but not limited to, precaution, prevention, and taking action on the basis of, and in response to, the best available scientific evidence. This overlap reinforces the need to take these principles into account in interpreting specific climate-related obligations under Part XII. The duty to cooperate in adopting standards as expressed in Part XII (see further paras. 76-77 below), as well as the duty to conduct due diligence, conduct impact assessments and consider the impact of finance flows, must be informed by the scientific evidence as to the extent, scale and urgency of the threat posed by climate change.

69. In light of the obligation under both UNCLOS and the Paris Agreement to act on the basis of scientific evidence, the assessment of what is "necessary" by way of specific action to be taken under Part XII must also be based on the best available science as to the precise nature, scale and urgency of the threat posed by climate change. This applies to meeting the general obligations laid down in Article 192 of UNCLOS, as well as to the specific measures envisaged in Article 194(1), (2) and (5), and those provided for in Articles 196, 207-212 of the Convention. The science is required to inform the

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⁸³ Paris Agreement, Article 8(1). Action is being taken under the Warsaw mechanism to address issues including emergency preparedness and the resilience of communities. In addition, the Sharm el-Sheikh Implementation Plan was adopted at COP 27 in 2022. These provisions and measures are relevant to the implementation of Part XII in that they reinforce the urgency and necessity of reducing GHG emissions across all relevant sectors and of cooperating to address specific losses related to the marine environment including from extreme events, slow onset impacts and displacement of fisheries.

interpretation and application of Article 193, noting that a State Party's sovereign right to exploit its natural resources pursuant to their environmental policies must accord with their duty to protect and preserve the marine environment. Also relevant to the interpretation of what measures are "necessary" under Part XII of the Convention are the requirements for ambition and progression contained in Articles 3 and 4 of the Paris Agreement, particularly in the light of the emission and production gaps (and the overall implementation gap) referred to in paras. 32-37 above.

70. Article 2(2) of the Paris Agreement provides that it will be implemented to "reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances." Under an integrated approach to the climate-related duties arising under Part XII of the Convention, it will be necessary to consider the extent to which these principles relate to specific obligations, having regard to the support that Developed Country Parties are required to provide Developing State Parties, especially those particularly vulnerable to the adverse effects of climate change and having significant capacity constraints, such as the Least Developed Countries and Small Island Developing States.⁸⁴

V. SPECIFIC OBLIGATIONS OF UNCLOS STATES PARTIES

71. Mauritius now turns to the specific obligations of UNCLOS States Parties, including under Part XII, as set out in the Request.

A. Pollution

- In the light of the best available scientific evidence as to the harmful impact of GHG on the climate, including on the marine environment, GHG emissions clearly fall within the definition of pollution under Article 1(1)(4) of UNCLOS. Reference to the introduction by man, directly or indirectly, of "substances or energy into the marine environment which results or is likely to result in such deleterious effects as harm to living resources and marine life..." covers the impacts of climate change, including ocean acidification, coral bleaching and deoxygenation. The references in Article 1(1)(4) of the Convention to "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" also cover climate change impacts on fish stocks, coastal inundation, sea level rise and increases in extreme events such as cyclones. Article 194(1) of UNCLOS requires Parties to take all measures necessary to prevent, reduce and control pollution of the marine environment "from any source". It is also to be noted that Part XII covers pollution from land-based sources (Article 207), pollution from vessels (Article 211), or from or through the atmosphere (Article 212). These and other provisions of Part XII are directly relevant to GHG emissions.85
- 73. As noted above, elements of the international climate regime which establish collective goals, including the temperature goal, inform the obligations imposed on States Parties under Part XII, whether Parties are acting individually or together. The obligation under Part XII to "prevent, reduce and control" pollution of the marine environment in relation

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⁸⁴ See in particular: Article 9(4) of the Paris Agreement.

⁸⁵ See *e.g.*, Articles 213 and 222

to the deleterious effects that result or are likely to result from climate change is to be interpreted as including the obligation to reduce GHG emissions (pollution) in line with the goals, timeframes and emission pathways indicated by the Paris Agreement and the science presented by the IPCC, taking into account the current emissions and production gaps. In this context, States Parties should have regard to the specific threats posed to fragile and endangered marine ecosystems by GHG emissions. These include the risk that tipping points will be crossed unless urgent action is taken to make deep reductions and that there will be overshoot of the temperature goal laid down in Article 2(1)(a) of the Paris Agreement. Both these eventualities pose specific and catastrophic risks to the marine environment. Ref The SR 1.5 Report notes that: "[g]iven the sensitivity of corals to heat stress, even short periods of overshoot (*i.e.*, decades) are expected to be extremely damaging to coral reefs." Ref

B. Preventing, reducing and controlling pollution

- 74. In considering the specific obligations imposed in this context, it is important to recall that the obligations in Part XII apply to all States irrespective of where the alleged harmful activities take place, ⁸⁸ and to all maritime zones and beyond. ⁸⁹ On the basis of an integrated and harmonised approach to the obligations arising under Part XII of the Convention and the UNFCCC/Paris Agreement, and in light of the best available scientific evidence, Parties to the Convention have the following specific obligations to prevent, reduce and control GHG emissions that are harmful to the marine environment:
 - a. In relation to pollution from land-based sources, Article 207(5) provides that the 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. This strict threshold is reinforced in the context of GHG emissions from land-based sources, as these are persistent and must be subject to deep reductions if catastrophic harm to the marine environment is to be avoided.
 - b. In relation to Article 212 of UNCLOS, the requirement for States to 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 should be read consistently with the temperature goal and mitigation framework established under the Paris Agreement. The necessity of specific measures must be assessed having regard to the emissions gap and to any gaps in the current system of regulation in place.⁹⁰

⁸⁶ SR 1.5, 3.6.1. See also: p.181 and p.281.

⁸⁷ *Ibid.*, p.230.

⁸⁸ South China Sea Arbitration, para. 927.

⁸⁹ SRFC Advisory Opinion, para. 120.

⁹⁰ UNCLOS, Article 212(2).

C. The obligation to have due regard to the rights and duties of one another

75. In the *SFRC Advisory Opinion*, the Tribunal concluded that, in exercising their rights and performing their duties in their respective EEZs, UNCLOS Parties must have due regard to the rights and duties of one another. The Tribunal noted that, while the SRFC Member States and other States Parties to the Convention have sovereign rights to explore, exploit, conserve and manage the living resources in their EEZs, in exercising their rights and performing their duties under the Convention they must have due regard to the rights and duties of one another. This flows from Articles 56(2) and 58(3) of UNCLOS, in conjunction with Articles 192 and 193. In the context of climate change, this obligation is relevant to any act or omission which directly undermines the protection of the marine environment from the impacts of climate change since this will necessarily impact on the rights and duties of others across all maritime zones. This obligation has a particular relevance to making deep reductions in GHG emissions since a global collective effort is required to meet international climate goals and a failure to make the needed reductions places a greater burden on other States to keep GHG emissions within the remaining global carbon budget.

D. The duty to cooperate

- The IPCC has noted that: "[k]ey enablers for implementing effective responses to climate-related changes in the ocean and cryosphere include intensifying cooperation and coordination among governing authorities across spatial scales and planning horizons". 92 Under Article 197 of UNCLOS, Parties are required to cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organisations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with the Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features. In its provisional measures order in MOX Plant, the Tribunal emphasised that "the duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law.⁹³ This fundamental principle has implications in the context of climate change in two ways: first, the UNFCCC/Paris Agreement establishes relevant international rules, standards and recommended practices, for example in relation to the temperature goal and mitigation framework as outlined in paras. 53-55 above, as well as in areas such as transparency in reporting GHG emissions. Second, there is a further duty of cooperation on UNCLOS Parties to ensure that measures taken under Part XII are consistent with relevant rules and standards under the UNFCCC/Paris Agreement, for example by ensuring that the various pollution related obligations cover all relevant sources of GHGs, where necessary adopting further specific rules including generally applicable international rules and standards.
- 77. Under this duty of cooperation (together with the specific provisions of Section 5 of Part XII of the Convention), Parties are required to ensure adequate coverage of all relevant GHG emissions and to address any current gaps in the rules laid down to control pollution

⁹¹ SFRC Advisory Opinion, para. 216.

⁹² SROCC, C.4.

⁹³ MOX Plant (Ireland v. United Kingdom) Provisional Measures, Order of 3 December 2001, ITLOS Reports 2001, para. 82; see also: SFRC Advisory Opinion, para. 140.

from GHGs, for example from the failure to prohibit venting and flaring of methane from offshore oil and gas infrastructure. The duty of cooperation must be fulfilled with the aim of closing the emissions and production gaps which, in undermining the achievement of the UNFCCC/Paris Agreement goals, directly threaten the marine environment. Unless measures taken under Part XII of UNCLOS are informed by the standards established under the UNFCCC/Paris Agreement, the international climate objective, which is directly relevant to the protection of the marine environment, cannot be achieved. Furthermore, on the basis of scientific evidence, the adoption of a different standard, such as a looser timeframe for achieving net zero, would place Parties in breach of their obligations under Articles 192 and 194 of UNCLOS, given the impacts on the marine environment from a temperature rise above 1.5-2°C. This duty is reinforced in the context of the urgency and ambition required in ensuring full coverage of GHGs in the implementation of Section 5 of Part XII of UNCLOS, by reference to the remaining carbon budget and emission pathways indicated by the IPCC.

E. The duty to act with due diligence

- 78. As the ICJ held in *Corfu Channel*, the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory. It is "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States". A State is thus obliged to use all the means at its disposal to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. This underlying principle applies generally to proposed activities which may have a significant adverse impact in a transboundary context. In order to fulfil its obligation to exercise due diligence in preventing significant transboundary environmental harm, a State must, before embarking on an activity having the potential adversely to affect the environment of another State, ascertain if there is a risk of significant transboundary harm, which would trigger the requirement to carry out an environmental impact assessment.
- 79. In the Advisory Opinion on Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area ("Advisory Opinion on Activities in the Area") the Seabed Disputes Chamber found that in order to fulfil their obligation of due diligence, States must "deploy adequate means, to exercise best possible efforts, to do the utmost" to obtain the result of compliance with obligations. "Ea]n obligation to adopt regulatory or administrative measures . . . and to enforce them". "In the context of climate change, this entails assessing decisions and policies against the temperature goal and mitigation timetable established under the Paris Agreement. Doing 'the utmost' in this context means ensuring that States act with the necessary urgency

⁹⁴ Corfu Channel (United Kingdom v. Albania), Merits, Judgment, ICJ Reports 1949, p. 22.

⁹⁵ Pulp Mills on the River Uruguay (Argentina v. Uruguay) ICJ Reports 2010, pp. 55-56, para. 101.

⁹⁶ Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Judgment, ICJ Reports 2015, p. 665, para. 104.

⁹⁷ *Ibid*.

⁹⁸ *Ibid.*, para. 110.

⁹⁹ *Ibid.*, para. 111.

and ambition to make the deep reductions in GHG emissions which are required to close the current emission and production gaps. The duty to exercise due diligence to prevent significant transboundary pollution from GHG emissions therefore includes the use of effective environmental impact assessments which assess cumulative GHG emissions from projects, programmes and investments and include quantified assessments of scope 3 emissions from relevant projects/programmes, including those concerned with fossil fuel production. This is required to estimate the full climate related impact of projects.

80. The ILC's 2001 Draft Articles on Transboundary Harm from Hazardous Activities state that the standard for due diligence should be "appropriate and proportional to the degree of risk of the transboundary harm". The Tribunal has since confirmed that the content of due diligence obligations is a variable concept which may "change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge. It may also change in relation to the risks involved in the activity... The standard of due diligence has to be more severe for the riskier activities". In light of the scientific evidence as to the catastrophic risks posed to the marine environment by climate change, the standard of due diligence under Part XII of UNCLOS is an exacting one. To the extent that there remains any scientific uncertainty as to the impacts of climate change, the precautionary principle remains relevant in the face of the scale of the potential harm.

F. Impact assessments

- 81. Article 206 of UNCLOS imposes on Parties a specific obligation to assess and communicate potential effects of activities when "States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment". The use of "or" in Article 206 means that the obligation is engaged whenever States have reasonable grounds to conclude either, that relevant activities "may cause substantial pollution of [the marine environment]" or that the relevant activities may cause "significant and harmful changes to the marine environment". As long as it can be shown that an activity may cause "substantial pollution", a State's obligation to conduct impact assessments is engaged regardless of whether it is possible to identify specific consequences for the marine environment.
- 82. In its *Advisory Opinion on Activities in the Area*, the Seabed Disputes Chamber drew directly on the customary obligation to conduct impact assessments as informing the interpretation of the obligation under UNCLOS. The obligation was first recognised by the ICJ in *Pulp Mills* when the Court stated that "it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular on a shared

¹⁰⁰ ILC, Draft Articles on Transboundary Harm from Hazardous Activities (2001), Article 3(13), available at: https://legal.un.org/ilc/texts/instruments/english/commentaries/9 7 2001.pdf (last accessed 14 June 2023).

¹⁰¹ Advisory Opinion on Activities in the Area, para. 117.

¹⁰² *Ibid.*, paras. 131-132.

¹⁰³ *Ibid.*, para 149.

resource". 104 The Court then held that the form and content of impact assessments is a matter for domestic rather than international law. 105 However, having regard to the general obligations to protect and preserve the marine environment in Articles 192 and 194, as well as the obligation to cooperate with other States in Article 194, together with the need for a harmonised interpretation with the UNFCCC/Paris Agreement, some specific elements of impact assessment relating to projects giving rise to GHG emissions can be identified.

In relation to Articles 205 or 206 of UNCLOS and in the context of what is required in 83. terms of publicity and communication for reports and assessments, regard should be had, with respect to GHG emissions, to provisions of the UNFCCC/Paris Agreement, including Article 13 of the Paris Agreement. This establishes a transparency framework and underlines the need for transparency as to the assessment of GHG emissions arising from projects. In the context of GHG emissions which have implications for the marine environment (that is to say, all GHG emissions), such reports should be published under the auspices of the UNFCCC/Paris Agreement unless another international organisation appears to be more appropriate, such as the International Maritime Organization for shipping related emissions. Parties are required to ensure that environmental impact assessments are effective in the context of assessing the climate impact of GHG emissions. This requires further development of existing practice where this is inadequate, for example through the development of a metric to compare GHG emissions that includes their effect on ocean acidification, as well as climate change more broadly and the inclusion of quantified assessment of scope 3 GHG emissions, particularly where these form the greater part of the emissions from a project.

G. The duty to refrain from directing finance flows toward actions which are inconsistent with a low emissions pathway and/or climate resilient development

As described in paras. 62-64 above, finance flows which are inconsistent with a low emissions pathway and climate resilient development are likely to increase the risk of catastrophic harm to the marine environment by prolonging fossil fuel production and locking in future GHG emissions. This duty to address the risk posed by such finance flows is implicit in Part XII of UNCLOS through the references to "all measures necessary" in Article 194(2) and other necessary measures including those referred to in Articles 207 and 212.

H. The duty to ensure that measures taken to reduce GHG emissions do not themselves cause pollution of the marine environment

The duty to ensure that measures taken to reduce GHG emissions do not themselves cause 85. pollution of the marine environment is relevant in the context of ocean fertilisation bearing in mind the prohibitions adopted under the London Convention and the Convention on Biological Diversity. 106 Parties to UNCLOS must take appropriate positive steps to protect and preserve the marine environment in the light of the global adaptation goal set under the Paris Agreement, including through the reduction of non-

¹⁰⁴ Pulp Mills on the River Uruguay (Argentina v. Uruguay) ICJ Reports 2010, para. 204.

¹⁰⁵ *Ibid.*, para. 205.

¹⁰⁶ It should be noted that the National Academy of Sciences concluded that benefits are outweighed by risks.

climate stressors such as over-fishing and coastal runoff, as well as through coastal zone management and defence. This includes taking current and future impacts of climate change into account in the designation of marine protected areas (this is of particular relevance to Mauritius bearing in mind the marine protected area to be established by Mauritius around the Chagos Archipelago).

I. Loss and damage

- 86. In relation to the specific obligations outlined above, and taking into account the ILC's Draft Articles on State Responsibility, each UNCLOS State Party is required to address loss and damage by reference to *inter alia*:
 - c. the existential threat to small island States and low-lying coastal areas (which includes Mauritius);
 - d. the need to establish early warning systems and address other matters set out in Article 8 of the Paris Agreement;
 - e. slow onset events including the movement of fish stocks away from the tropics;
 - f. the effect on the quality of sea water; and
 - g. the social and economic impacts associated with the environmental impacts of climate change that cannot be avoided through mitigation or adaptation.

J. State responsibility

- 87. The failure of a State to have regard to the science on climate change, and in particular to ignore the urgent need to close the emissions gap, will have consequences for its responsibility under UNCLOS for contributing to the impacts of climate change, including on the marine environment and in particular on those States most vulnerable to those impacts. For the reasons set out above, in the context of harm to the marine environment, such a failure will give rise to a breach of an international obligation under the UNCLOS, having regard also to the UNFCCC/Paris Agreement.
- 88. In this context, the rules on State responsibility, as laid down in the International Law Commission's Articles on State Responsibility, ¹⁰⁷ are relevant including Article 33(1) which states that:

"The obligations of the responsible State set out in this part may be owed to another State, to several States, or to the international community as a whole, depending in particular on the character and content of the international obligation and on the circumstances of the breach."

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¹⁰⁷ ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts (2001), available at: https://legal.un.org/ilc/texts/instruments/english/commentaries/9 6 2001.pdf (last accessed 14 June 2023).

VI. <u>CONCLUSION</u>

- 89. In conclusion, Mauritius submits that the Tribunal has jurisdiction to render the advisory opinion requested, and that there are no compelling reasons to decline to do so.
- 90. As to the exercise of its judicial function, Mauritius invites the Tribunal to give an Advisory Opinion that offers full support to the interpretation and application of UNCLOS in a manner that prevents climate change, contributes to the mitigation of its consequences, and does so to give effect to the international climate regime (UNFCCC and Paris Agreement).
- 91. Accordingly, Mauritius invites the Tribunal to declare that:
 - a. UNCLOS requires Parties to take steps necessary to protect the marine environment from the grave and urgent threat posed by climate change;
 - b. the definition of "pollution" in Article 1(1)(4) includes GHG emissions, as defined by the IPCC;
 - c. UNCLOS requires each Party to take account of, and give effect to, the best available scientific evidence, including in particular that provided by the IPCC, as well as the clear scientific evidence of potentially catastrophic climate change impacts on the marine environment;
 - d. the failure of a Party to take account of, and give effect to, the best available scientific evidence in respect of climate change will expose a State Party to the risk of responsibility and liability under UNCLOS; and
 - e. the interpretation and application of UNCLOS shall be informed by the obligations set forth in the UNFCC and Paris Agreement, including in relation to: (i) the temperature goal; ¹⁰⁸ (ii) the mitigation timetable; ¹⁰⁹ (iii) adaptation; ¹¹⁰ (iv) finance flows; ¹¹¹ (v) sinks; ¹¹² (vi) loss and damage; ¹¹³ (vii) precaution, prevention and taking action on the basis of the best available scientific evidence. ¹¹⁴
- 92. Further, Mauritius invites the Tribunal to declare the following specific obligations of UNCLOS State Parties to (i) 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; and (ii) protect and preserve the marine environment in relation to climate change impacts:

¹⁰⁸ See: Section IV.A above.

¹⁰⁹ See: Section IV.B above.

¹¹⁰ See: Section IV.C above.

¹¹¹ See: Section IV.D above.

¹¹² See: Section IV.E above.

¹¹³ See: Section IV.F above.

¹¹⁴ See: paras. 43 and 69 above.

- a. State Parties shall take steps under Part XII of the Convention, as a matter of urgency to address the grave risk to the marine environment, including by:
 - i. Taking all measures necessary to prevent, reduce and control pollution of the marine environment from any GHG emissions (Article 194(1)), including land-based sources (Article 207) and from vessels (Article 211). This obligation includes measures to reduce GHG emissions (*i.e.*, "pollution" within the meaning of Article 1(1)(4)) in line with the goals, timeframes and emission pathways indicated by the Paris Agreement and the science presented by the IPCC, taking into account the current emissions and production gaps.
 - ii. Adopting, implementing and applying laws, regulations, measures, rules, standards and recommended practices and procedures to minimise, to the fullest extent possible, the release of toxic, harmful or noxious substances, especially those which are persistent, into the marine environment (Article 207(5)).
 - iii. Adopting laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere, taking into account internationally agreed rules, standards and recommended practices, which should be read consistently with the temperature goal and mitigation framework established under the Paris Agreement (Article 212).
- b. State Parties should have due regard to the rights and duties of other Parties, in particular in relation to any act(s) or omission(s) which directly undermine the protection of the marine environment from the impacts of climate change.
- c. State Parties are required to cooperate directly or through competent international organisations to address the causes and impacts of climate change and in particular to address the urgent need to make deep reductions in greenhouse gas emissions. Such cooperation includes formulating and elaborating international rules, standards and recommended practices and procedures consistent with the Convention, with the aim of closing the emissions and production gaps which, in undermining the achievement of the UNFCCC/Paris Agreement goals, directly threaten the marine environment (Article 197).
- d. State Parties are under a duty to conduct due diligence to prevent significant transboundary pollution from greenhouse gas emissions, including by assessing decisions and policies against the temperature goal and mitigation timetable established under the Paris Agreement.
- e. State Parties are required to carry out impact assessments with regard to any policy, practice or decision that will lead to substantial pollution of the marine environment by, including in relation to situations where it may not be possible to identify specific consequences for the marine environment (Articles 205 and 206).
- f. State Parties are under a duty to refrain from directing finance flows toward any policy or action which are inconsistent with a low emissions pathway and/or climate resilient development (Articles 194(2), 207 and 212).

- g. State Parties are required to take appropriate positive steps to protect and preserve the marine environment in the light of the global adaptation goal set under the Paris Agreement, including through the reduction of non-climate stressors such as overfishing and coastal runoff, as well as through coastal zone management and defence (*e.g.*, by designating marine protected areas).
- h. The failure to comply with such obligations under UNCLOS may give rise to responsibility in relation to: (i) loss and damage specifically occasioned by such failure(s); and (ii) contributing to the impacts of climate change more generally, including on the marine environment and in particular on those States most vulnerable to such impacts.

Chris

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Agent for the Republic of Mauritius
16 June 2023