



INTERNATIONAL COURT OF JUSTICE

**REQUEST FOR AN ADVISORY OPINION OF THE INTERNATIONAL COURT OF
JUSTICE ON THE OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE**

WRITTEN STATEMENT OF OPPORTUNITY GREEN

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Contents

CHAPTER 1: INTRODUCTION	4
A. Expertise.....	4
B. Scope of this Submission	4
CHAPTER 2: FACTUAL BACKGROUND	6
A. The Climate Emergency: Scientific Background.....	6
B. IAS and Climate Change.....	9
I. Shipping.....	10
II. Aviation	13
CHAPTER 3: LEGAL FRAMEWORK	16
A. UNFCCC.....	16
B. Kyoto Protocol	17
C. Paris Agreement	18
D. UNCLOS.....	21
E. International Human Rights Treaties.....	23
F. General Principles and Rules	25
I. Prevention Principle	25
II. Precautionary Principle	26
III. CBDR-RC	27
CHAPTER 4: APPLICATION.....	29
A. Obligations of States under the Paris Agreement to mitigate GHG emissions from IAS	30
I. The Paris Agreement calls for global efforts to keep the global average temperature increase to 1.5°C and applies to all sectors, including IAS.....	31
II. The Paris Agreement requires Parties to submit progressive NDCs which reflect the highest possible ambition to stay within 1.5°C, necessarily including actions across all sectors, including IAS	33
III. The outcome of the GST informs the ambition cycle of NDCs, reinforcing the interpretation that progressive NDCs must include emissions from IAS.....	35

IV. The reporting and accounting mechanisms of the Paris Agreement require comprehensive information and accounting covering global emissions across all sectors, including IAS	36
V. Guidance on accounting or reporting cannot override or diminish the substantive obligations of States pursuant to Articles 2 and 4 of the Paris Agreement	39
VI. Notwithstanding the accounting mechanisms, developed countries should include emissions from IAS in their NDCs and developing countries should be working towards such inclusion... 41	
VII. The interpretation that IAS emissions should not be included in NDCs, should only be reported on, and should be addressed under alternative international regimes is manifestly absurd or unreasonable	44
B. Obligations of States under UNCLOS to mitigate anthropogenic GHG emissions from international shipping and aviation.....	46
I. ITLOS Advisory Opinion	47
II. The definition of ‘pollution of the marine environment’ includes GHG emissions and therefore the associated Part XII obligations apply to GHG emissions from shipping and aviation	48
III. States Parties’ due diligence obligations under Part XII UNCLOS require States Parties to take all necessary measures to mitigate, prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the 1.5°C temperature goal of the Paris Agreement	49
IV. States Parties’ specific obligations under Part XII to establish international rules and standards in relation to vessel and aircraft pollution acting through the competent international organization or general diplomatic conference.....	50
V. States Parties’ must take unilateral and/or regional action to satisfy their due diligence obligations under Part XII UNCLOS to the extent that international rules and standards remain insufficient	52
VI. In particular, Flag and Port States have obligations to regulate GHG emissions from vessels and enforce such regulations to discharge their obligations under Part XII of UNCLOS	53
CHAPTER 5: CONCLUSION.....	55

CHAPTER 1: INTRODUCTION

1. This written statement (the “**Submission**”) is made by Opportunity Green with respect to the request for an advisory opinion regarding the obligations of States in respect of climate change transmitted to the International Court of Justice (the “**Court**” or “**ICJ**”) pursuant to United Nations General Assembly (“**UNGA**”) resolution 77/276 of 29 March 2023.

B. Expertise

2. Opportunity Green is a United Kingdom (“**UK**”) registered charity (registered UK charity number: 1199413) and non-governmental organization (“**NGO**”) that has as its charitable objects the promotion and advancement of the conservation, protection and enhancement of the environment. Opportunity Green uses legal, economic and policy knowledge to tackle climate change. It does this by amplifying diverse voices, forging ambitious collaborations and using legal innovation to motivate decision makers and achieve climate justice.
3. Opportunity Green has particular expertise in the legal and regulatory frameworks governing shipping and aviation policy in the UK, European Union (“**EU**”), and internationally. The organization regularly advises other NGOs and policymakers on both legal and political processes and policies in relation to decarbonisation and has published several legal opinions and papers on the same issues. Opportunity Green also has specific expertise in shipping decarbonisation policy at the international level. It works with climate vulnerable countries, who are traditionally under-resourced and underrepresented at the International Maritime Organization (“**IMO**”), providing them with briefing notes, facilitating information sharing and networking events and hosting bilateral meetings as required to help in the preparation of countries’ positions.

B. Scope of this Submission

4. The Court has been requested by UNGA to address the following questions (the “**Questions**”):

Having particular regard to the Charter of the United Nations, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the United Nations Framework Convention on Climate Change, the Paris Agreement, the United Nations Convention on the Law of the Sea, the duty of due diligence, the rights recognized in the Universal Declaration of Human Rights, the principle

of prevention of significant harm to the environment and the duty to protect and preserve the marine environment,

(a) What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations?

(b) What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to:

(i) States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change?

(ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?

5. This Submission seeks to assist the Tribunal in answering the above Question (a). In light of Opportunity Green’s specialist expertise (outlined in paragraph 3), this Submission focuses on the specific obligations of States in relation to mitigation of emissions from international aviation and shipping (“IAS”) under international law, and particularly, the United Nations Framework Convention on Climate Change (“UNFCCC”),¹ the Paris Agreement² and the United Nations Convention on the Law of the Sea (“UNCLOS”).³

¹ United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107.

² Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS 1.

³ United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.

CHAPTER 2: FACTUAL BACKGROUND

- Chapter 2 provides a brief factual background: first of the climate emergency; and second of the contribution of IAS to the climate crisis and international regulation of these two sectors to date.

A. The Climate Emergency: Scientific Background

- This section sets out the scientific background to the climate emergency, including its principal causes and impacts (both in general and specific to the marine environment), and the status of mitigation efforts.
- In 2023, the Intergovernmental Panel on Climate Change (“IPCC”) published the Synthesis Report of the Sixth Assessment Report which summarises the state of knowledge of the climate crisis for policymakers.⁴
- The IPCC confirmed with *high confidence* that human activities, mainly through the emission of greenhouse gases (“GHG”), have ‘unequivocally’ caused global warming, with global surface temperature having reached 1.1°C above pre-industrial levels in 2011–2020.⁵ Global mean near-surface temperature in 2023 reached approximately 1.40 ± 0.12°C above 1850–1900 average, making it virtually certain that 2023 was the warmest year on record. In fact, the past nine years (2015–2023) were the nine warmest years on record.⁶
- The IPCC further observed with *high confidence* that anthropogenic climate change has caused widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere, and is already affecting many weather and climate extremes in every region across the globe. This in turn has caused widespread adverse impacts and related losses and damages to the environment and to people (*high confidence*), with unequal impacts: vulnerable communities who have historically contributed least to this crisis are disproportionately affected (*high confidence*).⁷

⁴ IPCC, ‘Summary for Policymakers’ in Hoesung Lee and José Romero (eds), *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC 2023)

<www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf> accessed 7 March 2024.

⁵ *ibid* 4.

⁶ World Meteorological Organization, *Provisional State of the Global Climate 2023* (World Meteorological Organization 2023) <<https://wmo.int/files/provisional-state-of-global-climate-2023>> accessed 7 March 2024.

⁷ IPCC, *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (n 4) 5.

11. In 2019, the IPCC released a special report dedicated to the effects of anthropogenic climate change on the ocean and the cryosphere.⁸ These changes have also been well documented in successive reports.⁹ Broadly, the IPCC noted that the absorption of excess heat by the ocean has resulted in the rate of ocean warming doubling since 1993 (*likely*). The IPCC found it *very likely* that heat-related events like marine heatwaves had doubled in frequency since 1982 and increased in intensity (*very high confidence*). Further, through the absorption of excess carbon dioxide (“CO₂”), the ocean has suffered increasing surface acidification (*virtually certain*) and deoxygenation (*medium confidence*).¹⁰ The IPCC also noted (with *very high confidence*) the accelerated rising of global mean sea level, due to increasing rates of ice loss from Greenland and Antarctic ice sheets.¹¹ These stressors are projected to intensify and associated extreme events are expected to occur more frequently.¹²
12. The IPCC clearly stated with *high confidence* that continued GHG emissions will lead to increasing global warming, and that every increment of global warming will intensify multiple and concurrent hazards (*high confidence*).¹³ Therefore, deep, rapid and sustained GHG emissions reductions are needed.¹⁴ The foregoing is exacerbated by the fact that climate-related risks are higher than

⁸ IPCC, *Special Report on the Ocean and Cryosphere in a Changing Climate* in Hans-Otto Pörtner and others (eds), (CUP 2019) <www.ipcc.ch/site/assets/uploads/sites/3/2022/03/SROCC_FullReport_FINAL.pdf> accessed 7 March 2024.

⁹ See for example IPCC, *Synthesis Report of the IPCC Sixth Assessment Report (AR6): Longer Report* in Paola Arias and others (eds), (IPCC 2023) <www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf> accessed 7 March 2024; IPCC, ‘Summary for Policymakers’ in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) <www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf> accessed 7 March 2024; IPCC, ‘Oceans and Coastal Ecosystems and Their Services’ in Hans-Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) <www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf> accessed 7 March 2024; IPCC, ‘Small Islands’ in Hans Otto Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) <www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf> accessed 7 March 2024; IPCC, ‘Summary for Policymakers’ in Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2021) <www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf> accessed 7 March 2024; IPCC, *Regional Fact Sheet- Oceans* (IPCC 2021) <www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Ocean.pdf> accessed 7 March 2024; IPCC, *Regional Fact Sheet - Small Islands* (IPCC 2021) <www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Small_Islands.pdf> accessed 7 March 2024.

¹⁰ IPCC, *Special Report on the Ocean and Cryosphere in a Changing Climate* (n 8) 9.

¹¹ *ibid* 10.

¹² *ibid* 17–28.

¹³ IPCC, *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (n 4) 12.

¹⁴ *ibid* 12, 18, 22.

previously assessed and projected long-term impacts are multiple times higher than currently observed (*high confidence*). Climate-related risks and projected impacts as well as related losses and damages escalate with every increment of global warming (*very high confidence*).¹⁵

13. As global warming increases, so do the likelihood and impacts of abrupt and/or irreversible changes in the climate system, including changes triggered when tipping points are reached. While some future changes are unavoidable and/or irreversible, the IPCC reaffirmed with *high confidence* that they can be limited by deep, rapid and sustained global GHG emissions reduction.¹⁶
14. Limiting anthropogenic climate change ultimately requires net zero CO₂ emissions. Cumulative emissions up to reaching net zero CO₂ emissions and the greenhouse gas emissions reductions undertaken this decade largely determine whether the global temperature increase can be limited to 1.5°C or 2°C (*high confidence*).¹⁷ The IPCC emphasised with *high confidence* that all global modelled pathways that limited warming to 1.5°C or 2°C, involve rapid, deep and, in most cases, immediate GHG emissions reductions in all sectors this decade.¹⁸
15. In 2018, the IPCC published a specific report on the 1.5°C temperature threshold, in which it discussed the severe impacts of 1.5°C global warming, concluding that a temperature increase of 2°C would result in even higher impacts.¹⁹ Crucially, limiting global warming to 1.5°C also reduces the probability of crossing tipping points.²⁰ The remaining carbon budget estimate for (only) a 50% chance of limiting global warming to 1.5°C is approximately 250 gigatons of CO₂ as of January 2023; this is about six years of current CO₂ emissions.²¹
16. The necessity of near-term responses could not be more urgent. The IPCC stated with *very high confidence* that there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.²² Rapid and far-reaching transitions across all sectors and systems are necessary to achieve deep and sustained emissions reductions and secure this future (*high confidence*).²³

¹⁵ *ibid* 14.

¹⁶ *ibid* 18.

¹⁷ *ibid* 19.

¹⁸ *ibid* 20.

¹⁹ IPCC, 'Summary for Policymakers' in Valérie Masson-Delmotte and others (eds), *Special Report on Global Warming of 1.5 °C* (CUP 2018) <www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SPM_version_report_LR.pdf> accessed 7 March 2024.

²⁰ David I. Armstrong McKay and others, 'Exceeding 1.5°C global warming could trigger multiple climate tipping points' (2022) 377(6611) *Science* 1.

²¹ Robin D. Lamboll and others, 'Assessing the size and uncertainty of remaining carbon budgets' (2023) 13 *Nature Climate Change* 1360.

²² IPCC, *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (n 4) 24.

²³ *ibid* 28.

17. While mitigation efforts, including policies and laws, have continued to expand, global GHG emissions in 2023 which are implied by nationally determined contributions (“NDCs”) announced by October 2021 make it *likely* that warming will exceed 1.5°C during the 21st century and make it harder to limit warming below 2°C. Next to this so-called ‘emissions gap’²⁴ there is also an ‘implementation gap’,²⁵ as well as shortcomings of the necessary finance flows to meet climate goals across all sectors and regions (*high confidence*).²⁶
18. This ‘emissions gap’ was further highlighted in the most recent Emissions Gap Report, published by the United Nations Environment Programme in 2023 (“UNEP”).²⁷ The emissions gap in 2030 was found to remain high: current unconditional NDCs imply a 22 gigaton of CO₂ equivalent gap for the 1.5°C goal. If conditional NDCs were implemented in addition, this estimate would be reduced by 3 gigaton of CO₂ equivalent.²⁸ To this end, UNEP has called on all countries to urgently accelerate economy-wide, low-carbon transformations to achieve the long-term temperature goal of the Paris Agreement.²⁹

B. IAS and Climate Change

19. The shipping and aviation sectors are major polluters and contribute to almost 4.8% of global GHG emissions combined.³⁰ Emissions from domestic shipping and aviation account for around 2.1% of this total, while GHG emissions from international shipping and aviation make up 2.7%.³¹ It is crucial to note that the estimated contribution of aviation to global greenhouse gas emissions is exclusive of consideration of its ‘non-CO₂’ effects, as outlined in paragraph 33.
20. Moreover, the two sectors are poorly regulated in terms of GHG emissions. While domestic emissions are nationally accounted for, international emissions are not. Unless regulation leads to

²⁴ Emissions gaps are the difference between the emission levels implied by the NDCs and the average emission levels of global modelled mitigation pathways consistent with limiting warming to 1.5°C or 2°C.

²⁵ Implementation gaps refer to how far currently enacted policies and actions fall short of reaching stated targets.

²⁶ IPCC, *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (n 4) 10.

²⁷ UNEP, *Emissions Gap Report 2023: Broken Record* (UNEP 2023) <www.unep.org/emissions-gap-report-2023> accessed 7 March 2024.

²⁸ *ibid* XX.

²⁹ *ibid* XXIII.

³⁰ Global shipping accounts for 2.89% of GHG emissions: Jasper Faber and others, *Fourth IMO GHG Study 2020* (IMO 2020) 112 <www.imo.org/en/ourwork/Environment/Pages/Fourth-IMO-Greenhouse-Gas-Study-2020.aspx> accessed 7 March 2024. Global aviation accounts for 1.9% of GHG emissions: Hannah Ritchie, ‘Climate change and flying: what share of global CO₂ emissions come from aviation?’ (*Our World in Data*) <<https://ourworldindata.org/co2-emissions-from-aviation>> accessed 7 March 2024.

³¹ Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, ‘Nationally determined contributions under the Paris Agreement: Synthesis report by the secretariat’ (14 November 2023) UN Doc FCCC/PA/CMA/2023/12, 13, footnote 13.

further mitigation in the IAS sectors, the combined emissions of those sectors ‘will consume around 60–220% of the available global CO₂ budget by 2050, even when the benefits of technological advances are included.’³²

I. Shipping

21. The entire shipping sector (international, domestic and fishing) is responsible for approximately 2.89% of global GHG emissions.³³ Between 2012 and 2018, the GHG emissions of shipping have increased by 9.6%; from 977 million tonnes in 2012 to 1,076 million tonnes in 2018.³⁴
22. If no further action is taken to decarbonise the sector, CO₂ emissions from shipping are projected to increase by up to 130% of 2008 emission levels by 2050, compared to 90% of 2008 emissions in 2018.³⁵ Considering that the demand for shipping has increased faster than fuel efficiency improvements, mainstreaming shipping decarbonisation objectives is increasingly urgent to achieve the 1.5°C temperature goal of the Paris Agreement.³⁶
23. The IMO is the specialised agency of the United Nations (“UN”) responsible for setting global standards for the safety, security and environmental performance of international shipping which are enforced by flag States and port States. The IMO’s main role is to establish a framework for the shipping industry that is fair and effective, universally adopted and universally implemented.
24. To date, the IMO has promoted the adoption of some 50 conventions and protocols and adopted more than 1,000 codes and recommendations concerning maritime safety and security, the prevention of pollution and related matters. The most important maritime environmental convention adopted by the IMO is the International Convention on the Prevention of Marine Pollution from Ships (the “**MARPOL Convention**”).³⁷

³² UNEP, *Emissions Gap Report 2020* (UNEP 2020) 55 <<https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34426/EGR20.pdf?sequence=1&isAllowed=y>> accessed 7 March 2024.

³³ Faber and others (n 30) 112.

³⁴ *ibid* 1.

³⁵ *ibid* 3.

³⁶ United Nations Conference on Trade and Development, *Review of Maritime Transport 2023: Towards a green and just transition* (UN 2023) 59 <https://unctad.org/system/files/official-document/rmt2023_en.pdf> accessed 7 March 2024.

³⁷ The International Convention on the Prevention of Marine Pollution from Ships (adopted 2 November 1973, entered into force 2 October 1983) and its Protocol of 1978 (adopted 17 February 1978, entered into force 1 October 1983) 1340 UNTS 62.

25. In 1997, a new annex was added to the MARPOL Convention. The Regulations for the Prevention of Air Pollution from Ships (“**Annex VI**”)³⁸ seek to minimise airborne emissions from ships and their contribution to local and global air pollution and environmental problems. Annex VI entered into force in 2005 and a number of revisions have since added to the regulation of GHG emissions. These include, for example:
- i. Energy Efficiency Design Index (“EEDI”):³⁹ Adopted in 2011, EEDI requires new ships to meet a certain technical energy efficiency in their design. However, EEDI has not yet driven efficiency beyond business as usual, nor does it require energy efficiency improvements to reduce emissions to zero by any year.⁴⁰
 - ii. The Ship Energy Efficiency Management Plan (“SEEMP”):⁴¹ Adopted in 2011 alongside EEDI, SEEMP recommends optimal technologies to increase ship and fleet energy efficiency performance to ship operators. It also offers a monitoring tool to manage efficiency performance overtime. In 2022, the IMO published a set of guidelines on the development of a SEEMP. The development of a SEEMP is mandatory, however discretion is left to the ship owner as to the contents of the plan.⁴²
 - iii. Energy Efficiency Index for Existing Ships (“EEXI”):⁴³ Adopted in 2021, EEXI is designed to meet the current IMO goal of a 40% improvement in carbon intensity in all ships compared to 2008. EEXI requires ship operators to improve the technical energy efficiency of existing ships to catch up with new ships of the same type and deadweight.
 - iv. Carbon Intensity Indicator (“CII”):⁴⁴ Adopted in 2021 together with the EEXI, CII introduces a linear reduction of in-service carbon intensity of ships between 2023 and 2030. Ships are rated from A to E, with A being the most efficient. Ships rating D for three years

³⁸ Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (adopted 26 September 1997, entered into force 19 May 2005) TIAS no. 9–108.

³⁹ Resolution MEPC.203(62), ‘2011 Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (inclusion of regulations on energy efficiency for ships in MARPOL Annex VI)’ (adopted 15 July 2011).

⁴⁰ Dan Rutherford, Xiaoli Mao and Bryan Comer, *Potential CO2 reductions under the Energy Efficiency Existing Ship Index* (International Council on Clean Transportation 2020) <<https://theicct.org/wp-content/uploads/2021/06/Marine-EEXI-nov2020.pdf>> accessed 7 March 2024.

⁴¹ Resolution MEPC.203(62) (n 39).

⁴² Elin Kragesand Hansen, Hanna Barbara Rasmussen and Marie Lützen, ‘Making shipping more carbon-friendly? Exploring ship energy efficiency management plans in legislation and practice’ (2020) 65(101459) *Energy Research & Social Science* 1, 2.

⁴³ Resolution MEPC.328(76), ‘Amendments to the Annex of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating there to (2021 Revised MARPOL Annex VI)’ (adopted 17 June 2021).

⁴⁴ *ibid.*

or E for one year have to submit a plan for how they will improve performance to C or above. Ports are ‘encouraged’ to provide incentives to ships with good ratings, however, no enforcement is proposed. Improvement in CII per year of 1% in 2020–2022 and 2% in 2023–2026 is anticipated, but no further reduction factors are set.

26. A 2022 study highlights that the stringency levels of standards such as the EEDI, EEXI and CII are too low to lead to significant emissions reductions.⁴⁵
27. In addition to these measures, the Initial IMO Strategy on Reduction of GHG Emissions from Ships (“**Initial GHG Strategy**”) was adopted by the Marine Environment Protection Committee during its 72nd session (MEPC 72), in April 2018.⁴⁶ A 2023 IMO Strategy on Reduction of GHG Emissions from Ships (the “**Revised GHG Strategy**”) was adopted at the 80th session of the Marine Environment Protection Committee (MEPC 80), in July 2023.⁴⁷
28. The Revised GHG Strategy increases the level of ambition compared to the Initial GHG Strategy. It commits States to the uptake of zero or near-zero GHG emission technologies, fuels and/or energy sources to represent at least 5%, striving for 10%, of the energy used by international shipping by 2030, to peak GHG emissions from international shipping as soon as possible and to reach net zero emissions by or around 2050. The Revised GHG Strategy also includes ‘indicative checkpoints’ to reach net zero: to reduce the total annual GHG emissions from international shipping by at least 20%, striving for 30%, by 2030, compared to 2008; and by at least 70%, striving for 80%, by 2040, compared to 2008.
29. Despite making considerable improvements to the Initial GHG Strategy, the Revised GHG Strategy still fails to align with the 1.5°C temperature goal of the Paris Agreement.⁴⁸ Thus, even in light of the Revised GHG Strategy, international shipping’s climate action is considered to be ‘highly insufficient’.⁴⁹ Moreover, measures to implement the Revised GHG Strategy are yet to be adopted.

⁴⁵ Domagoj Baresic and others, *Closing the Gap: An Overview of the Policy Options to Close the Competitiveness Gap and Enable an Equitable Zero-Emission Fuel Transition in Shipping* (UMAS 2022) 47 <www.globalmaritimeforum.org/content/2021/12/Closing-the-Gap_Getting-to-Zero-Coalition-report.pdf> accessed 7 March 2024.

⁴⁶ Resolution MEPC.304(72), ‘Initial IMO Strategy on Reduction of GHG Emissions from Ships’ (adopted 13 April 2018).

⁴⁷ Resolution MEPC.377(80), ‘2023 IMO Strategy on Reduction of GHG Emissions from Ships’ (adopted 07 July 2023); Resolution MEPC.304(72), ‘Initial IMO Strategy on Reduction of GHG Emissions from Ships’ (adopted 13 April 2018).

⁴⁸ Simon Bullock, James Mason and Alice Larkin, ‘Are the IMO’s new targets for international shipping compatible with the Paris Climate Agreement?’ (2023) *Climate Policy* 1.

⁴⁹ ‘International Shipping’ (*Climate Action Tracker*, 12 October 2023) <<https://climateactiontracker.org/sectors/shipping/>> accessed 7 March 2024. This rating takes into consideration the newly revised strategy.

II. Aviation

30. Global aviation currently accounts for approximately 2.4% of annual global CO₂ emissions.⁵⁰ The climate impact of aviation is expected to increase in the future, and aviation's share of global CO₂ emissions could rise to an estimated 22% by 2050.⁵¹ This is due to two principal factors.
31. First, the sector is constantly expanding (except during the Covid-19 pandemic). Global aviation has increased from 310 million passenger journeys in 1970 to 4.5 billion passenger journeys in 2019.⁵² CO₂ emissions from aviation have undergone 'sustained multi-decade growth': the average growth rate in CO₂ emissions between 2013 and 2018 was 27% higher than the growth rate over the period 1970 to 2012. Over the last three decades, CO₂ emissions from the sector have increased by approximately 140%.⁵³ Such growth is projected to continue and 'air travel and emissions are projected to more than double up to 2050'.⁵⁴
32. Second, aviation is difficult to decarbonise and efforts are proceeding significantly more slowly than in other sectors. To date, CO₂ reductions from aviation have relied principally on technological efficiency gains in engine design, yet such gains have always been outweighed by the growth in demand referred to above⁵⁵ and are limited by inherently long technology development times and asset lifetimes.⁵⁶ Projections show that growth of air travel will continue to be considerably greater than the likely reductions in emissions from technological improvements.⁵⁷
33. The impact of aviation on climate change is amplified by the effects of 'non-CO₂ emissions' (including gases such as sulphur dioxide and nitrogen oxides) at altitude. When such non-CO₂ emissions are taken into account, global aviation accounts for approximately 4% of all observed anthropogenic global warming up to 2021 (the majority of which has occurred since 1990).⁵⁸

⁵⁰ D.S. Lee and others, 'The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018' (2021) 244(117834) *Atmospheric Environment* 1, 4.

⁵¹ European Parliament's Committee on Environment, Public Health and Food Safety ("ENVI"), *Emission Reduction Targets for International Aviation and Shipping*, in Martin Cames and others (eds), (ENVI 2015) 9 <[www.europarl.europa.eu/RegData/etudes/STUD/2015/569964/IPOL_STU\(2015\)569964_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2015/569964/IPOL_STU(2015)569964_EN.pdf)> accessed 7 March 2024.

⁵² *ibid* 1.

⁵³ ENVI, *International Climate Negotiations Issues at stake in view of the COP28 UN Climate Change Conference in Dubai and beyond*, in Sienna Healy and others (eds), (ENVI 2023) 26 <[www.europarl.europa.eu/thinktank/en/document/IPOL_STU\(2023\)754191](http://www.europarl.europa.eu/thinktank/en/document/IPOL_STU(2023)754191)> accessed 7 March 2024.

⁵⁴ *ibid* 27.

⁵⁵ ICAO, *Environmental Report 2022: Innovation for a Green Transition* (ICAO 2022) 104-220 <www.icao.int/environmental-protection/Documents/EnvironmentalReports/2022/ICAO%20ENV%20Report%202022%20F4.pdf> accessed 7 March 2024.

⁵⁶ UNEP, *Emissions Gap Report 2020* (n 32) 60.

⁵⁷ *ibid* 56.

⁵⁸ Milan Klöwer and others, 'Quantifying aviation's contribution to global warming' (2021) 16(104027) *Environmental Research Letters* 1, 4.

34. In light of the above evidence of aviation’s impact on climate change, ‘a drastic course correction is needed for aviation to be compatible with the goals of the Paris Agreement’.⁵⁹ Indeed, CO₂ emissions from aircraft need to peak between 2025–2030 in order to align with the Paris Agreement,⁶⁰ and international aviation must be completely decarbonised by around 2050 for 1.5°C alignment.⁶¹ In reality, however, the current trajectory for international aviation is consistent with a 4°C+ pathway.⁶²
35. The International Civil Aviation Organization (“ICAO”) is a UN agency serving as the global forum of States for international civil aviation. ICAO has adopted two principal initiatives relevant to climate change.
36. In 2016, the Carbon Offsetting and Reduction Scheme for International Aviation (“CORSA”) was adopted. CORSA is a market-based mechanism to offset emissions which are above 2019 emissions levels using carbon offsets. This mechanism will become mandatory in 2027. However, CORSA has a number of critical shortcomings, including among other things:⁶³
- i. a high baseline resulting in a low level of emissions being captured by CORSA;
 - ii. its ‘carbon neutral growth’ goal being insufficiently ambitious;
 - iii. its failure to capture non-CO₂ emissions;
 - iv. quality issues with the carbon credits; and
 - v. compliance and enforceability issues.
37. Relying on ‘out of sector’ offsetting means that CORSA drives no absolute emissions reductions in the aviation sector; emissions could increase with a net effect of no overall reductions.⁶⁴ The result ‘is in stark contrast with the reduction pathway necessary for limiting warming to within 1.5°C’.⁶⁵

⁵⁹ ENVI, *International Climate Negotiations Issues at stake in view of the COP28 UN Climate Change Conference in Dubai and beyond* (n 53) 27.

⁶⁰ Brandon Graver and others, *Vision 2050: Aligning Aviation with the Paris Agreement* (International Council on Clean Transportation (ICCT) 2022) 27 <<https://theicct.org/publication/global-aviation-vision-2050-align-aviation-paris-jun22/>> accessed 7 March 2024.

⁶¹ UNEP, *Emissions Gap Report 2020* (n 32) 55.

⁶² ‘International Aviation’ (*Climate Action Tracker*, 22 September 2022) <<https://climateactiontracker.org/sectors/aviation/>> accessed 7 March 2024.

⁶³ ENVI, *International Climate Negotiations Issues at stake in view of the COP28 UN Climate Change Conference in Dubai and beyond* (n 53) 21.

⁶⁴ UNEP, *Emissions Gap Report 2020* (n 32) 59.

⁶⁵ ebd.

38. In 2022, the ICAO Assembly adopted a collective long-term global aspirational goal of net zero carbon emissions in international aviation by 2050 (“**LTAG**”).⁶⁶ However, ICAO has not set out a pathway to meet the LTAG and it is unclear how it will be met.⁶⁷ The agreement is not in line with the 1.5°C goal; possible temperature outcomes are estimated to range from 1.6°C to 2.3°C.⁶⁸ Further, the LTAG is not binding and is intended to keep aviation on a ‘sustainable growth’ pathway.⁶⁹
39. ICAO has ‘patently failed to exercise leadership in mitigation action in international civil aviation over the last three decades’.⁷⁰ Given its objective is ‘the safe and orderly growth of international civil aviation’ and it has no specific mandate for environmental protection,⁷¹ that is perhaps not surprising. ICAO has attempted to keep climate mitigation under its purview, reflecting ‘a distrust not only of initiatives adopted under the UNFCCC regime, but also of any national (“unilateral”) measures “which would adversely affect the orderly development of international civil aviation”’.⁷² As such, ICAO has taken the initiative on climate mitigation ‘only when and in so far as this was necessary to prevent other organizations, or states, from adopting more effective measures’.⁷³
40. Consequently, ICAO initiatives on climate change mitigation are limited and ineffective (see paragraphs 35–39). This stems from an underlying tension, if not direct contradiction, between ICAO’s primary objective of growth and the mitigation objective of the international climate law regime, given international aviation is a sector which cannot simultaneously grow and reduce its emissions (at least in the short to medium term) (see paragraph 39).
41. In the context of increasing climate impacts from international aviation and in the absence of effective ICAO initiatives, significant action by states is required to meet the deep, rapid and immediate GHG emissions reductions that are needed in the aviation sector. Indeed, the International Council on Clean Transportation finds that ‘early, aggressive and sustained government intervention’ is required, which ‘triggers widespread investments in zero-carbon aircraft and fuels, peaking fossil jet fuel use in 2025 and zeroing it out by 2050’.⁷⁴ Even in that scenario, the sector’s emission

⁶⁶ Resolution A41-21, ‘Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change’ (adopted 7 October 2023).

⁶⁷ Jan Fuglestvedt and others, ‘A “greenhouse gas balance” for aviation in line with the Paris Agreement’ (2023) 14(4) WIREs Climate Change 1, 11.

⁶⁸ Shraeya Mithal and Dan Rutherford, *ICAO’s 2050 net-zero CO₂ goal for international aviation* (ICCT 2023) 3 <<https://theicct.org/wp-content/uploads/2022/12/global-aviation-ICAO-net-zero-goal-jan23.pdf>> accessed 6 March 2024.

⁶⁹ Resolution A41-21 (n 66), preamble, paragraphs 6–7.

⁷⁰ Benoit Mayer and Zhuoqi Ding, ‘Climate Change Mitigation in the Aviation Sector: A Critical Overview of National and International Initiatives’ (2022) 12(1) Transnational Environmental Law 17, 26.

⁷¹ Article 44(a) of the Chicago Convention on International Civil Aviation (adopted 7 December 1944, entered into force 4 March 1947) 15 UNTS 295 (the “**Chicago Convention**”).

⁷² Mayer and Ding (n 70) 35.

⁷³ *ibid* 39.

⁷⁴ Graver and others (n 60) 18.

reductions would only be consistent with a 1.75°C temperature rise,⁷⁵ so would not meet the 1.5°C temperature aim of the Paris Agreement.

CHAPTER 3: LEGAL FRAMEWORK

42. Article 38(1) of the Statute of the Court⁷⁶ sets out the sources of law which the Court shall apply. Primary sources include treaties, customary international law and general principles. The Court may also refer to judicial decisions and scholarship as a subsidiary source.
43. Chapter 3 will set out the legal framework applicable to emissions from IAS for the purposes of answering Question (a), focusing on:
 - i. Treaty law, in particular, the UNFCCC, the Paris Agreement, UNCLOS and international human rights treaties; and
 - ii. General principles and rules, in particular, the principle of prevention of significant harm to the environment (the “**Prevention Principle**”), the precautionary principle and the principle of common but differentiated responsibility and respective capabilities (“**CBDR-RC**”).

A. UNFCCC

44. The overarching international framework treaty governing anthropogenic climate change is the UNFCCC which was adopted on 9 May 1992 and entered into force on 21 March 1994. The objective of the UNFCCC is set out in Article 2 (emphasis added):

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. [...]

45. Article 3(3) UNFCCC emphasises the importance of covering all sources of greenhouse gases as well as economic sectors in anticipating, preventing and minimising the causes of climate change and mitigating its adverse effects (emphasis added):

⁷⁵ *ibid* 22.

⁷⁶ Statute of the International Court of Justice (adopted 26 June 1945, entered into force 24 October 1945) 33 UNTS 993.

[...] To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

46. The most significant general commitments in the UNFCCC concern national inventories and reporting:⁷⁷
- i. Article 4(1)(a) UNFCCC imposes on Parties a procedural obligation, taking into consideration their common but differentiated responsibilities, to ‘develop, periodically update, publish and make available to the Conference of the Parties’ national GHG emissions inventories. The national inventories are based on comparable methodologies which are agreed upon by the Conference of the Parties (“COP”) (Articles 4 and 12 UNFCCC). The COP has agreed to use the inventory guidelines adopted by the IPCC for this purpose (see paragraphs 118–121).⁷⁸
 - ii. Article 4(1)(b) UNFCCC imposes on Parties a substantive obligation to ‘[f]ormulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources [...].’

B. Kyoto Protocol⁷⁹

47. The Kyoto Protocol was adopted on 11 December 1997 and entered into force on 16 February 2005. The Kyoto Protocol operationalised the UNFCCC through agreed targets which committed 37 industrialised countries and economies in transition, as well as the European Union, to limit and reduce GHG emissions. It imposed quantified targets for two commitment periods from 2008 until 2020. The second commitment period ended in 2020 and the Kyoto Protocol is now superseded by the Paris Agreement.
48. Article 2(2) of the Kyoto Protocol specifically addresses emissions from IAS:

⁷⁷ Daniel Bodansky, Jutta Brunée and Lavanya Rajamani, *International Climate Change Law* (OUP 2017), 130.

⁷⁸ Decision 4/CP.1, ‘Methodological Issues’ (6 June 1995) UN Doc FCCC/CP/1995/7/Add.1, paragraphs 1(a)–(b).

⁷⁹ Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 11 December 1997, entered into force 16 February 2005) 2303 UNTS 162.

The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

Article 2(2) of the Kyoto Protocol did not, however, confer exclusive competence on either ICAO or the IMO.⁸⁰

C. Paris Agreement

49. The Paris Agreement was adopted on 12 December 2015 and entered into force on 4 November 2016. Article 2(1)(a) of the Paris Agreement contains the long-term temperature goal. It provides:

This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change [...] including by: (a) Holding the increase in the global temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; [...]⁸¹

The temperature goal must be read against the ultimate objective of the UNFCCC (see paragraph 44).⁸²

50. Article 4(1) of the Paris Agreement provides further context by setting out the required pathway to achieve the temperature goal:

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible [...] and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic

⁸⁰ See Henrik Ringbom, 'Regulating Greenhouse Gases from Ships: Some Light at the End of the Funnel?' in Elise Johansen, Signe Veierud Busch, Ingvild Ulrikke Jakobsen (eds), *The Law of the Sea and Climate Change* (CUP 2021) 135–137; Chris Lyle, 'Beyond ICAO's CORSIA: Towards a More Climatically Effective Strategy for Mitigation of Civil Aviation Emissions' (2018) 8 *Climate Law* 104, 104.

⁸¹ Article 2(1) of the Paris Agreement.

⁸² "In pursuit of the objective of the Convention" (emphasis added) Preamble of the Paris Agreement, paragraph 3.

emissions by sources and removals by sinks of greenhouse gases in the second half of this century [...].

51. The ‘balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases’ produces a second emissions goal to the peaking and rapid reduction of GHG emissions in line with the best available science (see paragraph 101): to achieve net zero emissions in the second half of the century in line with the long-term temperature goal.⁸³

52. The mechanism through which each Party communicates its actions to reduce GHG emissions to reach the temperature goal is its ‘nationally determined contribution’ (“**NDC**”). Article 3 of the Paris Agreement, which incorporates a ratchet-up mechanism alongside Articles 4(2) and 4(3), states:

As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this Agreement.

53. Article 4(2) of the Paris Agreement provides that:

Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

54. Under Article 4(3) of the Paris Agreement, each Party’s successive NDC ‘will represent a progression’ beyond the Party’s then current NDC and ‘reflect its highest possible ambition’ according to the principle of CBDR-RC, in the light of different national circumstances.

55. The progression mechanism in Article 4(3) and the cross-cutting provision in Article 3 are connected to another key element of the Paris Agreement: the global stocktake (the “**GST**”). Article 4(9) of the Paris Agreement stipulates that the outcome of the GST ‘shall’ be used to inform Parties’ progression in relation to their NDCs. Further, Article 14(3) of the Paris Agreement states that the outcome of

⁸³ Daniel Bodansky, ‘The Legal Character of the Paris Agreement’ (2016) 25 *Review of European, Comparative & International Environmental Law* 142, 145.

the GST ‘shall inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement [...]’.

56. The emissions reduction targets communicated under NDCs should be economy-wide (developed country Parties) and should become, over time, economy-wide (developing country Parties). Article 4(4) of the Paris Agreement stipulates as follows:

Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.

57. In order to assess whether or not NDCs are aligned with the overarching temperature goal, the Paris Agreement establishes certain reporting and accounting obligations on the Parties.

58. Pursuant to Article 4(8) of the Paris Agreement, when communicating their NDCs, Parties shall:

provide the information necessary for clarity, transparency and understanding in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement.

59. Further, under Article 4(13) of the Paris Agreement:

Parties shall account for their nationally determined contributions. In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting, in accordance with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

60. These reporting and accounting obligations are bolstered by the establishment of an ‘enhanced transparency framework’ for action and support under Article 13 of the Paris Agreement. Such transparency framework ‘shall build on and enhance the transparency arrangements under the Convention’ (Article 13(3) of the Paris Agreement). The purpose of the framework for transparency of action is as follows (Article 13(5) of the Paris Agreement):

to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties' individual nationally determined contributions under Article 4.

61. As such, the enhanced transparency framework is intended to, among other things, to track Parties' progress towards achieving their NDCs to provide a clear understanding of climate change action in light of the ultimate objective of the UNFCCC (see paragraph 44); and to provide a consistent, global overview of anthropogenic emissions and climate action and support.

62. As part of the Parties' obligations under the transparency framework, each Party is required to provide the following information pursuant to Article 13(7) of the Paris Agreement:

(a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Agreement; and

(b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.

63. Pursuant to Article 13(13) of the Paris Agreement, the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement ("CMA") is to adopt 'common modalities, procedures and guidelines, as appropriate, for the transparency of action and support'.

D. UNCLOS

64. The UNCLOS, adopted on 10 December 1982 and entering into force on 16 November 1994, establishes the international legal framework governing the world's oceans.

65. States' obligations in terms of protection and preservation of the marine environment are contained in Part XII. The general obligation in Article 192 UNCLOS provides that 'States have the obligation to protect and preserve the marine environment.'

66. More specifically, Article 194 UNCLOS provides that (emphasis added):

1. 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 this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.

2. States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention.

3. The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:

[...] (b) pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design [...]

67. Such measures shall deal with all sources of ‘pollution of the marine environment’, defined in Article 1(1)(4) UNCLOS as:

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.

68. In addition to the obligations under Article 194 UNCLOS, there are specific obligations under UNCLOS for States to prevent, reduce and control pollution of the marine environment from vessels (Article 211) and to prevent, reduce and control pollution of the marine environment from or through the atmosphere (Article 212).

69. Article 211(1) UNCLOS provides that:

States, acting through the competent international organization or general diplomatic conference, shall establish international rules and standards to

prevent, reduce and control pollution of the marine environment from vessels [...] Such rules and standards shall, in the same manner, be re-examined from time to time as necessary.

70. Article 212 UNCLOS provides that:

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

2. States shall take other measures as may be necessary to prevent, reduce and control such pollution.

3. States, acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control such pollution.

E. International Human Rights Treaties

71. This section shows that States also have obligations in the context of anthropogenic climate change which are grounded in international human rights treaties.

72. It is widely accepted that the climate crisis endangers human rights. The Preamble of the Paris Agreement acknowledges that ‘climate change is a common concern of humankind’ and, in the context of climate action, calls on Parties to:

respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity[.]

73. UN human rights bodies have adopted and published multiple resolutions,⁸⁴ reports⁸⁵ and statements⁸⁶ recognising the far-reaching adverse effects of the climate crisis on a wide range of human rights, including the disproportionate impacts on the most vulnerable populations (see also paragraph 10).
74. UN treaty bodies have repeatedly stated that States’ human rights obligations implicate the obligation to prevent and remedy foreseeable and serious violations of human rights caused by anthropogenic climate change⁸⁷ and to regulate activities contributing to such harm.⁸⁸ These obligations have extra-territorial application.⁸⁹
75. It is outside the scope of this submission to provide an exhaustive list of protected human rights. They include, but are by no means limited to, the right to life⁹⁰; the right to private and family life;⁹¹ the right to adequate food;⁹² the right to an adequate standard of living;⁹³ the right to the enjoyment of the highest attainable standard of physical and mental health,⁹⁴ and the right to self-determination.⁹⁵ It has been argued that the climate crisis impacts the entirety of human rights.⁹⁶

⁸⁴ Human Rights Council (“HRC”) Resolution 7/23 (28 March 2008); 10/4 (25 March 2009); 18/22 (17 October 2011) UN Doc A/HRC/RES/18/22; 26/27 (15 July 2014) UN Doc A/HRC/RES/26/27; 29/15 (22 July 2015) UN Doc A/HRC/RES/29/15; 32/33 (18 July 2016) UN Doc A/HRC/RES/32/33; 35/20 (7 July 2017) A/HRC/RES/35/20; 38/4 (16 July 2018) A/HRC/RES/38/4; 44/7 (16 July 2020) UN Doc A/HRC/RES/44/7; 47/24 (14 July 2021) UN Doc A/HRC/RES/47/24; 50/9 (7 July 2022) UN Doc A/HRC/RES/50/9.

⁸⁵ HRC, ‘Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights’ (15 January 2009) UN Doc A/HRC/10/61; HRC, ‘The impacts of climate change on the human rights of people in vulnerable situations’ (6 May 2022) UN Doc A/HRC/50/57; Ian Fry, ‘Promotion and protection of human rights in the context of climate change’ (26 July 2022) UN Doc A/77/226.

⁸⁶ The Commission on the Elimination of all Forms of Discrimination against Women and others, ‘Joint Statement on Human Rights and Climate Change’ (14 May 2020) UN Doc HR1/2019/1, paragraph 1.

⁸⁷ *Billy v. Australia* [2022] CCPR/C/135/D/3624/2019, paragraphs 8.12, 8.14; *Sacchi v. Argentina* [2021] CRC/C/88/D/104/2019, paragraph 10.6; Commission on Economic, Social and Cultural Rights, ‘Climate change and the International Covenant on Economic, Social, and Cultural Rights’ (8 October 2018) UN Doc E/C.12/2018/1*.

⁸⁸ The Commission on the Elimination of all Forms of Discrimination against Women and others (n 86); *Sacchi v. Argentina* (n 87) paragraph 10.6.

⁸⁹ The relevant test: ‘if there is a causal link between the acts or omissions of the State in question and the negative impact on the rights of children located outside its territory, when the State of origin exercises effective control over the sources of the emissions in question.’ See *Sacchi v. Argentina* (n 87) paragraph 10.7; with reference to *The Environment and Human Rights*, Advisory Opinion OC-23/17, Inter-American Court of Human Rights Series A No 23 (15 November 2017), paragraphs 101– 102, 103, 104(h).

⁹⁰ Article 6 of the International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (“**ICCPR**”); Article 3 of the Universal Declaration of Human Rights (UDHR) (adopted 10 December 1948) UNGA Res 217 A(III) (“**UDHR**”).

⁹¹ Article 17 ICCPR; Article 12 UDHR.

⁹² Article 11 of the International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) UNGA Res 2200A (XXI) (“**ICESCR**”); Article 25 UDHR.

⁹³ Article 11 ICESCR; Article 25 UDHR.

⁹⁴ Article 12 ICESCR; Article 25 UDHR.

⁹⁵ Common Article 1(1) ICESCR and ICCPR; Article 1 of the Charter of the United Nations (adopted 26 June 1945, entered into force 24 October 1945) 1 UNTS XVI (“**UN Charter**”).

⁹⁶ Fry (n 85) paragraph 88.

76. Furthermore, both the UN Human Rights Council and the UNGA have recognised the right to a clean, healthy and sustainable environment as a distinct human right, and affirmed that the promotion of this right requires the full implementation of the multilateral environmental agreements under the principles of international environmental law.⁹⁷

F. General Principles and Rules

77. This section sets out general principles and rules of particular significance in the present context. Some of these may qualify as formal sources of international law under Article 38(1) of the Statute of the Court, as is the case with the Prevention Principle and the Precautionary Principle (see paragraphs 80 and 83). Others, such as the principle of CBDR-RC, may fall under the scope of ‘general principles’ which influence the interpretation of treaty law pursuant to Article 31(3) of the Vienna Convention on the Law of Treaties (“VCLT”)⁹⁸ (see paragraphs 85–90).⁹⁹

I. Prevention Principle

78. The Prevention Principle imposes on States ‘the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction’.¹⁰⁰
79. The Prevention Principle is also relevant in the context of collective interests such as climate change which is a ‘common concern of mankind’, as made clear by the preamble of the UNFCCC. Furthermore, international case law suggests that the Prevention Principle is linked to community interests and is concerned with harm to the environment in and of itself, going beyond transboundary environmental harm.¹⁰¹

⁹⁷ HRC, Resolution 48/13, ‘The human right to a clean, healthy and sustainable environment’ (8 October 2021) UN Doc A/HRC/RES/48/13; UNGA, Resolution 48/13 ‘The human right to a clean, healthy and sustainable environment’ (28 July 2022) UN Doc A/RES/76/300.

⁹⁸ Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331.

⁹⁹ Alan Boyle and Catherine Redgwell, *Birnie, Boyle, and Redgwell's International Law and the Environment* (4th edn, OUP 2021) 29.

¹⁰⁰ Declaration of the United Nations Conference on the Human Environment, ‘Report of the United Nations Conference on the Human Environment’ (1973) UN Doc A/CONF.48/14/Rev.1 (“**Stockholm Declaration**”), Principle 21; Rio Declaration on Environment and Development ‘Report of the United Nations Conference on Environment and Development’ (1993) UN Doc A/CONF.151/26/Rev.1 (Vol. I) (“**Rio Declaration**”), Principle 2.

¹⁰¹ *Legality of the Threat or Use of Nuclear Weapons* (Advisory Opinion) [1996] ICJ Rep 226, paragraph 29; *Gabčíkovo-Nagymaros Project (Hungary/Slovakia)* (Judgment) [1997] ICJ Rep 7, paragraph 53; *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 14, paragraph 193; *Iron Rhine Railway (Belgium/Netherlands)* (Award of 24 May 2005) XXVII UNRIAA 35, paragraph 59; *South China Sea Arbitration (The Philippines v China)* (Award of 12 July 2016) XXXIII UNRIAA 166, paragraphs 940–941.

80. It is widely accepted by both case law¹⁰² and scholarship¹⁰³ that the legal status of the Prevention Principle is that of customary international law.
81. The Prevention Principle imposes on States an obligation of due diligence, and thus, an obligation of conduct. It has been characterised by the International Tribunal for the Law of the Sea (“ITLOS”) Seabed Disputes Chamber as ‘an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result’.¹⁰⁴

II. Precautionary Principle

82. The precautionary principle seeks to provide guidance in the development and application of international environmental law in the case of scientific uncertainty.¹⁰⁵ Principle 15 of the Rio Declaration reflects the core of the principle.¹⁰⁶ However, the principle has since been incorporated into many international environmental treaties. The UNFCCC adopts the precautionary principle specifically under Article 3(3) as follows:

The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effect. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. [...]

83. The ICJ affirmed the relevance of the precautionary principle ‘in the interpretation and application of the provisions of the Statute [of the River Uruguay]’.¹⁰⁷ The ITLOS Seabed Disputes Chamber noted that the precautionary principle is ‘an integral part of the general obligation of due diligence’¹⁰⁸

¹⁰² *Legality of the Threat or Use of Nuclear Weapons* (n 101) paragraph 29; *Gabcikovo-Nagymaros Project* (n 101) paragraph 140; *Pulp Mills on the River Uruguay* (n 101) paragraph 101; *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)* (Merits) [2015] ICJ Rep 665, paragraph 104; *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion, 1 February 2011) ITLOS Reports 2011, 10, paragraphs 131–135; *Iron Rhine Railway* (n 101) paragraphs 59, 222; *Indus Waters Kishenganga (Pakistan/India)* (Partial Award of 20 December 2013) XXXI UNRIAA 1 paragraphs 448–451; *South China Sea Arbitration* (n 101) paragraphs 940–948; Advisory Opinion OC-23/17, Inter-American Court of Human Rights (n 89) paragraphs 97–99.

¹⁰³ See, for example Boyle and Redgwell (n 99) 160; Jacqueline Peel and Philippe Sands, *Principles of International Environmental Law* (4th edn, CUP 2018) 211.

¹⁰⁴ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (n 102) paragraph 110.

¹⁰⁵ Peel and Sands (n 103) 230.

¹⁰⁶ ‘Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’

¹⁰⁷ *Pulp Mills on the River Uruguay* (n 101) paragraph 257.

¹⁰⁸ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (n 102) paragraph 131.

and identified ‘a trend towards making this [precautionary] approach part of customary international law’.¹⁰⁹ Furthermore, the ITLOS Seabed Disputes Chamber outlined that the principle applies ‘where scientific evidence concerning the scope and potential of negative impact of the activity in question is insufficient but where there are plausible indications of potential risks’.¹¹⁰

84. At the very minimum, the precautionary principle informs the interpretation of international law with the aim of enhancing the protection of the environment where the impact of a particular activity is scientifically uncertain.¹¹¹

III. CBDR-RC

85. In the context of climate change, the principle of CBDR-RC consists of two elements:
- i. a ‘common’ responsibility of States towards the climate system, reflecting the phenomenon that no single state can protect the environment on its own, and that all states are affected by climate change;¹¹² and
 - ii. a ‘differentiated’ responsibility of States towards the protection of the climate system, reflecting the diverse circumstances of the states with respect to their capabilities in tackling climate change, as well as their respective contributions to the issues at hand.¹¹³
86. Broadly, the UNFCCC has incorporated the principle of CBDR-RC by establishing differentiated obligations for Parties listed in its Annexes (adopting a ‘bifurcated’ approach)¹¹⁴ and by listing CBDR-RC in its principles in Article 3(1) which reads as follows:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.

87. The principle of CBDR-RC is also incorporated in the Paris Agreement and builds upon the principled approach in UNFCCC albeit in a more ‘nuanced’ and ‘diversified’ form, throughout its

¹⁰⁹ *ibid* paragraph 135.

¹¹⁰ *ibid* paragraph 131.

¹¹¹ Peel and Sands (n 103103) 239–240.

¹¹² Christopher D. Stone, ‘Common but Differentiated Responsibilities in International Law’ (2004) 98(2) *American Journal of International Law* 276, 276.

¹¹³ Tuula Honkonen, *The Common but Differentiated Responsibility Principle in Multilateral Environmental Agreements: Regulatory and Policy Aspects* (Kluwer Law International 2009) 1–2.

¹¹⁴ Christina Voigt and Felipe Ferreira, ‘“Dynamic Differentiation”: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ (2016) 5(2) *Transnational Environmental Law* 285, 289.

provisions (for example on mitigation) as well as on the basis of progression and highest possible ambition.¹¹⁵ Article 2(2) reads as follows:

This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

88. A question arises as to the compatibility of the CBDR-RC principle with the principle of no more favourable treatment prevalent in international shipping (“NMFT”). The latter principle is recognised within the IMO in Article 5(4) MARPOL and requires IMO Member States to apply the provisions included in IMO conventions to ships registered in non-Party states, to the extent that this is necessary to prevent the more favourable treatment of non-Party ships. NMFT also features in Article 227 UNCLOS, which imposes a more general obligation not to discriminate in form or in fact against vessels of any other State when they exercise their rights and perform their duties under Part XII of the Law of the Sea Convention.
89. We submit that CBDR-RC and NMFT are compatible given that whilst CBDR-RC is concerned with differentiation, NMFT is concerned with preventing discrimination, and discrimination and differentiation are distinct concepts. Thus, Member States could adopt international rules on GHG reduction in shipping which permitted or required differentiation between countries.
90. This distinction can be illustrated by reference to the Paris Memorandum of Understanding on Port State Control (“**Paris MoU**”). Paris MoU¹¹⁶ is a regional body that regulates environmental matters in European waters. It is used by State authorities to determine which ships merit additional scrutiny upon arrival in Paris MoU member ports. The Paris MoU has direct relevance to the issue of GHG regulation as it provides a precedent for States to distinguish between necessary operational features to regulate emissions criteria. Although the Memorandum endorses the principle of non-discrimination, it still sanctions the differential treatment of vessels flagged in different states, as the frequency with which vessels are inspected depends upon whether they are included on a white, grey or black list. This illustrates the concept that, whilst non-discrimination is the overarching principle, some differentiation may nevertheless be justified.

¹¹⁵ *ibid*, 293–301.

¹¹⁶ ‘Paris Memorandum of Understanding on Port State Control’ (including 44th Amendment, adopted 20 May 2022, entered into force 1 July 2022).

CHAPTER 4: APPLICATION

91. Article 31 VCLT sets out the general principles of interpretation applicable to treaties. It sets out that treaties must be interpreted ‘in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose’. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes, ‘any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty’, as well as:
- (a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;
 - (b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation;
 - (c) any relevant rules of international law applicable in the relations between the parties.
92. The application of the legal framework in this section will primarily focus on treaty law flowing from the international climate regime (UNFCCC and the Paris Agreement) and the law of the sea (UNCLOS), notwithstanding the fact that States’ obligations to mitigate emissions from IAS may also flow directly from international human rights law, customary international law and general principles of law. These other sources of international law will be applied indirectly to inform the interpretation of the relevant treaty provisions.
93. At the outset, it is important to note that there is a strong general preference in international law for norms to be interpreted in a way which renders them compatible with one another. In other words, 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.¹¹⁷ This concept, known as systemic integration,¹¹⁸ is codified in Article 31(3)(c) VCLT.¹¹⁹ The principle is rooted in the understanding that treaties do not exist in a vacuum; rather, as creatures of international law, they are part of the

¹¹⁷ Study Group of the International Law Commission, *Report on Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law* (13 April 2006) A/CN.4/L.682, paragraph 4.

¹¹⁸ Campbell McLachlan, ‘The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention’ (2005) 54(2) *International & Comparative Law Quarterly* 279.

¹¹⁹ ‘There shall be taken into account, together with the context: any relevant rules of international law applicable in the relations between the parties.’

international legal system, and as such they must be interpreted against the background of general principles of international law.¹²⁰

94. Systemic integration is also receiving increasing attention in international jurisprudence,¹²¹ partly due to its utility in addressing fragmentation in international law.¹²² This is consistent with the Court's own jurisprudence: 'Moreover, an international instrument has to be interpreted and applied within the framework of the entire legal system prevailing at the time of the interpretation'.¹²³

A. Obligations of States under the Paris Agreement to mitigate GHG emissions from IAS

95. Section A outlines Parties' obligations to mitigate GHG emissions from the IAS sectors under the Paris Agreement.¹²⁴
- i. Sub-section I outlines that the long-term temperature goal of 1.5°C necessarily includes emissions from IAS.
 - ii. Sub-section II shows that the standard of conduct to be employed when designing progressive NDCs which reflect the highest possible ambition at the minimum requires actions across all economic sectors, including IAS.
 - iii. Sub-section III sets out that the outcome of the GST reinforces the interpretation that successive NDCs must include emissions from IAS.
 - iv. Sub-section IV explains that the reporting and accounting mechanisms of the Paris Agreement require comprehensive information and accounting covering global emissions across all sectors, including IAS.
 - v. Sub-section V highlights that guidance on reporting or accounting cannot override or diminish the substantive obligations of Parties in light of the long-term temperature goal.

¹²⁰ McLachlan (n 118) 280.

¹²¹ Richard Gardiner, *Treaty Interpretation* (OUP 2008), 251.

¹²² Study Group of the International Law Commission (n 116) paragraphs 410–480.

¹²³ *In Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276* (Advisory Opinion) [1971] ICJ Rep 16, paragraph 53.

¹²⁴ Chapter 4 Section A draws on and is inspired by a previous legal analysis conducted by Estelle Dehon KC, *In the Matter of the UN Framework Convention on Climate Change and in the Matter of the Paris Agreement. Re: Inclusion of emissions from international aviation and shipping in Nationally Determined Contributions* (Transport & Environment 2021) <www.transportenvironment.org/wp-content/uploads/2021/10/Re-Aviation-Shipping-NDC-UPDATED-Legal-Advice-Final-3-5-21-corr-1.pdf> accessed 7 March 2024.

- vi. Sub-section VI outlines that, notwithstanding the accounting mechanism, developed Parties should include emissions from IAS in their NDCs and developing Parties should be working towards such inclusion.
- vii. Sub-section VII argues that the interpretation that IAS emissions should not be included in NDCs, should only be reported on separately, and should be addressed under alternative international regimes is manifestly absurd or unreasonable.

I. The Paris Agreement calls for global efforts to keep the global average temperature increase to 1.5°C and applies to all sectors, including IAS

- 96. The long-term goal of limiting the global temperature increase to 1.5°C above pre-industrial levels and peaking obligations (Articles 2(1)(a) and 4(1) of the Paris Agreement) necessarily include emissions from IAS.
- 97. The temperature goal in Article 2(1)(a) of the Paris Agreement includes two limits ('well below 2°C above pre-industrial levels' and '1.5°C above pre-industrial levels' respectively). However, subsequent agreements between the Parties as well as scientific and political consensus have established the 1.5°C limit as the key threshold under the Paris Agreement:
 - i. In the Glasgow Climate Pact, the Parties recognised the importance of limiting global warming to an increase of 1.5°C compared with 2°C and 'resolved to pursue efforts to limit the temperature increase to 1.5°C'.¹²⁵ This decision can be viewed as a 'subsequent agreement [...] regarding the interpretation of the treaty or the application of its provisions' pursuant to Article 31(3)(a) VCLT.
 - ii. Domestic courts have also confirmed the primacy of the 1.5°C threshold. For example, the French speaking Court of Appeals of Brussels recently held (unofficial English translation, emphasis added):¹²⁶

¹²⁵ Decision 1/CMA.3, 'Glasgow Climate Pact' (8 March 2022) UN Doc FCCC/PA/CMA/2021/10/Add.1, paragraph 21; see also Decision 1/CMA.4, 'Sharm el-Sheikh Implementation Plan' (17 March 2023) UN Doc FCCC/PA/CMA/2022/10/Add.1, paragraph 8.

¹²⁶ *Klimaatzaak et al. v. Kingdom of Belgium et al.* [2023] French speaking Court of Appeals of Brussels 2021/AR/15gs, 2022/AR/737, 2022/AR/891 (Civic Division), paragraph 191: 'A cet égard, il existe actuellement un consensus scientifique et politique (à tout le moins sur le plan international), notamment suite au rapport special du GIEC [IPCC] de 2018 et aux COP de Glasgow et Sharm El-Sheik, pour considerer que le seuil d'un réchauffement dangereux doit être fixé à 1.5°C plutôt qu'à 2°C [...]' (emphasis added), see also paragraphs 176, 199.

In this respect, there is currently a scientific and political consensus (at least internationally), notably following the 2018 IPCC Special Report and the Glasgow and Sharm El-Sheik COPs, that the threshold for dangerous warming should be set at 1.5°C rather than 2°C [...]

98. While the Paris Agreement is considered a ‘bottom-up’ agreement,¹²⁷ the collective commitments in Articles 2(1)(a) and 4(1)(a) of the Paris Agreement are normative parameters which guide each Party’s individual standard of conduct (or due diligence obligation) ‘top down’ in designing progressive NDCs (see paragraphs 104–112).¹²⁸
99. The emphasis of the global nature of the temperature goal, referring to the ‘increase in the global temperature’ and the required ‘global response’, is important; it is a strong indicator that all economic sectors are included in this long-term mitigation objective.¹²⁹ Exclusion of two entire globally operating sectors would directly jeopardise the global temperature goal as well as contradict the need for a global response.
100. Exclusion of IAS from these provisions is not evident on their plain wording, nor can it be inferred (rather, explicit wording would be needed to exclude these emissions). This interpretation is strengthened when read against the objective of the UNFCCC which is to ‘prevent dangerous anthropogenic interference with the climate system’. To this end, the UNFCCC is premised on the principle that measures and policies should ‘comprise all economic sectors.’¹³⁰
101. The wording ‘best available science’ in relation to the peaking obligations to reach the temperature goal in Article 4(1) of the Paris Agreement can be understood as a reference to assessments by the IPCC. The IPCC clearly indicates that all economic sectors have to undertake ‘rapid and deep, and in most cases, immediate greenhouse gas emissions reductions’, particularly considering that ‘there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all’ (see paragraph 16).
102. Ultimately, mitigating the substantive number of emissions from the IAS sectors (which together contribute to 4.8% of global GHG emissions) is plainly essential to limiting global warming to 1.5°C and to transition to a net zero economy. This is all the more urgent when considering the growth

¹²⁷ Marie L. Banda, ‘The Bottom-Up Alternative: The Mitigation Potential of Private Climate Governance After the Paris Agreement’ (2018) 42 Harvard Environmental Law Review 325.

¹²⁸ Christina Voigt, ‘The Power of the Paris Agreement in international climate litigation’ (2023) 32(2) Review of European Comparative & International Environmental Law 237, 239.

¹²⁹ Yubing Shi, ‘The Implications of the Paris Agreement for the Regulation of Greenhouse Gas Emissions from International Shipping’ (2018) 32(1) Ocean Yearbook 528, 538.

¹³⁰ Article 3(3) UNFCCC.

projections of these emissions: if emissions from IAS increase as projected (see paragraphs 22 and 30), this would directly endanger the temperature threshold.

103. We submit that the temperature goals contained within the Paris Agreement, and specifically Article 2(1)1(a) and 4(1)(a) necessarily include the IAS sectors and respectfully ask the Court for confirmation of this point.

II. The Paris Agreement requires Parties to submit progressive NDCs which reflect the highest possible ambition to stay within 1.5°C, necessarily including actions across all sectors, including IAS

104. Pursuant to Articles 2(1)(a), 4(1) and 4(2) of the Paris Agreement, Parties have obligations to submit successive NDCs with a view to staying within the 1.5°C temperature goal and reach global peaking of GHG emissions as soon as possible. NDCs must reflect the highest possible ambition (Articles 3 and 4(3) of the Paris Agreement), considering the principle of CBDR-RC, in light of different national circumstances. It is submitted that the standard of conduct to be employed when designing NDCs necessarily includes actions across all economic sectors, including IAS.
105. The obligation to communicate an NDC of itself is a binding procedural obligation of result, as indicated by the language used ('shall') in Article 4(2) of the Paris Agreement.¹³¹ The obligation to pursue domestic mitigation measures to reach these contributions, on the other hand, is a binding substantive obligation ('shall'). The wording here is different: Parties are required to 'aim' to achieve the objective of their NDCs which indicates that this is an obligation of conduct, and thus subject to due diligence requirements.¹³² Article 4(2) should be read in the context of Articles 2(1), 4(1) and 3 of the Paris Agreement.
106. Whilst Article 4(3) of the Paris Agreement leaves discretion to Parties to interpret 'highest possible ambition' and 'progression' of successive NDCs, the language used ('will') suggests that the provision creates a normative expectation and imposes a high standard of care on States, in other words, a due diligence standard.¹³³ This due diligence standard reflected in Article 4(3) of the Paris

¹³¹ Lavanya Rajamani, 'Due Diligence in International Climate Change Law' in Heike Krieger, Anne Peters and Leonhard Kreuzer (eds), *Due Diligence in the International Legal Order* (OUP 2021) 169.

¹³² Lavanya Rajamani, 'Due Diligence in International Climate Change Law' in Heike Krieger, Anne Peters and Leonhard Kreuzer (eds), *Due Diligence in the International Legal Order* (OUP 2021) 169; see also Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics' (2016) 65 *International and Comparative Law Quarterly* 493, 498; Bodansky (n 83) 148; Ralph Bodle and Sebastian Oberthür, 'The Legal Form of the Paris Agreement and Nature of its Obligations' in Daniel Klein et al. (eds), *The Paris Agreement on Climate Change: Analysis and Commentary* (Oxford University Press 2017) 99.

¹³³ Voigt (n 128) 241; IPCC, 'International Cooperation' in Priyadarshi R Shukla et al. (eds), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) 1451, 1466: '[w]hile what represents a Party's

Agreement and the cross-cutting provision in Article 3 of the Paris Agreement is informed by relevant rules of international law.¹³⁴

107. From this interpretation, it follows that the reasonableness and appropriateness of measures taken to design an adequately ambitious NDC should be under scrutiny.¹³⁵ It has been argued that, at the minimum, the preparation of NDCs must incorporate mitigation actions across all economic sectors.¹³⁶
108. The Prevention Principle (see paragraphs 78–80), requiring States ‘to deploy all adequate means, to exercise best possible efforts, and to do the utmost’,¹³⁷ is of particular relevance in this context. It necessarily informs the reasonableness of State actions, including the preparation of successive NDCs under the Paris Agreement.¹³⁸
109. This interpretation is in line with domestic and international jurisprudence. Domestic courts have relied on the Prevention Principle to define the duty of care required by governments to reduce GHG emissions.¹³⁹ Outside of the climate context, this approach has also been followed at the international level. The *South China Sea* arbitration, for instance, relied on the Prevention Principle, based on its customary status recognised by the ICJ and other tribunals, to inform ‘the scope of the general obligation in Article 192’ under UNCLOS.¹⁴⁰
110. The standard of care taken when preparing NDCs must also take into consideration States’ obligations under international human rights law (see paragraph 74). It has been argued by scholarship that a human rights obligation to prevent climate harm would apply likewise to international shipping as it is reasonably foreseeable that States’ shipping policies could pose a significant risk of climate change that will harm human rights.¹⁴¹ States’ human rights obligations

highest possible ambition and progression is not prescribed by the Agreement or elaborated in the Paris Rulebook [...], these obligations could be read to imply a due diligence standard’.

¹³⁴ Article 31(3) VCLT.

¹³⁵ Leslie-Anne Duvic-Paoli and Mario Gervasi, ‘Harm to the global commons on trial: The role of the prevention principle in international climate adjudication’ (2023) 32(2) *Review of European, Comparative & International Environmental Law* 226, 232; Voigt (n 128) 243; Rajamani, ‘Due Diligence in International Climate Change Law’ (n 131) 169.

¹³⁶ Voigt (n 128) 241.

¹³⁷ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (n 102) paragraph 110.

¹³⁸ Duvic-Paoli and Gervasi (n 135) 232.

¹³⁹ See *State of the Netherlands v Urgenda Foundation* [2019] ECLI:NL:HR:2019:2007, Supreme Court of the Netherlands, paragraph 5.7.5; *Atrato River case (Judgement)* [2016] T-622/16, Constitutional Court of Colombia, paragraph 7.34; *PSB et al v Brazil (Vote of Minister Cármen Lúcia)* [2022] ADPF 760/DF, Supreme Federal Court of Brazil, paragraphs 7–8.

¹⁴⁰ *South China Sea Arbitration (The Philippines v China)* (n 101), paragraph 941; see also *Trail Smelter (United States v Canada)* (Award of 16 April 1938 and 11 March 1941) III UNRIAA 1905.

¹⁴¹ Baine P. Kerr, ‘All Necessary Measures: Climate Law for International Shipping’ (forthcoming) 64 *Virginia Journal of International Law* 1, 37–39.

require States to diligently mitigate this risk.¹⁴² The same obligation would reasonably apply by extension to international aviation.

111. It is submitted that Parties that completely disregard entire sectors such as IAS in their NDCs cannot satisfy ‘highest possible ambition’ requirements and do not fulfil the due diligence requirements under customary international law and international human rights law referred to above. While the architecture of the Paris Agreement does not intend to prescribe how Parties are to undertake their mitigation efforts, the exclusion of entire sectors such as IAS is clearly contrary to the objectives of the Paris Agreement and the UNFCCC (see paragraphs 44 and 49). Further, IAS ‘remain areas where substantial ambition could be ratcheted up’.¹⁴³
112. Therefore, at the minimum, due diligence requirements impose on Parties the obligation to undertake mitigation efforts across all sectors, including IAS. This is also in line with States obligations under UNCLOS (which arguably go further than obligations under the UNFCCC and the Paris Agreement). We respectfully seek confirmation from the Court on this point.

III. The outcome of the GST informs the ambition cycle of NDCs, reinforcing the interpretation that progressive NDCs must include emissions from IAS

113. Pursuant to Articles 4(9) and 14 of the Paris Agreement, the outcome of the GST must inform the ambition cycle of NDCs. This reaffirms the interpretation that progressive NDCs must include emissions from IAS for the following reasons.
114. The outcome of the first GST, presented at COP28 in December 2023, encouraged Parties as follows (emphasis added):

to come forward in their next nationally determined contributions with ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5°C, as informed by the latest science, in the light of different national circumstances.¹⁴⁴

115. The outcome of the GST also encourages Parties to consider the opportunities which were identified in the technical dialogue of the GST in enhancing their action and support.¹⁴⁵ Indeed, the preliminary results of the technical dialogue of the GST highlighted the need to rapidly reduce emissions from

¹⁴² ebd.

¹⁴³ Martinez Romera, ‘The Paris Agreement and the Regulation of International Bunker Fuels’ (2016) 25(2) Review of European, Comparative & International Environmental Law 215, 221.

¹⁴⁴ Draft decision -/CMA, ‘Outcome of the first global stocktake’ (13 December 2023) UN Doc FCCC/PA/CMA/2023/L.17.5, paragraph 40.

¹⁴⁵ ibid paragraph 177.

IAS and the lack of effective international cooperation in this regard.¹⁴⁶ Significantly, the report states:

It remains important to understand whether and how [the efforts of the IMO and ICAO] are additional to action within NDCs, and rigorous accounting is needed to avoid potential overlaps across and within initiatives.¹⁴⁷

116. The outcome of the GST has confirmed the stark shortfall in Parties' NDCs (see also paragraph 18). The manner in which the outcome of the GST shall inform Parties' climate action is 'in a nationally determined manner' (Article 14(3) of the Paris Agreement). However, as outlined in paragraphs 105 to 112, when designing successive NDCs, Parties are under the obligation to exercise due diligence, and the required standard of conduct necessarily includes actions across all sectors, as is reinforced by the outcome of the GST. We submit that it would be helpful for the Court to clarify that NDCs must include IAS emissions.

IV. The reporting and accounting mechanisms of the Paris Agreement require comprehensive information and accounting covering global emissions across all sectors, including IAS

117. The reporting and accounting obligations in Articles 4(8) and 4(13) (see paragraphs 57–59) and under the transparency framework in Article 13 of the Paris Agreement (see paragraphs 60–62) do not specifically refer to IAS emissions (or indeed the emissions from any specific sector). However, such reporting and accounting obligations are clearly intended to apply to all sectors:
- i. Article 4(8) provides that the information accompanying NDCs should include 'information necessary for clarity, transparency and understanding' in accordance with decision 1/CP.21';
 - ii. Article 4(13) provides that in accounting for NDCs, Parties shall promote, *inter alia*, 'completeness'; and
 - iii. Article 13(5) provides that the purpose of the enhanced transparency framework for action is to provide 'a clear understanding of climate change action in the light of the objective of the Convention', being the stabilisation of GHG concentrations in the atmosphere (see paragraph 44).

Such clarity and complete understanding cannot be achieved unless all sectors and sources of emissions are included in Parties' reporting and accounting.

¹⁴⁶ Subsidiary Body for Scientific and Technological Advice and Subsidiary Body for Implementation, 'Technical dialogue of the first global stocktake – Synthesis report by the co-facilitators on the technical dialogue' (8 September 2023) UN Doc FCCC/SB/2023/9, paragraph 124.

¹⁴⁷ *ibid* paragraph 130.

118. In terms of relevant guidance for the provision of such information:
- i. Article 4(8) refers to decision 1/CP.21¹⁴⁸ and any relevant decisions of the CMA;
 - ii. Article 4(13) refers to guidance adopted by the CMA; and
 - iii. Article 13(7) refers to preparing national inventory reports using methodologies accepted by the IPCC and agreed upon by the CMA.
119. For the purposes of Article 4(13) of the Paris Agreement, paragraph 31 of decision 1/CP.21 sets out that guidance for accounting for Parties' NDCs is to ensure that Parties:
- i. 'account for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the Intergovernmental Panel on Climate Change and adopted by the Conference of the Parties serving as the meeting of the Parties' (paragraph 31(a)); and
 - ii. 'strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions' (paragraph 31(c)).
120. Other relevant decisions and guidance of the CMA as referred to in Articles 4(8), 4(13) and 13(7) of the Paris Agreement are as follows:
- i. Decision 4/CMA.1¹⁴⁹, Annex 1, which contains the information to be provided to facilitate clarity, transparency and understanding of NDCs, which, in respect of scope and coverage, includes:
 - (i) '[s]ectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines' (paragraph 3(b)); and
 - (ii) '[h]ow the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21', i.e., how the Party has striven to include all categories of emissions or removals in its NDC, and an explanation for the exclusion of any categories (paragraph 3(c)).
 - ii. Decision 4/CMA.1, Annex 2, which provides the guidance referred to in paragraph 31 of decision 1/CP.21 for Parties to account for their NDCs under Article 4(13) of the Paris Agreement, including that:

¹⁴⁸ Decision 1/CP.21, 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015' (29 January 2016) UN Doc FCCC/CP/2015/10/Add.1.

¹⁴⁹ Decision 4/CMA.1, 'Further guidance in relation to the mitigation section of decision 1/CP.21' (17 December 2020) UN Doc FCCC/PA/CMA/2018/3/Add.1

- (i) ‘Parties account for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the IPCC and in accordance with decision 18/CMA.1’ (paragraph 1(a));
 - (ii) ‘Parties account for all categories of anthropogenic emissions and removals corresponding to their nationally determined contribution’ (paragraph 3(a)); and
 - (iii) ‘Parties strive to include all categories of anthropogenic emissions and removals in their nationally determined contribution, and, once a source, sink or activity is included, continue to include it’ (paragraph 3(b)).
- iii. Decision 18/CMA.1¹⁵⁰, pursuant to which the CMA adopted, under Article 13(13) of the Paris Agreement, certain modalities, procedures, and guidelines for the transparency framework including the guidance in Annex 1, paragraph 53 that:

[e]ach Party should report international aviation and marine bunker fuel emissions as two separate entries and should not include such emissions in national totals but report them distinctly, if disaggregated data are available, making every effort to both apply and report according to the method contained in the IPCC guidelines referred to in paragraph 20 above for separating domestic and international emissions.

121. The IPCC guidelines and methodologies referred to are set out in the Guidelines for National Greenhouse Gas Inventories published in 2006 (the “**IPCC Guidelines**”) which were refined in 2019 (the “**2019 IPCC Refinement**”). The IPCC Guidelines state that:

A national total is calculated by summing up emissions and removals for each gas. An exception is emissions from fuel use in ships and aircraft engaged in international transport which is not included in national totals, but is reported separately.

Those fuels are instead included as ‘memo items’¹⁵¹. The 2019 IPCC Refinement reiterates this guidance (noting that the 2019 IPCC Refinement was not intended to revise the IPCC Guidelines), stating that ‘[e]missions from fuel for use on ships or aircraft engaged in international transport

¹⁵⁰ Decision 18/CMA.1, ‘Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement’ (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.2.

¹⁵¹ IPCC, *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, in Simon Eggleston and others (eds) (IPCC 2006) Chapter 1, Volume 1, Annex 8A.2.

should not be included in national totals. To ensure global completeness, these emissions should be reported separately'.¹⁵²

122. We submit that the guidance to account IAS emissions separately to national totals has perversely led to Parties treating those sectors as beyond the ambit of the Paris Agreement and NDCs, and instead as solely under the purview of ICAO and IMO respectively. For instance, the UK's NDC (updated September 2022) states that emissions from IAS are outside its scope, and it 'is supportive of efforts to reduce these emissions through action under the International Civil Aviation Organisation and the International Maritime Organization'.¹⁵³ It is submitted that this approach is not consistent with the Paris Agreement for the reasons set out in sections V to VII below.
123. On the contrary, the purpose of this accounting guidance is to ensure global 'completeness' and transparency of mitigation action across all sources and sectors. This is consistent with the aims of the reporting, accounting and transparency provisions to achieve clarity, completeness, transparency and a clear understanding of the global stabilisation of GHG emissions. Thus, it is submitted that the Paris Agreement requires Parties to provide clear information within their NDCs regarding IAS emissions and their actions to mitigate the same, and we respectfully ask the Court for confirmation of this point.

V. Guidance on accounting or reporting cannot override or diminish the substantive obligations of States pursuant to Articles 2 and 4 of the Paris Agreement

124. It is submitted that the reason that IAS emissions are to be reported separately does not derive from any different obligation on Parties in respect of mitigation of those sectors, rather it is to ensure accounting consistency across the sectors. Article 4(13) of the Paris Agreement stipulates that in accounting for Parties' NDCs, Parties shall 'ensure the avoidance of double counting'. Double counting is a risk for IAS emissions, given different methodologies for counting such emissions can be adopted by different States.
125. It is seemingly for that reason, rather than any other, that the IPCC Guidelines suggest that IAS emissions should be reported separately from national totals – so that potential reporting overlaps or gaps can be easily identified and addressed. Indeed, it is clear from the accompanying explanation of the purpose of separate reporting in the 2019 IPCC Refinement – to 'ensure global completeness'

¹⁵² IPCC, Decision IPCC-XLIX-9, *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories*, in the Task Force on National Greenhouse Gas Inventories (eds) (IPCC 2019) Chapter 8, Volume 1.

¹⁵³ UK, 'United Kingdom of Great Britain and Northern Ireland's Nationally Determined Contribution' (23 September 2022) 6. All submitted NDCs are available in the Nationally Determined Contributions Registry at <<https://unfccc.int/NDCREG>> accessed 7 March 2024.

– that it is for accounting clarity and to ensure that all emissions are captured in reporting, rather than the fact that IAS should enjoy any different treatment under the Paris Agreement.

126. The risk of double counting should not exclude IAS emissions from the Paris Agreement, nor permit Parties to divest their obligations under the Paris Agreement in respect of the IAS sectors to international organizations. In accordance with the precautionary principle (see paragraph 82), a double counting risk is not a reason to exclude emissions from NDCs or from substantive mitigation action.¹⁵⁴ The risk is also perhaps overstated. The UK’s Climate Change Committee has commented that:

There are no practical barriers to inclusion [of IAS emissions in the UK’s national target]. Emissions are already estimated and reported to the UN and should be included in UK emissions targets on the same basis. The uncertainty attached to these estimates is no higher than for other sectors covered by carbon budgets.¹⁵⁵

127. In any event, even if IAS emissions are reported separately, a reporting mechanism does not change the Parties’ substantive mitigation obligations under the Paris Agreement, particularly under Articles 2 and 4 of the Paris Agreement, and cannot be used to dilute such obligations.¹⁵⁶ As under the UNFCCC, the emissions that a party must inventory or report cannot limit the substantive obligation to reduce emissions.¹⁵⁷

128. If the separate reporting of IAS emissions were to imply that such emissions fall outside of the scope of NDCs, that would be clearly contrary to the intention of the agreement:

- i. The Paris Agreement is intended to apply globally to all emissions and include all sectors (see section VI) and NDCs are the mechanism of achieving the aims of the Paris Agreement;
- ii. Due to the size and climate impact of the emissions from IAS, and the fact that about two thirds of all shipping and aviation emissions are international,¹⁵⁸ such a conclusion would imperil the very purpose of the agreement by allowing those sectors’ emissions to increase as currently projected¹⁵⁹ (see section IV); and

¹⁵⁴ Dehon (n 124) 19.

¹⁵⁵ Lord Deben, *Letter to the Secretary of State for Transport, Rt Hon Grant Shapps MP, about net-zero and the approach to international aviation and shipping (IAS) emissions* (2019) <www.theccc.org.uk/wp-content/uploads/2019/09/Letter-from-Lord-Deben-to-Grant-Shapps-IAS.pdf> accessed 29 February 2024.

¹⁵⁶ Dehon (n 124) 16.

¹⁵⁷ Mayer and Ding (n 70) 20.

¹⁵⁸ UNEP, *Emissions Gap Report 2020* (n 32) 52.

¹⁵⁹ Romera (n 143) 221.

iii. If such a significant outcome were the intention of the Parties, then such intention would have been explicitly stated in the provisions of the Paris Agreement,¹⁶⁰ rather than merely inferred from guidance which is itself only referred to in the Paris Agreement (see also paragraph 145). It is submitted that such an outcome would be manifestly absurd or unreasonable (see further paragraphs 146–149 below).

129. Thus, a reporting mechanism cannot be held to alter the agreed provisions of the Paris Agreement on the ordinary meaning of its terms. Neither can those mechanisms be considered a subsequent agreement on the interpretation of the Paris Agreement; the mechanism operationalises the Paris Agreement and does not therefore interpret the terms of the Agreement under Article 31(3)(a) VCLT.

130. Furthermore, Parties' use of those mechanisms cannot be regarded a practice that alters such interpretation, especially considering differing national approaches to the issue.¹⁶¹ Given the Paris Agreement is based on a bottom-up approach, there is no subsequent, uniform practice by Parties regarding the inclusion of emissions from IAS in Parties' NDCs.

131. We submit that an opinion from the Court that clarifies that IAS emissions fall within States' mitigation obligations under the Paris Agreement would be of assistance to States as well as contribute to the achievement of the aims of the Paris Agreement itself.

VI. Notwithstanding the accounting mechanisms, developed countries should include emissions from IAS in their NDCs and developing countries should be working towards such inclusion

132. Parties are to undertake and communicate NDCs 'with the view to achieving the purpose of [the Paris Agreement]' (Article 3), being the aims set out in Article 2 (including the long-term temperature goal). Each successive NDC 'will represent a progression' and reflect the Party's 'highest possible ambition' (Article 4(3)). Developed countries' targets should be 'economy-wide' and 'absolute', as should developing countries' targets over time (Article 4(4)).

133. As such, and as set out in paragraphs 96–131 above, the inclusion of IAS emissions in NDCs accords with the Paris Agreement's obligations in respect of NDCs, and any Party that does not include IAS emissions in its NDC should be working towards such inclusion to meet those obligations.

134. Indeed, the European Parliament has highlighted that:

in order to ensure the consistency of NDCs with the economy-wide commitments required by the Paris Agreement, the Parties should be

¹⁶⁰ Dehon (n 124) 19.

¹⁶¹ *ibid* 23.

encouraged to include emissions from international shipping and aviation in their NDCs and to agree on implementing measures at regional and national level to reduce emissions from these sectors, including non-CO₂ impacts from aviation and the climate emissions of maritime fuels; highlights the fact that the Union should lead by example in that respect.¹⁶²

135. Given Parties already report IAS emissions, there are no practical barriers to their inclusion in national targets, and therefore NDCs.¹⁶³ As the UK's Climate Change Committee (in its capacity as an independent statutory body) has advised the UK Government, the international framing of IAS should not prevent the inclusion of its emissions in national targets, as is the case for other sectors covered by international agreements (e.g., energy-intensive industry).¹⁶⁴
136. It has been argued that the accounting mechanism in paragraph 53 of decision 18/CMA.1 (see paragraph 120iii) is a 'misstep, which fails properly to reflect the legal obligations in the Paris Agreement', as its approach does not reflect the legal obligations set out in the Paris Agreement and it should therefore be amended.¹⁶⁵
137. Whether a misstep or not, it is submitted that it should be amended by the Parties in any event, given the reporting framework itself should be 'enhanced' and progressively improve over time with the aim of providing a clear understanding of climate change action and stabilisation of GHG emissions.¹⁶⁶ As such, the Parties should develop the framework so that it properly accounts for IAS emissions and ensures global action with the aim of staying within the temperature limit.
138. Clearly, if Parties are to 'strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions',¹⁶⁷ and in each NDC (which is to represent a progression on the previous) Parties are to explain how they 'have taken into consideration' the need to strive to include all such categories.¹⁶⁸ Parties should resolve any accounting issues which are inhibiting this transparency in order to meet the aims of the transparency framework.
139. In any event, nothing in those accounting provisions presently prevents the inclusion of IAS emissions in Parties' NDCs. As explained in paragraphs 124–138 above, the accounting and

¹⁶² European Parliament, 'Resolution of 21 November 2023 on the UN Climate Change Conference 2023 in Dubai, United Arab Emirates (COP28)' P9_TA(2023)0407, paragraph 40 <www.europarl.europa.eu/doceo/document/TA-9-2023-0407_EN.pdf> accessed 7 March 2024.

¹⁶³ Lord Deben (n 155).

¹⁶⁴ *ibid.*

¹⁶⁵ Dehon (n 124) 16.

¹⁶⁶ Benoit Mayer, 'Transparency Under the Paris Rulebook: Is the Transparency Framework Truly Enhanced?' (2019) 9 *Climate Law* 40, 53–54.

¹⁶⁷ Decision 4/CMA.1 (n 148) Annex I, paragraph 3(b).

¹⁶⁸ *ibid* paragraph 3(c).

reporting mechanisms do not prevent mitigation action. There is no explicit or implicit obligation in the Paris Agreement for Parties not to regulate emissions from IAS.¹⁶⁹ It would be irrational, and contrary to the purpose of the Paris Agreement, if such emissions could not be included in NDCs. Indeed, a Party can choose a different reporting methodology if its NDC requires it to do so, and that discretion could legally be exercised to include IAS emissions in its national inventory if that were required for national action on such emissions.¹⁷⁰

140. While many States have excluded emissions from IAS from their reporting, some have taken a different approach, for example:

- i. In its enhanced NDC from 16 October 2023, the EU includes CO₂ emissions from international flights to the extent they are covered by the EU Emissions Trading Scheme;¹⁷¹ and
- ii. Switzerland and the UK include emissions from IAS in their respective long-term low-GHG emissions-development strategies, submitted to the UNFCCC separately to its NDC pursuant to Article 4(19) of the Paris Agreement.¹⁷²

141. However, the accounting provision has led to ambiguity around the inclusion of the same in NDCs. For example, the UK's NDC (updated in September 2022)¹⁷³ states:

Emissions from International Aviation and Shipping are not included in the scope of this NDC, in line with advice from the Climate Change Committee (CCC), the UK's independent advisors. The UK currently reports these emissions as a memo item in the UK's GHG Inventory, and is supportive of efforts to reduce these emissions through action under the International Civil Aviation Organisation and the International Maritime Organisation.

¹⁶⁹ This argument is made in relation to international aviation in Mayer and Ding (n 70) 21.

¹⁷⁰ Dehon (n 124) 19.

¹⁷¹ European Union, 'Update of NDC of the European Union and its Member States' (16 October 2023).

¹⁷² Switzerland, 'Switzerland's Long-Term Climate Strategy' (28 January 2021); UK, 'Net-Zero Strategy: Build Back Greener' (19 October 2021). All submitted long-term strategies are available in the long-term strategies portal at <<https://unfccc.int/process/the-paris-agreement/long-term-strategies>> accessed 7 March 2024.

¹⁷³ UK, 'United Kingdom of Great Britain and Northern Ireland's Nationally Determined Contribution' (n 153).

142. Parties have started to include emissions from IAS in their domestic climate legislation¹⁷⁴ and net zero targets, or at least committed to review existing statutory exclusions,¹⁷⁵ showing a growing recognition of the need for national action on IAS emissions in addition to action through ICAO and the IMO. Whilst such national action is promising, it is limited.
143. We submit that it does not follow that the fact of emissions being reported separately means that they ought to be addressed outside of the UNFCCC framework by the ICAO and IMO. Moreover, as set out in paragraphs 29 and 38, these institutions have not adopted policies consistent with the Paris Agreement and the act of deferring to the ICAO and IMO in respect of IAS emissions means that Parties have not successfully discharged their obligations under the Paris Agreement.
144. Moreover, nowhere in the Paris Agreement does it say that Parties should pursue mitigation action on IAS emissions through the ICAO and IMO. The provisions of the Paris Agreement apply globally and to all sectors (see paragraphs 96–103).
145. It may be that such inference has mistakenly derived from the Kyoto Protocol. That conclusion is incorrect as the Kyoto Protocol is now defunct and is not incorporated in the Paris Agreement, therefore its provision relating to the ICAO and IMO is irrelevant to the legal obligations under the Paris Agreement. Even if the Kyoto Protocol were relevant to interpretation, the opposite inference can more plausibly be made that by intentionally not repeating the provision of the Kyoto Protocol relating to the ICAO and IMO, the Parties did not wish for the ICAO and IMO to enjoy the same privilege in respect of mitigation actions on the ICAO and IMO. In any event, the Kyoto Protocol itself did not confer exclusive competence on the ICAO and IMO (see paragraph 48).

VII. The interpretation that IAS emissions should not be included in NDCs, should only be reported on, and should be addressed under alternative international regimes is manifestly absurd or unreasonable

146. If the analysis above is not accepted, and instead it is considered that the Paris Agreement obligations relating to IAS extend only to reporting and accounting obligations, and that consequently,

¹⁷⁴ See, for example Switzerland: Loi fédérale sur les objectifs en matière de protection du climat, sur l'innovation et sur le renforcement de la sécurité énergétique du 30 septembre 2022 (LCI, RS 814.310) (unofficial English translation: 'Federal Act on Climate Protection Goals, Innovation and Strengthening Energy Security'); the UK will include IAS emissions in its Sixth Carbon Budget (2033–2037), see: Committee on Climate Change, 'The Sixth Carbon Budget The UK's path to Net Zero' (December 2020) <www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf> accessed 7 March 2024.

¹⁷⁵ New Zealand's 2050 emissions reduction target is currently under review. An amendment would potentially include emissions from international shipping and aviation. See <www.climatecommission.govt.nz/our-work/advice-to-government-topic/review-on-whether-emissions-from-international-aviation-and-shipping-should-be-included-in-the-2050-target/#:~:text=Currently%2C%20Aotearoa%20New%20Zealand's%20emissions,and%20from%20Aotearoa%20New%20Zealand.> accessed 7 March 2024.

substantive mitigation is transferred to other international frameworks, we submit that the result of that interpretation is manifestly absurd or unreasonable:

- i. For the reasons set out in section I, the aims of the Paris Agreement can evidently not be satisfied without addressing the IAS sectors, therefore their exclusion would jeopardise the whole purpose of the agreement. Further, national targets simply cannot be met without the inclusion of IAS emissions.¹⁷⁶
- ii. As explained in section VI, any climate-related measures adopted by ICAO and IMO are not aligned with the regime of the Paris Agreement and there are no mechanisms to tie the actions under those regimes to the Paris Agreement aims. Therefore, States cannot reasonably assume that their unilateral Paris Agreement obligations are discharged through function of those organizations.

147. In circumstances where legal interpretation leads to a result that is manifestly absurd or unreasonable, Article 32 VCLT provides that:

Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning [...]

148. As such, if the interpretation that IAS emissions mitigation falls outside of the Paris Agreement is adopted, the Court may have recourse to the preparatory work of concluding the Paris Agreement. Such preparatory work evidences an intention to include IAS in the scope of the agreement. Wording in an earlier draft of the Paris Agreement contained the following:

Parties [shall][should][other] pursue the limitation or reduction of greenhouse gas emissions from international aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively, with a view to agreeing concrete measures addressing these emissions, including developing procedures for incorporating emissions from international aviation and marine bunker fuels into low-emission development strategies.¹⁷⁷

¹⁷⁶ In the UK for example, see Lord Deben (n 155).

¹⁷⁷ Ad Hoc Working Group on the Durban Platform for Enhanced Action, 'Draft Paris Outcome: Revised draft conclusions proposed by the Co-Chairs' (5 December 2015) UN Doc FCCC/ADP/2015/L.6/Rev.1, 8.

149. The removal of this provision indicates that Parties did not agree to prioritise addressing IAS emissions through ICAO and IMO respectively,¹⁷⁸ and instead that IAS emissions are captured by the general global provisions of the Paris Agreement (see paragraphs 96–103). However, the approach taken by some Parties more closely mirrors this text. Whilst that interpretation does not logically follow from the wording of the Paris Agreement, nor the preceding negotiations, given such misinterpretation is affecting Parties’ practice in implementing the Paris Agreement, it is respectfully submitted that clarity from the Court on this point would be helpful.
150. In summary, in relation to the effect of the reporting and accounting provisions of the Paris Agreement on IAS emissions:
- i. The reporting and accounting obligations in the Paris Agreement include IAS emissions;
 - ii. Whilst IPCC guidance suggests that IAS emissions should be accounted for separately, that does not limit or reduce the substantive obligations to address IAS emissions under the Paris Agreement;
 - iii. To align with the economy-wide application of the Paris Agreement, Parties can still include IAS emissions in their NDCs, and indeed developed countries should, and developing countries should be working towards such inclusion;
 - iv. The contrary interpretation, that IAS emissions fall outside of the Parties’ obligations under the Paris Agreement because they are reported separately to national totals, leads to a result which is manifestly absurd and unreasonable; and
 - v. Persisting differences in States’ approaches to IAS in the climate change regime indicates that clarity from the Court would be helpful to States, as well as vital if the aims of the Paris Agreement are to be met.

B. Obligations of States under UNCLOS to mitigate anthropogenic GHG emissions from international shipping and aviation

151. Section B outlines States Parties’ obligations to mitigate anthropogenic GHG emissions from international shipping and aviation under UNCLOS.
- i. Sub-section I outlines the current context in which this written submission to the ICJ is made, in particular in relation to the ongoing advisory opinion in relation to climate change

¹⁷⁸ Dehon (n 124) 12.

- under consideration by ITLOS, to which Opportunity Green made a submission focusing on vessel emissions;
- ii. Sub-section II shows that the definition of “pollution of the marine environment” includes GHG emissions and therefore the associated UNCLOS Part XII obligations apply to GHG emissions from vessels and aviation;
 - iii. Sub-section III contends that States Parties’ due diligence obligations under Part XII UNCLOS require States Parties to take all necessary measures to mitigate prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the 1.5°C temperature goal of the Paris Agreement;
 - iv. Sub-section IV outlines States Parties’ specific obligations under Part XII to establish international rules and standards in relation to vessel and aircraft pollution acting through the competent international organization or general diplomatic conference;
 - v. Sub-Section V sets forth that States Parties’ must take unilateral and/or regional action to satisfy their due diligence obligations under Part XII UNCLOS to the extent that international rules and standards remain insufficient; and
 - vi. Sub-section VI shows that in particular, flag and port States have obligations to regulate GHG emissions from vessels and enforce such regulations, and port State jurisdiction in particular provides an effective mechanism under which States Parties can discharge their obligations under Part XII of UNCLOS.

I. ITLOS Advisory Opinion

152. On 12 December 2022, the ITLOS received a request for advisory opinion from the Commission of Small Island States on Climate Change and International Law (“**COSIS**”) concerning States’ obligations under UNCLOS to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects of climate change, and to protect and preserve the marine environment in relation to climate change impacts.¹⁷⁹

¹⁷⁹ *Request for Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law* (Request for Advisory Opinion, 12 December 2022) <www.itlos.org/en/main/cases/list-of-cases/request-for-an-advisory-opinion-submitted-by-the-commission-of-small-island-states-on-climate-change-and-international-law-request-for-advisory-opinion-submitted-to-the-tribunal/> accessed 7 March 2024.

153. On 15 June 2023, Opportunity Green submitted a written statement to ITLOS to support its consideration of these questions.¹⁸⁰ Opportunity Green’s statement argued that UNCLOS requires States Parties to adopt stringent standards on vessel pollution either domestically, in concert with other States Parties, or through the competent international organization to ensure compliance with the temperature limit in the Paris Agreement. Paragraph 151 outlines the key submissions, detailed further below, which primarily focused on the obligations of States Parties with respect to vessel pollution (and specifically Article 211).
154. According to our interpretation, the UNCLOS obligations on States Parties to take all necessary measures to prevent, reduce and control pollution of the marine environment from any source would reasonably extend to pollution caused by GHG emissions from aviation (and UNCLOS addresses such emissions specifically in Article 212). Therefore, much of our submission could be considered to apply in respect of aviation emissions *mutatis mutandis*. We have incorporated reference and brief analysis of the issue of the regulation of GHG emissions caused by aviation in the summary of our key submissions to ITLOS below, but such reference and analysis is by no means intended to be exhaustive.

II. The definition of ‘pollution of the marine environment’ includes GHG emissions and therefore the associated Part XII obligations apply to GHG emissions from shipping and aviation

155. The definition of “pollution of the marine environment” (see paragraph 67) includes GHG emissions, including those from IAS, as such emissions satisfy each element of the definition:
- i. ‘introduction by man’: It is self-evident that GHG emissions from IAS are introduced through human activities;
 - ii. ‘directly or indirectly, of substances or energy into the marine environment’: GHG emissions are a direct introduction of substances into the atmosphere, causing global warming, and this results in indirect introduction of these substances into the ocean, as well as addition of heat energy into the ocean;
 - iii. ‘which results in such deleterious effects as harm to living resources and marine life [...] and reduction of amenities’: The IPCC has indicated that from the best available science GHG emissions result or are likely to result in deleterious effects on the marine environment. This includes warming and acidification which alters the physical and chemical makeup of

¹⁸⁰ Opportunity Green, ‘Amicus Curiae Brief of Opportunity Green in the matter of Case No. 31’ (15 June 2023) <www.itlos.org/fileadmin/itlos/documents/cases/31/written_statements/4/C31-WS-4-4-Opportunity_Green.pdf> accessed 7 March 2024.

the ocean and threatens the functioning of marine ecosystems through ‘deleterious effects’ (see paragraph 11).

156. A broad definition of ‘pollution of the marine environment’ is consistent with other provisions in UNCLOS such as Articles 194(1), 194(3) and 207–212 which are drafted to encompass a broad range of sources of marine pollution. The definition ‘pollution of the marine environment’ thus includes all sources of GHG emissions, including from vessels and aircraft, and this interpretation is widely recognised in academia.¹⁸¹ Previous international case law also supports this conclusion.¹⁸²

III. States Parties’ due diligence obligations under Part XII UNCLOS require States Parties to take all necessary measures to mitigate, prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the 1.5°C temperature goal of the Paris Agreement

157. The broad substantive obligation on States Parties in Article 192 UNCLOS imposes a general duty of due diligence on States Parties to protect and preserve the entire marine environment from pollution of the marine environment caused by the harmful effects of sources of GHG emissions, including those from IAS, in areas both within and beyond national jurisdiction, and regardless of the vector through which those effects occur.
158. The general due diligence obligation under Article 192 UNCLOS must be read independently of and in addition to obligations on States Parties contained elsewhere in UNCLOS, including *inter alia* those under Articles 194, 211 and 212.
159. Further, the core obligation under Article 194(1) UNCLOS requires States Parties to take ‘all measures [...] necessary to prevent, reduce and control pollution of the marine environment from

¹⁸¹ Alan Boyle, ‘Litigating Climate Change under Part XII of the LOSC’ (2019) 34 *The International Journal of Marine and Coastal Law* 458, 465; Daniel Bodansky, ‘Regulating Greenhouse Gas Emissions from Ships: The Role of the International Maritime Organisation’ in Harry N. Scheiber, Nilufer Oral and Moon-Sang Kwon (eds), *Ocean Law Debates* (Brill Nijhoff 2018), <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2813785> accessed 7 March 2024; Yoshifumi Tanaka, ‘Regulation of Greenhouse Gas Emissions from International Shipping and Jurisdiction of States’ (2016) 25 *Review of European, Comparative & Intl Environmental Law* 333, 337–338; Yubing Shi, ‘Are greenhouse gas emissions from international shipping a type of marine pollution?’ (2016) 113(1–2) *Marine Pollution Bulletin* 187, 189–190. See also David Testa, ‘Controlling GHG Emissions from Shipping: The Role, Relevance and Fitness for Purpose of UNCLOS’ in Froukje Maria Platjouw and Alla Pozdnakova (eds), *The Environmental Rule of Law for Oceans: Designing Legal Solutions* (CUP 2023) 35: ‘Considering the definition encompasses the introduction of both “substances” and “energy” into the marine environment, it is difficult to argue in good faith that GHG emissions from shipping do not constitute “pollution of the marine environment.”’

¹⁸² See *Southern Bluefin Tuna (New Zealand v Japan; Australia v Japan)* (Provisional Measures, Order of 27 August 1999) ITLOS Reports 1999, 280, paragraph 70; *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission* (Advisory Opinion, 2 April 2015) ITLOS Reports 2015, 4, paragraph 120; also *Chagos Marine Protected Area Arbitration (Mauritius v United Kingdom)* (Award of 18 March 2015) XXI UNRIAA 359, paragraph 538; *South China Sea Arbitration* (n 101), paragraph 284.

any source'. In discharging this obligation, States Parties are to use 'the best practicable means at their disposal and in accordance with their capabilities' (see paragraph 66).

160. States Parties' obligations under Part XII, and particularly, Articles 192 and 194 UNCLOS are of 'conduct', requiring 'due diligence',¹⁸³ which requires States Parties to 'deploy adequate means, to exercise best possible efforts, to do the utmost' (see paragraph 81).¹⁸⁴ Importantly, the standard of due diligence may change over time, for example, in light of new scientific knowledge.¹⁸⁵
161. The long-term temperature goal of 1.5°C as enshrined in the Paris Agreement and supported by the best available science is the preeminent international standard¹⁸⁶ to assess whether States Parties take 'all measures necessary' to effectively discharge their due diligence obligations under Part XII of UNCLOS. The Paris Agreement imposes legal obligations on its Parties to reduce emissions from IAS in line with the 1.5°C temperature goal (see paragraphs 96–103), including through informing the standard of care required by States Parties to UNCLOS to fulfil the requirements of Articles 192, 194, Article 211(1) and 212 UNCLOS.
162. This is supported *inter alia* by Article 237 UNCLOS and the principle of systemic integration in Article 31(1)(c) VCLT (see paragraph 93). In the *South China Sea Arbitration* case it was held that 'other applicable rules of international law' inform the content of the general Article 192 UNCLOS duty.¹⁸⁷
163. Thus, States Parties' general due diligence obligations under Part XII UNCLOS require them to take all necessary measures to mitigate, prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the Paris Agreement's 1.5°C temperature goal.

IV. States Parties' specific obligations under Part XII to establish international rules and standards in relation to vessel and aircraft pollution acting through the competent international organization or general diplomatic conference

164. The source-specific obligations under Articles 211 (with respect to pollution of the marine environment from vessels) and Articles 212 (with respect to pollution of the marine environment through the atmosphere) are additional (albeit complementary) to the general due diligence obligations under Articles 192 and 194 UNCLOS.

¹⁸³ *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (n 102) paragraph 110.

¹⁸⁴ *ibid* paragraph 110.

¹⁸⁵ *ibid* paragraph 117.

¹⁸⁶ Alan Boyle, 'Protecting the Marine Environment from Climate Change' in Elise Johansen, Signe Veierud Busch, Ulrikke Jakobsen (eds), *The Law of the Sea and Climate Change* (CUP 2021) 102.

¹⁸⁷ *South China Sea Arbitration (The Philippines v China)* (n 101) paragraphs 941–942.

165. Article 211(1) UNCLOS refers to ‘competent international organization’ through which States Parties ‘shall establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels’. This is generally understood to mean the IMO,¹⁸⁸ but there is no stipulation in UNCLOS specifying that the IMO is the only relevant competent international organization.¹⁸⁹ Article 212(3) UNCLOS, similarly to Article 211(1), refers to States acting ‘especially’ through competent international organizations (such as the IMO, or the ICAO in relation to aviation).
166. Other appropriate organizations or general diplomatic conferences that could fulfil this role may include, without limitation, the COP, the CMA as well as regional organizations such as the EU. Notwithstanding, States Parties have generally accorded the IMO competence with regard to international rules and standards to prevent, reduce and control pollution of the marine environment from vessels (for an overview see paragraphs 25–27).
167. In establishing international rules and standards to prevent, reduce and control GHG emissions with respect to vessels and aircraft, States Parties must take ‘all measures necessary’ and act to comply with the 1.5°C temperature goal the Paris Agreement to effectively discharge their due diligence obligations under Part XII of UNCLOS (see paragraph 161).
168. The non-alignment of the policies enacted by the IMO in relation to GHG emissions from vessels with the Paris Agreement’s temperature limit (see paragraph 29) means that States Parties have failed to properly meet their obligations under Articles 192, 194(1), 194(2), 194(3)(b), 211 and 212 UNCLOS. Therefore, adequate standards to protect and preserve the marine environment from climate change (including via the effective regulation of GHG emissions through the adoption and enforcement of adequate standards), do not currently exist.
169. In relation to the establishment of international rules and standards to reduce emissions from aviation, the measures agreed by States Parties at ICAO are also not aligned with the Paris Agreement temperature limit (see paragraph 38) and similarly do not discharge States Parties’ obligations under Part XII UNCLOS.
170. Thus, for States Parties to comply with their obligations under Articles 194(1) and 211(1) and 212(3) UNCLOS and effectively exercise due diligence, States Parties shall:
- i. in compliance with Article 211(1) UNCLOS, adopt adequate and appropriate international rules and standards in relation to GHG emissions from vessels that align with the Paris

¹⁸⁸ Horace B. Robertson, ‘Navigation in the Exclusive Economic Zone’ (1983) 24(4) *Virginia Journal of International Law* 865, 899; Daniel M. Bodansky, ‘Protecting the Marine Environment from Vessel Source Pollution’ (1991) 18 *Ecology Law Quarterly* 719, 726, 740.

¹⁸⁹ Ringbom (n 80) 148–149.

- Agreement temperature limit and the best available science (through the competent international organization or the general diplomatic conference);
- ii. in compliance with Article 212(3) UNCLOS, endeavour to establish adequate and appropriate global rules and standards in relation to GHG emissions from aircraft that align with the Paris Agreement and the best available science (through the competent international organization or the general diplomatic conference).

V. States Parties 'must take unilateral and/or regional action to satisfy their due diligence obligations under Part XII UNCLOS to the extent that international rules and standards remain insufficient

171. Moreover, and to the extent that global rules and standards on IAS remain insufficient to comply with the 1.5°C temperature goal, States Parties must adopt more stringent standards unilaterally (or regionally) in order to discharge their due diligence obligations under Part XII of UNCLOS, particularly Articles 192 and 194 UNCLOS, and undertake all necessary measures to ensure compliance with such international standards.
172. For example, pursuant to Article 212(1) UNCLOS, States have unilateral obligations in respect of the adoption of laws and regulations to prevent, reduce and control pollution of the marine environment through the atmosphere, encompassing GHG emissions of both vessels and aircraft.¹⁹⁰ Article 212(3) UNCLOS does not in any way limit or restrict such unilateral obligations. Such laws and regulations shall 'take into account' internationally agreed rules. By operation of Article 212(2) UNCLOS, States are obliged to take measures which may extend beyond those rules established in accordance with Article 212(1) UNCLOS.
173. In relation to the regulation and management of shipping in particular, this would *prima facie* include all emissions from vessels over which States Parties have port, flag, or coastal jurisdiction under UNCLOS.
174. In relation to the regulation and management of aviation, the legislative sovereignty of states over their sovereign territory is recognised in the Chicago Convention, and was further determined by the Court of Justice of the European Union in *Air Transportation Association of America & Others v Secretary of State for Energy and Climate Change*, wherein it found (in relation to the inclusion of aviation in the European Union Emissions Trading System) that European Union legislation may be applied to an aircraft operator when its aircraft is in a Member State territory, and specifically departing from or arriving at an aerodrome in that Member States, as in such a case that aircraft is

¹⁹⁰ It is self-evident that vessel emissions may also cause pollution of the marine environment through the atmosphere.

subject to the ‘unlimited jurisdiction of that Member State [and the European Union]’.¹⁹¹ We therefore submit that States Parties are both obliged and facilitated to act to regulate and manage GHG emissions under UNCLOS and international law.

VI. In particular, Flag and Port States have obligations to regulate GHG emissions from vessels and enforce such regulations to discharge their obligations under Part XII of UNCLOS

175. There are three types of jurisdictions over vessels under UNCLOS: coastal State, flag State, and port State. For the purposes of this summary, we have excluded consideration of coastal State jurisdiction as we consider it of less relevance to the present submission, but an analysis of this element of UNCLOS jurisdiction is available in our original submission to the ITLOS.

176. Flag State jurisdiction is often considered the primary basis for the regulation of ships. Article 92(1) UNCLOS stipulates:

Ships shall sail under the flag of one State only and, save in exceptional cases expressly provided for in international treaties or in this Convention, shall be subject to its exclusive jurisdiction on the high seas. [...]

177. States Parties can therefore regulate pollution from vessels flagged in their countries without restriction.¹⁹² Moreover, as Article 211(2) UNCLOS sets only an obligatory minimum (in that the laws and regulations must have *at least the same* effect as that of generally accepted international rules and standards) it confers discretion on flag States to adopt more onerous standards.

178. To the extent that such generally accepted international rules and standards are inadequate to discharge the States Parties’ due diligence obligations, and therefore do not satisfy the obligations of Articles 192 and 194 UNCLOS (see paragraphs 65 and 66), flag States must impose more stringent laws under Article 211(2) UNCLOS in order to prevent, reduce and control pollution of the marine environment caused by GHG emissions. Flag States must also ensure the effective enforcement of such measures pursuant to Article 217(1) UNCLOS.

179. However, we also recognise that in practical terms flag State enforcement alone is likely insufficient to remedy high seas pollution. Port State jurisdiction has emerged as a more practical compliance route.

¹⁹¹ *Air Transport Association of America & Others v. Secretary of State for Energy and Climate Change* [2011] C-366/10, paragraph 124.

¹⁹² Alyssa Kutner and Meredith Wilensky, *Flag State Regulation of Greenhouse Gas Emissions: Regulatory Authority of Flags of Convenience and Franchised Registries* (Sabin Center for Climate Change Law 2014) <https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1137&context=sabin_climate_change> accessed 7 March 2024.

180. Ports are often located within a state's sovereign territory and are therefore subject to the state's territorial sovereignty pursuant to Articles 2(1), 8, 11 and 12 UNCLOS. Article 211(3) UNCLOS recognises the prescriptive right for States to impose conditions on ships' right of entry into ports, a right deriving from the fact of ships' generally voluntary presence in port, and limited only by general principles of non-discrimination, good faith and non-abuse of right. It outlines that States may:

[...] establish particular requirements for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters or for a call at their off-shore terminals [...]

181. UNCLOS accords States wide discretion to enforce these entry requirements pursuant to Articles 25(2), 194(1), 212(2) and 218(1) UNCLOS.

182. Indeed, port State jurisdiction is already being used to regulate environmental matters, both within and outside the IMO, such as through the Paris MoU (see paragraph 90).

183. While a port State's right to regulate GHG emissions as a condition of port entry under Article 211(3) UNCLOS is discretionary, such discretion must be exercised by port States to discharge their obligations in Articles 192, 194(1) and 212 UNCLOS. For the same reason, port States must effectively enforce any such regulations.

184. In summary, Opportunity Green's submission requested the ITLOS to clarify the following. Please refer to the full submission for further detail:¹⁹³

- i. The definition of 'pollution of the marine environment' includes GHG emissions and therefore the associated UNCLOS Part XII obligations apply to GHG emissions from vessels and aviation;
- iii. States Parties' due diligence obligations under Part XII UNCLOS require States Parties to take all necessary measures to mitigate, prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the 1.5°C temperature goal of the Paris Agreement;
- iv. States Parties' have specific obligations under Part XII to establish international rules and standards in relation to vessel and aircraft pollution acting through the competent international organization or general diplomatic conference;

¹⁹³ Opportunity Green (n 180).

- v. States Parties' must take unilateral and/or regional action to satisfy their due diligence obligations under Part XII UNCLOS to the extent that international rules and standards remain insufficiently aligned to the Paris Agreement, as is currently the case; and
- vi. Flag and port States have obligations to regulate GHG emissions from vessels and enforce such regulations, and port State jurisdiction in particular provides an effective mechanism under which States Parties can discharge their obligations under Part XII of UNCLOS.

CHAPTER 5: CONCLUSION

185. Opportunity Green has made this Submission to assist the Court in answering Question (a). Given Opportunity Green's expertise in IAS, this Submission has focussed specifically on one aspect of Question (a), namely the obligations of States in relation to the mitigation of emissions from IAS having particular regard to the UNFCCC, the Paris Agreement and UNCLOS.
186. Broadly, our Submission has argued that these two sectors fall within the scope of the Paris Agreement. In particular, the global temperature goal of 1.5°C applies to all sectors, including IAS, and NDCs submitted under the Paris Agreement must include actions across all sectors, including IAS, to realise this goal. Further, our Submission has outlined that UNCLOS requires States to take all necessary measures to mitigate climate impacts from IAS, either domestically, in concert with other States Parties, or through the competent international organization to ensure compliance with the temperature limit in the Paris Agreement.
187. We respectfully ask that the Court considers the matters set out in this Submission and clarifies in its opinion States' obligations in relation to GHG emissions from IAS. Specifically, we seek confirmation that:
- i. The temperature goals contained within the Paris Agreement, and specifically Articles 2(1)(a) and 4(1)(a), necessarily include the IAS sectors;
 - ii. States have due diligence obligations when designing NDCs under the Paris Agreement, which indicate that NDCs must include actions across all sectors, including IAS, to realise the global temperature goal;
 - iii. Progressive NDCs which reflect the highest possible ambition to stay within the 1.5°C temperature limit necessarily must include actions across all sectors, including IAS, as reinforced by the outcome of the GST;
 - iv. Guidance by the IPCC to report IAS emissions separately to national emissions does not override Parties' substantive obligations under the Paris Agreement to reduce IAS emissions; it is rather intended to ensure global completeness and transparency (avoiding double counting);

- v. Notwithstanding the reporting and accounting mechanisms of the Paris Agreement, developed countries should include IAS emissions in their NDCs and developing countries should be working towards such inclusion;
- vi. The due diligence obligations under Part XII UNCLOS require States Parties to take all necessary measures to mitigate, prevent, reduce and control pollution of the marine environment by vessels and aircraft in line with the 1.5°C temperature goal of the Paris Agreement;
- vii. States Parties must take unilateral and/or regional action to satisfy their due diligence obligations under Part XII UNCLOS to the extent that international rules and standards (such as those implemented by IMO and ICAO) remain insufficient.

Opportunity Green

14 March 2024