Submission to the Special Rapporteur on climate change to the call for inputs on "Fossil Fuel-based Economy and human rights"

Opportunity Green, 27 February 2025

Opportunity Green is an NGO working to unlock the opportunities from tackling climate change using law, economics, and policy. We do this by amplifying diverse voices, forging ambitious collaborations and using legal innovation to motivate decision makers and achieve climate justice with particular emphasis on the aviation and shipping industries.

Opportunity Green welcomes the opportunity to respond to this call for inputs. We remain available for assistance and any further information; please contact David Kay, Legal Director, Opportunity Green at david@opportunitygreen.org or Olivia Moyle, Legal Assistant, Opportunity Green at olivia@opportunitygreen.org.

Introduction

The Intergovernmental Panel on Climate Change (IPCC) has stated with very high confidence that there is a rapidly closing window of opportunity to secure a liveable and sustainable future for all,[1] and human-caused climate change is already causing widespread loss and damages to nature and people,[2] with any increase in global temperature projected to have negative consequences to human health.[3] Indeed, the climate crisis is said to impact human rights in its entirety.[4] The European Court of Human Rights in *Verein KlimaSeniorinnen Schweiz and Others v Switzerland* recently found that article 8(1) of the European Convention of Human Rights (respect for private and family life) includes a right to effective protection by State authorities from the serious adverse effects of the climate crisis on lives, health, well-being and quality of life.[5]

The aviation and shipping sectors are major polluters in the fossil fuel-based economy and together contribute almost 4.8% of global greenhouse gas (GHG) emissions, with emissions projected to increase for both sectors.[6] GHG emissions from international aviation and shipping account for 2.7% of this total.[7] Yet the regulation of GHG emissions in both sectors remains weak and insufficient. Current policies put global shipping on a 2 – 3°C warming pathway by 2050,[8] and international aviation on a 4°C+ pathway.[9] It has been repeatedly asserted that addressing the emissions of international shipping and aviation is within the purview of the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) respectively, rather than a matter for individual States.[10] This is not consistent with the Paris Agreement, which provides that States should address GHG emissions from all economic sectors and must work towards rapid, deep and sustained GHG emissions. Consequently, States have an obligation under the Paris Agreement to properly account for and adopt policies that drive GHG emission reductions from international aviation and shipping.[11]

Despite these obligations, both sectors continue to be heavily dependent on fossil fuels, are projected to grow exponentially[12] and have typically enjoyed subsidies to support their fossil-based activities. While the IMO is taking steps to decarbonise the shipping sector, with its Member States adopting a revised Strategy on GHG Emissions Reduction in 2023, and currently negotiating a basket of mid-term emissions reductions measures, the ICAO has taken only a "limited role"[13] in the way of climate action (adopting only an 'aspirational' net zero goal, a technical CO_2 standard that is not expected to drive any mitigation, and a market-based measure (CORSIA) that has major limitations, including a high baseline of emissions and reliance on offsetting[14]). Addressing these limitations, for instance through the adoption of pricing mechanisms, such as fuel taxes and levies (which could, for example, contribute to loss and damage funding) could contribute to a green and just transition and support the enjoyment of human rights.

This submission has taken excerpts from two previous Opportunity Green submissions to UN human rights mechanisms: the Special Rapporteur on the human right to a healthy environment's call for inputs on "Oceans and Human Rights" and the UN Secretary General's analytical study on "The impact of loss and damage from the adverse effects of climate change on human rights".

Building on those previous submissions, Opportunity Green submits that: (i) the climate impacts from aviation and shipping, as fossil-fuel dependent activities, have an adverse effect on the enjoyment of human rights; (ii) the Paris Agreement, among other sources of international law, establishes legal obligations for States to account for and reduce emissions from international aviation and shipping; and, (iii) there are opportunities in each sector to scale a just transition away from fossil fuels. We set out responses to questions 3, 4 and 5 below.

Response to question 3: Which areas of international law are relevant to the protection of human rights in the context of the fossil fuels-based economy? In what ways do they support or hinder the protection of human rights in international law that would arise in the transition away from fossil fuels and the phase out of fossil fuel subsidies?

Climate obligations are found under multiple sources of international law, as demonstrated by three advisory opinions in the context of climate change.[15] Beyond the additional obligations clarified under UNCLOS, by the ITLOS advisory opinion, the clearest legal obligations that apply to international aviation and shipping lie in the United Nations Framework Convention on Climate Change (UNFCCC) as operationalised by the Paris Agreement. From establishing the legal obligation to account for and reduce GHG emissions from international aviation and shipping under the Paris Agreement it follows that national climate regulations should be adopted to meet States' international obligations. This should help address the human rights impacts of these activities in the fossil fuel-based economy as well as contribute to the just transition.

Paris Agreement

The long-term temperature goal of the Paris Agreement[16] must be read against, and in pursuit of, the ultimate objective of the UNFCCC, set out in Article 2 which requires, "[the] stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." Article 3(3) states (emphasis added), "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."

The mechanism through which each Party to the Paris Agreement communicates its actions to reduce GHG emissions to reach the temperature goal is its 'nationally determined contribution' (NDC). There is a binding obligation on each Party to submit an NDC every five years (Article 4(9)) which is: (i) for developed country Parties, economy-wide (and over time developing country Parties are also encouraged to move towards economy-wide targets) (Article 4(4)), (ii) progressively ambitious, and (iii) reflects its highest possible ambition according to the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC), in the light of different national circumstances, with developed countries taking the lead (Article 4(4)). Therefore, to align with the economy-wide application of the Paris Agreement, Parties (particularly developed country Parties) must include international aviation and shipping in their NDCs.

Currently, this is not standard practice as most States omit international aviation and shipping emissions from their NDCs. This has resulted in an emissions reporting[17] and implementation[18] gap. The United Nations Environment Programme (UNEP) reports that around 71% of the CO2 emissions from shipping and 65% from aviation are international and are not typically included in national totals.[19] Concurrently, the IMO and ICAO have not adopted policies that can be relied on by States to discharge State obligations under the Paris Agreement.[20] We submit that States' NDCs 3.0, due in September 2025, must necessarily include emissions from international aviation and shipping in their headline target and accounting mechanism.[21] This can help ensure that policies pertaining to emissions mitigation in these sectors are adopted that contribute to the green transition and help protect human rights.

The standard of care taken when preparing NDCs must also take into consideration States' obligations under international human rights law. 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.[22] States' human rights obligations require States to diligently mitigate this risk.[23] The same obligation would reasonably apply by extension to international aviation.

Polluter pays principle

The polluter pays principle is generally accepted as a principle of international environmental law.[24] Measures, policies and laws based on the polluters pays principle place the burden for the costs of pollution with the entity that caused it, internalising the costs of impacts to third parties resulting from the pollution.[25] Although distinct from a human rights-based approach, applications of the polluter pays principle can be an effective method for the protection, conservation, and restoration of oceans and biodiversity, and thus complementary to the realisation of related human rights.

Response to question 4: Are there good practices or lessons learned in regulating the fossil fuel-based economy that can support a just transition away from fossil fuels? Are there lessons from other sectors that can provide transferable insights for the transition away from fossil fuels?

A just and equitable transition at the International Maritime Organization

Following the adoption of the revised 2023 IMO Strategy on Reduction of GHG Emissions from Ships, the focus of discussions at the IMO related to GHG emissions reductions from international shipping has turned to the development of regulatory measures that can turn the agreed emissions targets into reality. The 'basket' of measures will include both (an) economic element(s), on the basis of a maritime GHG emissions pricing mechanism, and a technical element, namely a goal-based marine fuel standard (GFS). The measures are yet to be determined but must be ready for approval in April 2025 (at MEPC 83), before their legislative adoption in October 2025. The design of the measures will be key to ensuring that they are not only effective in achieving emissions reductions, but also secure a just and equitable transition for developing countries, in particular Small Island Developing States (SIDS) and Least Developed Countries (LDCs). Depending on their design, the IMO's mid-term measures could be a useful example to other fossil-fuel dependent sectors.

A well-designed price on shipping's emissions has the ability to support the decarbonisation of the shipping sector and incentivise higher energy efficiency, provide the certainty and strong signal needed to achieve a rapid ramp-up in investments across the sector, reduce the price gap between fossil fuels and zero-emission fuels, generate revenues to be redistributed to speed up the global transition to zero emissions, and ensure a just and equitable transition for developing countries. If adopted, a high price (i.e., starting price USD$150, ratcheting upward over time) on all well-to-wake GHG emissions from international shipping, like that proposed by the Pacific Island States and others, could provide a pioneering example to other fossil fuel dependent sectors. It is imperative that any revenues generated from a GHG price are allocated in a way that ensures a just and equitable transition, prioritising SIDS and LDCs.

Response to question 5: Are there gaps or barriers in the domestic regulation of business activities in the fossil fuel-based economy that prevent the protection of human rights? Are there specific examples of State regulation of a just transition away from fossil fuels and/or fossil fuel phase out? To what extent do these examples provide rights-based, gender-responsive, age-sensitive, disability-inclusive and risk-informed approaches to a just transition away from fossil fuels that prevent discrimination?

Fossil fuel taxation gap

Aviation and shipping are historically undertaxed industries, despite being major polluters, therefore a significant gap exists in the regulation of these activities in the fossil fuel-based economy, with implications for the protection of human rights. As the average global temperature continues to rise, climate vulnerable countries are forced to divert their already limited resources to responding to climate disasters, rather than focusing on sustainable development.[26] On the other hand, international aviation is an activity predominantly enjoyed by the wealthiest 2 to 4% of the world's population.[27] In response to this cyclical dilemma, the former UN Special Rapporteur on Human Rights and the Environment, David Boyd, and international human rights lawyer, Stephanie Keene, suggested the implementation of aviation and maritime levies to "help close the gap in SIDS and LDCs' finance for losses, damages, and adaptation in an expeditious, equitable and efficient manner."[28] In addition to this, the Global Solidarity Levies Task Force was launched at COP28 to explore "feasible, scaleable and sensible options for levies to raise additional resources for climate and development."[29] Such levies explored could help address the significant gap in climate finance (whilst $700 million was pledged at COP28 by several More Developed Countries (MDCs) to the loss and damage (L&D) fund, this covers less than 0.2% of global L&D needs[30]).

Aviation is the most carbon intensive form of transport.[31] Burning kerosene fuel at high altitudes emits both carbon and non-CO_2 emissions in the form of nitrous oxides, contrails and particulates. Non-CO_2 emissions have been overlooked by industries and regulators, as demonstrated by their exclusion in emissions trading schemes[32], yet these non-CO_2 impacts mean aviation actually accounts for 4% of global warming.[33] The absence of any pricing of the non-CO2 impacts of aviation externalises the environmental costs of such impacts. An aviation fuel tax in the EU alone could produce $12.8 billion in revenue by 2027.[34] While a similar tax in the UK could generate £6.7 billion in revenue and would not negatively impact the economy.[35] If other MDCs mobilised, this could create a significant amount of revenue needed by LDCs and SIDS to recover from L&D caused by aviation emissions (provided such tax is paired with an appropriate distribution mechanism; see further below).

Revenue distribution

As discussed in response to question 4, the International Maritime Organization (IMO) is currently negotiating a basket of mid-term emission reduction measures, which will include some form of GHG pricing mechanism. While the design of this mechanism remains open for discussion, all proposals result in the generation of some revenue. Several Member States, including Pacific Island States and other SIDS, argue that a portion of generated revenue should go towards environmental protection, adaptation and resilience building, and climate response to the impacts of pollution from international shipping, with differentiated priority to climate vulnerable developing states. This revenue distribution stream would remain separate and additional to developed countries' climate finance obligations under the UNFCCC. The aviation industry should do the same. However, due to governance challenges at the ICAO,[36] national governments should move forward with taxation domestically (placed on all flights departing from their jurisdictions, not just domestic flights) as quickly as possible, without waiting for an international universal agreement on aviation taxation.

Conclusion

Aviation and shipping are heavily reliant on the fossil fuel industry, representing two sectors causing extensive climate harm and therefore adversely impact the full enjoyment of human rights. At the same time, there are significant opportunities to address these issues and promote a just transition.

The Paris Agreement provides a strong legal framework for States to discharge their obligations by adopting regional and national reduction measure policies such as fuel levies and taxes. This submission has highlighted concrete steps currently being taken by the IMO in respect of shipping and where States can take greater national action in respect of the international shipping and aviation sectors.

Appendix A - References

1 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) 24.

2 ibid, 5.

3 IPCC, 'Impacts of 1.5°C of Global Warming on Natural and Human Systems' 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) 180.

4 Ian Fry, 'Promotion and protection of human rights in the context of climate change' (26 July 2022) UN Doc A/77/226.

5 Verein KlimaSeniorinnen Schweiz and Others v Switzerland [2024] ECHR 304.

6 Global shipping accounted for 2.89% of GHG emissions in 2018: 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 27 February 2025. Global aviation accounted for 1.9% of GHG emissions in 2019: 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 27 February 2025.

7 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.

8 'International Shipping' (*Climate Action Tracker*, 12 October 2023) <https://climateactiontracker.org/sectors/shipping/> accessed 27 February 2025. This rating takes into consideration the newly revised strategy.

9 'International Aviation' (*Climate Action Tracker*, 22 September 2022) <https://climateactiontracker.org/sectors/aviation/> accessed 27 February 2025.

10 See for example: The United Kingdom's (UK) 2030 Nationally Determined Contribution communication to the UNFCCC (updated September 2022) < https://assets.publishing.service.gov.uk/media/633d937d8fa8f52a5803e63f/uk-nationally-determined-contribution.pdf> accessed 27 February 2025, 6; The UK's 2035 Nationally Determined Contribution (NDC) emissions reduction target under the Paris Agreement < https://assets.publishing.service.gov.uk/media/679b5ee8413ef177de146c1e/uk-2035-nationally-determined-contribution.pdf> accessed 27 February 2025, 6.

11 Estelle Dehon KC, 'Legal Advice: 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' (2021) <https://www.transportenvironment.org/uploads/files/Re-Aviation-Shipping-NDC-UPDATED-Legal-Advice-Final-3-5-21-corr-1.pdf> accessed 27 February 2025.

12 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 27 February 2025, 3; European Parliament's Committee on Environment, Public Health and Food Safety (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) <www.europarl.europa.eu/thinktank/en/document/IPOL_STU(2023)754191> accessed 27 February 2025, 26.

13 Benoit Mayer and Zhuoqi Ding, 'Climate Change Mitigation in the Aviation Sector: A Critical Overview of National and International Initiatives' (2023) 12 Transnational Environmental Law 14, 10.

14 ibid 10–13.

15 See: International Tribunal for the Law of Sea, *Case No. 31 Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal),* Advisory Opinion of May 2024; Inter-American Court of Human Right, *Advisory Opinion OC-23/17 of November 15, 2017 Requested by the Republic of Colombia: The Environment and Human Rights*; 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 of 12 April 2023.*

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

17 Reporting 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.

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

[19] Based on reporting in 2020. United Nations Environment Programme (UNEP), Emissions Gap Report 2020 (UNEP 2020) <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34426/EGR20.pdf?sequence=1&isAllowed=y> accessed 27 February 2025, XXIII.

[20] 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; 'International Shipping' (Climate Action Tracker, 12 October 2023) <https://climateactiontracker.org/sectors/shipping/> accessed 27 February 2025. This rating takes into consideration the newly revised strategy. See also: 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 27 February 2025.

[21] For full legal analysis on the inclusion of international aviation and shipping emissions in NDCs, please see 'Written Statement of Opportunity Green' in a Request for an Advisory Opinion of the International Court of Justice on the Obligations of States in respect of Climate Change (14 March 2024) <https://climatecasechart.com/wp-content/uploads/non-us-case-documents/2024/20240314_18913_na.pdf> accessed 27 February 2025.

[22] Baine P. Kerr, 'All Necessary Measures: Climate Law for International Shipping' (forthcoming) 64 Virginia Journal of International Law 1, 37–39.

[23] ebd.

[24] Philippe Sands and others 'General Principles and Rules', in Philippe Sands and Jacqueline Peel (eds) *Principles of International Environmental Law* (Cambridge University Press, 2018) 197–251.

[25] Hillary Aidun, Daniel J. Metzger & Michael B. Gerrard, 'Principles of International Law and the Adoption of a Market-Based Mechanism for Greenhouse Gas Emissions from Shipping' (2021) Columbia Law School 4 < https://scholarship.law.columbia.edu/faculty_scholarship/2749> accessed 27 February 2025.

[26] Lisa Benjamin and Adelle Thomas, *Climate change impacts and research in the Caribbean: constraints, opportunities and the role of tertiary institutions*, 2018 University Initiatives in Climate Change Mitigation and Adaptation, 131–42; Adelle Thomas et al. *Climate Change and Small Island Developing States, Annual Review of Environment and Resources* (2020), 45(1), 1-27.

[27] Stefan Gössling and Andreas Humpe, 'The Global Scale, Distribution and Growth of Aviation: Implications for Climate Change' (2020) 65(102194) Global Environmental Change, 4.

[28] David Boyd and Stephanie Keene, 'OHCHR Policy Brief No. 2 - Air Travel and Maritime Shipping Levies: Making Polluters Pay for Climate Loss, Damages and Adaptation' 2021, 4.

[29] See: Global Solidarity Levies Task Force at < https://solidaritylevies.org/about/> accessed 27 February 2025.

[30] Nina Lakhani, '$700m pledged to loss and damage fund at Cop28 covers less than 0.2% needed' (The Guardian, 6 December 2023) <https://www.theguardian.com/environment/2023/dec/06/700m-pledged-to-loss-and-damage-fund-cop28-covers-less-than-02-percent-needed> accessed 27 February 2025.

[31] Milan Klöwer and others, 'Quantifying aviation's contribution to global warming' (2021) 16(104027) Environmental Research Letters 1.

[32] As of January 2025, the EU ETS includes a monitoring, reporting and verification requirement for aviation non-co_2 emissions for airline operators. However, this is merely a reporting requirement, and the non-co2 emissions are not yet priced.

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

[34] Thomas Hirsch and others, 'New resources for public climate finance and for the Loss and Damage Fund: Exploring taxes and levies at EU and multilateral level' Climate Action Network Europe September 2023 <https://caneurope.org/content/uploads/2023/10/Public-sources-climate-finance-loss-and-damage.pdf> accessed 27 February 2025, 3.

[35] Transport and Environment, Applying Kerosene Duty to Aviation, (November 2022) < https://www.transportenvironment.org/uploads/files/2209-Kerosene-Duty.pdf> accessed 27 February 2025, 1.

[36] Carly Hicks, 'Clear Sky and Transparent Sea' (Opportunity Green, December 2022) <https://www.opportunitygreen.org/publication-clear-sky-and-transparent-sea> accessed 27 February 2025.