**Submission to the Special Rapporteur on the promotion and protection of human rights in the context of climate change**

**to the call for inputs on**

**"Corporate accountability in the context of human rights and climate change"**

**Opportunity Green, 22 November 2023**

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 Carly Hicks, Legal Director, Opportunity Green at carly@opportunitygreen.org.

## Introduction

Despite shipping and aviation being major polluters, the two industries are poorly regulated in terms of greenhouse gas (GHG) emissions and are not on track to meet the Paris Agreement 1.5 °C temperature limit.

The entire shipping sector is responsible for approximately 2.89 % of global GHG emissions.[1] Global aviation accounts for 1.9% of greenhouse gas emissions[2] and 3.5% of 'effective radiative forcing' which is a closer measure of its impact on warming.[3] Alarmingly, if these two sectors are left unregulated, their carbon dioxide ($CO_2$) emission shares may rise to 22% for international aviation and 17% for maritime transport of global $CO_2$ emissions by 2050.[4]

In 2023, the International Maritime Organization (IMO) revised its Initial GHG Strategy.[5] The revised 2023 IMO Strategy is a considerable improvement; however, it still fails to align with the 1.5°C temperature goal. Even considering the revised Strategy, international shipping's

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1 Jasper Faber and others, 'Fourth IMO GHG Study 2020' (2020) International Maritime Organization <https://www.imo.org/en/ourwork/Environment/Pages/Fourth-IMO-Greenhouse-Gas-Study-2020.aspx> accessed 22 November 2023.

2 Hannah Ritchie, 'Climate change and flying: what share of global $CO_2$ emissions come from aviation?' (*Our World in Data*, 22 October 2020) <https://ourworldindata.org/co2-emissions-from-aviation#:~:text=Aviation%20accounts%20for%202.5%25%20of%20global%20CO2%20emissions&text=Most%20flights%20are%20powered%20by,to%20CO2%20when%20burned.> accessed 22 November 2023.

3 David S. Lee and others, 'The contribution of global aviation to anthropogenic climate forcing for 2000 to 2018' (2021) 244 Atmospheric Environment 117834.

4 Martin Cames and others 'Emission Reduction Targets for International Aviation and Shipping' (2015) Policy PE 569.964, European Parliament's Committee on Environment, Public Health and Food Safety <https://www.europarl.europa.eu/RegData/etudes/STUD/2015/569964/IPOL_STU(2015)569964_EN.pdf> accessed 22 November 2023.

5 Resolution MEPC.377(80) (adopted 7 July 2023); Resolution MEPC.304(72) (adopted 13 April 2018).

climate action has been rated as 'highly insufficient'.[6] Measures to implement the strategy are yet to be adopted.

In 2022, the International Civil Aviation Organization (ICAO) Assembly adopted a collective long-term global aspirational goal of international aviation of net-zero carbon emissions by 2050.[7] This agreement is also not in line with the 1.5°C goal; possible temperature outcomes range from 1.6°C to 2.3°C.[8] Further, it is not binding, and is intended to keep aviation on a pathway to 'sustainable growth'.[9]

Given the inadequacy of international action to address both shipping and aviation emissions, domestic action is required in order to bring these sectors in line with the Paris Agreement. However, domestic action remains severely lacking.

**Question 2.a)**

Our submission to question 2.a) focuses on climate risks, and specifically, climate litigation risks, for the shipping industry, with a view to current large-scale investments into liquefied natural gas (LNG).

Climate risks can be categorized into transition risks and physical risks resulting from climate change.[10] Transition risks (such as stranded assets) arise from the policy, legal, technology, and market changes that the transition to a low carbon or net zero economy entails.[11] Recent years have seen an increase in and diversification of climate litigation, and the emergence of climate litigation risks, both before judicial and quasi-judicial bodies.[12]

While 'Carbon Majors' remain the primary target for climate litigants, cases against corporations of other sectors are on the rise.[13] This trend poses a legal (and regulatory) risk to companies from other high-emitting sectors such as shipping. The International Chamber of Shipping (ICS), the global trade association for shipowners and operators, has warned that the

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6 'International Shipping' (*Climate Action Tracker*, 12 October 2023) <https://climateactiontracker.org/sectors/shipping/> accessed 22 November 2023.

7 ICAO Assembly Resolution A41-21 (adopted 7 October 2023).

8 Shraeya Mithal and Dan Rutherford, 'ICAO's 2050 net-zero $CO_2$ goal for international aviation' (2023) International Clean Council for Transportation <https://theicct.org/wp-content/uploads/2022/12/global-aviation-ICAO-net-zero-goal-jan23.pdf> accessed 22 November 2023.

9 ICAO Assembly Resolution A41-21 (n 7) preamble and paras. 6–7.

10 'Final Report – Recommendations of the Task Force on Climate-related Financial Disclosures' (2017) Task Force on Climate-related Financial Disclosures <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf> accessed 22 November 2023.

11 ibid.

12 Joana Setzer and Catherine Higham, 'Global trends in climate change litigation: 2023 snapshot' (2023) Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2023/06/Global_trends_in_climate_change_litigation_2023_snapshot.pdf> accessed 22 November 2023.

13 ibid.

increasing trend and scope of climate litigation could herald a new legal risk for shipping companies and directors.[14]

Stock listed, multinational ship operators carrying fossil products are expected to be the most likely targets due to their trade's involvement in the oil and gas industry. ICS also stressed that there are wider grounds for climate litigation which could affect all shipowners.[15]

The last decade has seen a rapid uptake of LNG,[16] often portrayed as a 'transitional fuel',[17] despite the International Panel on Climate Change (IPCC) stating that natural gas-based fuels are inadequate to meet climate goals for shipping.[18] The uptake of LNG resulted in an increase of the sector's methane emissions by 150%.[19]

LNG consists primarily of methane, a GHG that is up to 83 times more potent than $CO_2$ over a 20-year period.[20] When used as a shipping fuel, methane leaks and slips into the atmosphere across the entire lifecycle. The emission of unburned methane during combustion is of particular concern.[21]

The science strongly suggests that benefits of lifecycle GHG emissions of using LNG as a marine fuel are limited if not negative compared to conventional fuels.[22] The World Bank has warned against the use of LNG in shipping, stating (emphasis added) 'there are *significant* risks that speak against LNG as a 'transitional fuel'.[23] It is estimated that the global fleet of LNG-capable ships is at risk of stranded assets worth $850bn.[24] Further, climate litigation risks for investments into LNG are beginning to materialize for shipping companies.

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14 'Climate law poses emerging challenge for shipowners' (*International Chamber of Shipping*, 8 March 2023) <https://www.ics-shipping.org/news-item/climate-law-poses-new-emerging-challenge-for-ship-owners/> accessed 22 November 2023.

15 ibid.

16 Faber and others (n 1).

17 'LNG – fuel in transition' (*Shell*) <https://www.shell.com/energy-and-innovation/natural-gas/lng-for-transport/lng-for-marine.html> accessed 22 November 2023.

18 Priyadarshi Shukla and others, 'Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change' (2022) IPCC <https://www.ipcc.ch/report/ar6/wg3/> accessed 22 November 2023.

19 Faber and others (n 1).

20 Valerie Masson-Delmotte and others, 'Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the International Panel on Climate Change' (2021) IPCC <https://www.ipcc.ch/report/ar6/wg1/> accessed 22 November 2023.

21 Nikita Pavlenko and others, 'The climate implications of using LNG as a marine fuel' (2020) International Clean Council for Transportation Working Paper 2020-02 <https://theicct.org/sites/default/files/publications/Climate_implications_LNG_marinefuel_01282020.pdf> accessed 22 November 2023.

22 Paul Balcombe, Dalia A. Heggo and Mathew Harrison, 'Total Methane and $CO_2$ Emissions from Liquefied Natural Gas Carrier Ships: The First Primary Measurements' (2022) 56(13) Environmental Science & Technology 9632; Pavlenko and others (n 21).

23 Dominik Englert and others 'The Role of LNG in the Transition Toward Low- and Zero-Carbon Shipping' (2021) 2, The World Bank <https://openknowledge.worldbank.org/entities/publication/a78f738a-22b7-5f63-95e0-a515e47e8835> accessed 22 November 2023.

24 Marie Fricaudet, 'Exploring methods for understanding stranded value: case study on LNG-capable ships' (2022) UCL Energy Institute <https://www.dropbox.com/s/ok3912v3xzeyclb/Stranded%20value%20-%20case%20study%20on%20LNG-capable%20ships%20FINAL.pdf?dl=0> accessed 22 November 2023.

In 2021, a shipping company was referred for investigation and enforcement action to the Financial Conduct Authority of the United Kingdom (UK). The referral request argued that the company's failure to be clear with shareholders about the climate-related risks it is exposed to breaches its legal obligations. One of the risks raised in the referral request concerned the company's investments into LNG as one of the 'key components' of its climate strategy.[25]

Misrepresentation and miscommunication risks do not just arise vis-á-vis investors but also the general public and consumers. In 2023, advertising complaints were filed with the UK Advertising Standards Authority (ASA) against several cruise lines for their marketing communications around LNG, which portrayed the fuel in a climate-beneficial manner.[26]

In conclusion, climate (litigation) risks are increasing for the shipping sector. The surge of investments into LNG suggests that shipping corporations are not adequately considering or explaining to investors the risks of such investments. Litigation risks have already started to crystallize.

**Question 3.c)**

Greenwashing practices by consumer-facing industries such as aviation are of great concern, as they hinder urgently needed demand reduction.[27] Our submission to question 3.c) outlines potential greenwashing with respect to climate change mitigation claims by the aviation industry and sets out greenwashing litigation targeting the aviation industry to date.

Several judicial cases and quasi-judicial greenwashing complaints, based on consumer protection law and advertising standards, have been filed against airlines. In the United States (US), for instance, there are two ongoing class action lawsuits against two airlines.

- The lawsuit *Long v. KLM* argues that an airline's compensation programme is misleading as it is based on insufficient offsets and inadequate carbon credits.[28] The case also claims that the airline's focus on sustainable aviation fuel (SAF) is misleading because this has a negligible effect on $CO_2$ reduction from flying.
- In *Berrin v. Delta Air Lines* the plaintiff alleges that an airline's representation as the world's first 'carbon neutral' airline based on purchase of carbon offsets is false and misleading due to fundamental integrity issues with the voluntary carbon offset market.[29]

[25] Available at: <https://www.clientearth.org/media/r2ymeh5o/17-08-2021-clientearth-fca-referral-request-carnival-plc-and-carnival-corporation.pdf> accessed 22 November 2023.
[26] Available at: <https://www.opportunitygreen.org/press-release-opportunity-green-issues-asa-complaints-over-cruise-lng-greenwashing> accessed 22 November 2023.
[27] IPCC (n 18).
[28] Available at <https://climatecasechart.com/case/long-v-koninklijke-luchtvaart-maatschappij-nv/> accessed 22 November 2023. A similar, previous lawsuit was dismissed due to procedural issues. See *Dakus v. KLM*, available at: <https://climatecasechart.com/case/dakus-v-koninklijke-luchtvaart-maatschappij-nv/>.
[29] Available at <https://climatecasechart.com/case/berrin-v-delta-air-lines-inc/> accessed 22 November 2023.

There are also several judicial greenwashing lawsuits against airlines outside of the US.

- A ruling has recently been issued by an Austrian regional court against an airline regarding misleading advertising concerning the amount of SAF used in commercial flights. The advertisement claimed a particular flight path was carbon neutral using 100% SAF, despite this being a technical impossibility.[30]
- In the Netherlands, the greenwashing lawsuit *Fossielvrij v. KLM* alleges that an airline's campaign, which claims that $CO_2$ compensation measures and the use of SAF can make flying sustainable, is misleading.[31]
- In Germany, the case *Environmental Action Germany v. Eurowings GmbH* makes a similar argument and criticizes insufficient compensation through climate protection projects and the use of SAF.[32]

In the UK, the ASA has dealt with several quasi-judicial complaints about greenwashing by airlines, all of which it upheld. The complaints concerned:

- Ads by an airline claiming to be Europe's lowest emissions airline. The ads were found to be misleading as these claims could not be substantiated;[33]
- An ad which suggested an airline's approach to aviation was protecting the world. The ad was considered misleading in overstating the airline's environmental impact.[34]
- Ads by an airline claiming to operate 'sustainable aviation'. The ASA noted that there existed no commercially viable technologies that could adequately substantiate a claim portraying flying as sustainable.[35]

At the EU-level, a sector-wide complaint against 17 airlines was submitted to the European Commission claiming the advertisement of offsetting schemes and SAF as sustainable options in aviation is misleading to consumers.[36]

An analysis of the cases demonstrates greenwashing concerns over two issues: (i) the communication around offsets to justify 'carbon neutral' claims, and particularly, underlying concerns about accounting methods and quality; and (ii) the marketing of SAF to justify 'climate action' or 'carbon neutral' claims.

To ensure the stated mitigation performance of offsets, certain environmental integrity criteria must be fulfilled. There is, however, wide uncertainty over the mitigation performance of offsetting. Concerns around quality include, but are not limited to, issues around additionality,

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30 Regional Court of Korneuburg, 29 June 2023, 29 Cg 62/22z – 16.

31 Available at <https://climatecasechart.com/non-us-case/fossielvrij-nl-v-klm/> accessed 22 November 2023.

32 Available at https://www.duh.de/fileadmin/user_upload/download/Projektinformation/Verbraucher/2023-09-14_%C3%9Cbersicht_DUH-Verfahren_Klimaneutralit%C3%A4t.pdf> accessed 22 November 2023.

33 ASA Ruling on Ryanair Ltd t/a Ryanair Ltd, Complaint No. G19-1035778.

34 ASA Ruling on Deutsche Lufthansa AG t/a Lufthansa, Complaint No. A22-1169419.

35 ASA Ruling on Etihad Airways, Complaint no. A22-1174208.

36 Clemens Kaupa, 'Green (f)lying – The legality of climate-related marketing claims by the aviation sector under the UCPD' (2023) BEUC <https://www.beuc.eu/sites/default/files/publications/BEUC-X-2023-084_Green_F-Lying_full_report.pdf> accessed 22 November 2023

overestimation, permanence, exclusivity, and avoidance of social and environmental harms.[37] As such, studies raise concerns over the validity of schemes that have been used by airlines.[38] Flagged issues concern additionality,[39] and accounting methods,[40] but also the communication around these schemes.[41]

The sustainability of certain SAF is also contentious. 'SAF' is an umbrella term and captures a range of production routes, each with different feedstocks. The most mature SAF technology to date is the production of biofuels produced from crops or waste, while synthetic e-fuel SAF will have a greater role to play in the future but require industrial rescaling.[42]

Feedstock origins and inputs are crucial to the lifecycle carbon neutrality of SAF.[43] Not all SAF are equally sustainable, with some crop-based biofuels producing higher emissions compared to fossil fuels once factors such as indirect land use change are considered.[44] Used cooking oils (UCO) and animal fats are the most popular SAF used by airlines in Europe,[45] despite not being the lowest emission options.[46] Ultimately, the use of SAF still results in emissions of GHG. Further, the uptake of SAF is slow. For example, the estimated production of UCO and animal fats in the UK and EU would only cover 2.9% respectively 1.4% of aviation fuel demand in 2050.[47]

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37 Derik Broekhoff and others, 'Securing Climate Benefit: A guide to Using Carbon Offsets' (2019) Stockholm Environment Institute <https://www.offsetguide.org/wp-content/uploads/2020/03/Carbon-Offset-Guide_3122020.pdf> accessed 22 November 2023.

38 See for example Florian Wozny and others, 'CORSIA – A Feasible Second Best Solution?' (2021) 12(14) Applied Sciences 7054.

39 Martin Cames and others, 'How additional is the Clean Development Mechanism?' (2016) Oeko-Institut e.V. <https://climate.ec.europa.eu/system/files/2017-04/clean_dev_mechanism_en.pdf> accessed 22 November 2023.

40 Rosalie Arendt, Vanessa Bach and Matthias Finkbeiner, 'Carbon Offsets: An LCA Perspective' in Stefan Albrecht and others (eds), *Progress in Life Cycle Assessment 2019* (Springer International Publishing 2021).

41 Susanne Becken & Brendan Mackey, 'What role for offsetting aviation greenhouse gas emissions in a deep-cut carbon world?' (2017) 63 Journal of Air Transport Management 71.

42 Net zero aviation fuels: resource requirements and environmental impacts' (2023) The Royal Society <https://royalsociety.org/-/media/policy/projects/net-zero-aviation/net-zero-aviation-fuels-policy-briefing.pdf> accessed 22 November 2023.

43 'SASHA Hydrogen Derived Fuels for Aviation and Maritime Study' (2023) Arup <https://static1.squarespace.com/static/641b1fe3c5095c2f32a52f2a/t/64f9c23dfcd9203213a1fa36/1694089797278/FINAL+REPORT+-+Hydrogen+Derived+Fuels+for+Aviation+and+Maritime+Study.pdf> accessed 22 November 2023.

44 'Sustainable Aviation Fuels (SAF) Sustainability Guide for Corporate Buyers' (2023) Transport & Environment <https://travelsmartcampaign.org/wp-content/uploads/2023-10-Corporate-SAF-Buyers-guide.pdf> accessed 22 November 2023.

45 ibid.

46 'CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels' (2022, 4th edn) ICAO <https://www.icao.int/environmentalprotection/CORSIA/Documents/CORSIA_Eligible_Fuels/ICAO%20document%2006%20-%20Default%20Life%20Cycle%20Emissions%20-%20June%202022.pdf> accessed 22 November 2023.

47 Anouk van Grinsven, 'Used Cooking Oil (UCO) as biofuel feedstock in the EU' (2020) CE Delft <https://www.transportenvironment.org/wp-content/uploads/2021/07/CE_Delft__200247_UCO_as_biofuel_feedstock_in_EU_FINAL%20-%20v5_0.pdf> accessed 22 November 2023.

In summary, numerous climate cases before both judicial and quasi-judicial bodies raise concerns over greenwashing practices by the aviation industry, particularly around offsets and SAF.