Response of Opportunity Green and Transport & Environment to the Consultation of the Climate Change Commission: Review on whether emissions from international shipping and aviation should be included in the 2050 target

This submission is made jointly by Opportunity Green and Transport & Environment.

Opportunity Green is a UK-based environmental non-profit organisation (registered charity number 1199413) using law, economics and policy to close the gaps in global climate action. Opportunity Green has particular expertise in the aviation and shipping sectors.

Transport & Environment (T&E) is Europe's leading advocate for clean transport and energy. Our mission is to fight for an affordable zero-emission transport system that benefits both people and the planet.

All page references in this submission are references to pages of the Climate Change Commission's (the "**Commission**") discussion document[1] accompanying the consultation, unless stated otherwise.

Chapter 2: Key Issues

8. Is there any further information or evidence the Commission should consider on the national and global context or technology opportunities for making decisions on including international shipping and aviation emissions in the 2050 target?

This submission addresses two key areas of further information or evidence that we submit the Commission should consider on the national and global context or technology opportunities for making decisions on including international shipping and aviation emissions in the 2050 target: (a) international legal obligations; and (b) the global context and technologies for decarbonisation. These are addressed in turn below.

A. Aotearoa New Zealand's international obligations

Opportunity Green agrees with the Commission's initial analysis that current global action in the international air and sea transport sectors is inadequate to deliver the emissions reductions required to

[1] He Pou a Rangi Climate Change Commission, *Discussion document: Review on whether emissions from international shipping and aviation should be included in the 2050, and if so how* (April 2024) <https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/isa-2050/user_uploads/ccc5433_ias-discussion_fa2.pdf> accessed 30 May 2024.

meet net zero greenhouse gas ("**GHG**") emissions by 2050, and that further action is required (page 38). The global efforts undertaken through the respective specialised United Nations agencies, the International Maritime Organization (the "**IMO**") and the International Civil Aviation Organization (the "**ICAO**"), fail to set the sectors on a trajectory that is compatible with the 1.5°C temperature goal of the Paris Agreement. Additionally, measures to implement the (non-binding) climate strategies of the IMO and ICAO are yet to be implemented.

In that context, we consider that there is further information on Aotearoa New Zealand's international obligations, additional to that outlined by the Commission on page 29, that supports the need for Aotearoa New Zealand to take further action on emissions reductions in each sector in order to discharge such obligations in light of the inadequacy of global action. Opportunity Green submits that additional sources of international law that provide relevant context for the decision on including international shipping and aviation emissions in the 2050 target include, without limitation, the United Nations Convention on the Law of the Sea ("**UNCLOS**"), international human rights treaties, and general principles and rules, in particular, the principle of prevention of significant harm to the environment, the precautionary principle and the principle of common but differentiated responsibility and respective capabilities.

This submission focuses on two sources of Aotearoa New Zealand's international obligations that are particularly relevant to international shipping and aviation:

i. the United Nations Convention on the Law of the Sea ("**UNCLOS**"), States' obligations in relation to GHG emissions under which have been elucidated by the International Tribunal for the Law of the Sea ("**ITLOS**") in its advisory opinion with respect to case no. 31 on 21 May 2024 (the "**ITLOS Advisory Opinion**"); and

ii. the Paris Agreement (noting that this is referred to on page 29, so we have raised only specific, additional points).

A(i). Obligations under UNCLOS

The ITLOS Advisory Opinion clarified States' existing obligations in respect of addressing GHG emissions under UNCLOS. We highlight the following key findings of ITLOS (paragraph 441 of the ITLOS Advisory Opinion, with own emphasis):

> (a) Anthropogenic GHG emissions into the atmosphere constitute pollution of the marine environment within the meaning of article 1, paragraph 1, subparagraph 4, of the Convention.
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> (b) Under article 194, paragraph 1, of the Convention, States Parties to the Convention have the specific obligations to take all necessary measures to

prevent, reduce and control marine pollution from anthropogenic GHG emissions and to endeavour to harmonize their policies in this connection. Such measures should be determined objectively, taking into account, *inter alia*, the best available science and relevant international rules and standards contained in climate change treaties such as the UNFCCC and the Paris Agreement, in particular the global temperature goal of limiting the temperature increase to 1.5°C above pre-industrial levels and the timeline for emission pathways to achieve that goal. The scope and content of necessary measures may vary in accordance with the means available to States Parties and their capabilities. The necessary measures include, in particular, those to reduce GHG emissions.

(c) The obligation under article 194, paragraph 1, of the Convention to take all necessary measures to prevent, reduce and control marine pollution from anthropogenic GHG emissions is one of due diligence. The standard of due diligence is stringent, given the high risks of serious and irreversible harm to the marine environment from such emissions. However, the implementation of the obligation of due diligence may vary according to States' capabilities and available resources.

(d) Under article 194, paragraph 2, of the Convention, States Parties have the specific obligation to take all measures necessary to ensure that anthropogenic GHG emissions under their jurisdiction or control do not cause damage by pollution to other States and their environment, and that pollution from such emissions under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights. This obligation applies to a transboundary setting and is a particular obligation in addition to the obligation under article 194, paragraph 1. It is also an obligation of due diligence. The standard of due diligence under article 194, paragraph 2, can be even more stringent than that under article 194, paragraph 1, because of the nature of transboundary pollution.

(e) In terms of specific sources of pollution, marine pollution from anthropogenic GHG emissions can be characterized as pollution from land-based sources, pollution from vessels, or pollution from or through the atmosphere.

(f) Under articles 207 and 212 of the Convention, States Parties have the specific obligation to adopt laws and regulations to prevent, reduce and

> control marine pollution from GHG emissions from land-based sources and from or through the atmosphere, respectively, taking into account internationally agreed rules, standards and recommended practices and procedures contained, *inter alia*, in climate change treaties such as the UNFCCC and the Paris Agreement. To this effect, States Parties have the specific obligations to take other necessary measures and, acting especially through competent international organizations or diplomatic conference, to endeavour to establish global and regional rules, standards and recommended practices and procedures.
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> (g) Under article 211 of the Convention, States Parties have the specific obligation to adopt laws and regulations to prevent, reduce and control marine pollution from GHG emissions from vessels flying their flag or of their registry, which must at least have the same effect as that of generally accepted international rules and standards established through the competent international organization or general diplomatic conference.

By finding that anthropogenic GHG emissions, including those from vessels and aircraft, fall within the definition of 'pollution of the marine environment', a wide-ranging set of obligations of parties (including Aotearoa New Zealand) to UNCLOS are triggered.

The key provision with a view to the prevention, reduction and control of pollution of the marine environment is article 194 of UNCLOS, which applies to pollution from 'any source' and lays down an obligation common to all sources of pollution with which States must comply (paragraph 189 of the ITLOS Advisory Opinion). The obligation under article 194 of the Convention is complemented and elaborated upon by articles 207–212 of UNCLOS, which address the source-specific obligations of States, such as those from shipping and aviation (paragraph 190 of the ITLOS Advisory Opinion).

The obligation to take 'all necessary measures' under article 194 of UNCLOS is a stringent one, and the measures themselves should be determined objectively, taking into account in particular the best available science, the 1.5°C temperature goal and the timeline for emission pathways to achieve that goal. Whilst global efforts and joint actions are important given the global and transboundary nature of GHG pollution, ITLOS stated in paragraph 202 of the ITLOS Advisory Opinion that:

> it does not follow that the obligation under article 194, paragraph 1, of the Convention is discharged exclusively through participation in the global efforts to address the problems of climate change. States are required to take all necessary measures, including individual actions as appropriate.

Further, ITLOS stated it did not consider that the obligation under article 194(1) would be satisfied 'simply by complying with the obligations and commitments under the Paris Agreement' (paragraph 223 of the ITLOS Advisory Opinion). As such, States may need to go beyond their Paris Agreement obligations under UNCLOS.

Whilst States need to take into account internationally agreed rules and standards and recommended practices and procedures in adopting national legislation to address pollution from or through the atmosphere (article 212(1) of UNCLOS), and need to adopt laws and regulations which have at least the same effect of generally accepted international rules and standards to address pollution from vessels (article 211(2) of UNCLOS), it does not follow that States have discharged their obligations under article 194 of UNCLOS simply by observing standards and rules adopted by IMO and ICAO. This is particularly the case where, as noted above, such standards do not align with the 1.5°C temperature goal which is part of the objective assessment of 'necessary measures' that States must take under article 194(1) of UNCLOS.

As such, we submit that the Commission should take into account the obligations of Aotearoa New Zealand under UNCLOS, as clarified in the ITLOS Advisory Opinion, when considering its advice on the decision whether or not to include emissions from international aviation and shipping in the 2050 target. To the extent global efforts in these sectors remain insufficient, it is difficult to see how States can meet their obligations under UNCLOS without appropriate domestic action. Inclusion in the 2050 target would help develop the measures required to discharge such obligations.

A(ii). Obligations under the Paris Agreement

We note that the Commission has stated that the separate reporting of the emissions from international shipping and aviation under the Paris Rulebook does not prevent countries from setting targets to reduce these emissions (page 29). We agree with that analysis.

However, we also consider that the separate reporting of such emissions has sometimes led to the erroneous conclusion that States' substantive obligations in respect of such emissions are somehow diluted. With respect to States' obligations to mitigate greenhouse gas emissions from the international shipping and aviation sectors under the Paris Agreement, Opportunity Green notes that:

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 international shipping and aviation.

ii. The standard of conduct to be employed when designing progressive Nationally Determined Contributions which reflect the highest possible ambition at the minimum requires actions across all economic sectors, including international shipping and aviation.

iii. The outcome of the Global Stocktake 2023 which encourages Parties to come forward with ambitious, economy-wide emission reduction targets covering all sectors reinforces the

interpretation that successive Nationally Determined Contributions must include emissions from international shipping and aviation.

iv. The reporting and accounting mechanisms of the Paris Agreement require comprehensive information and accounting covering global emissions across all sectors, including international shipping and aviation.

v. The guidance on reporting or accounting for such emissions separately cannot override or diminish the substantive obligations of Parties to reduce such emissions in light of the long-term temperature goal.

vi. Notwithstanding the accounting mechanism, developed Parties of the Paris Agreement should include emissions from international shipping and aviation in their Nationally Determined Contributions and developing Parties should be working towards such inclusion.

As such, it is difficult to see how States, particularly developed States (such as Aotearoa New Zealand), can meet their obligations under the Paris Agreement without addressing key sectors of the economy such as international shipping and aviation. Whilst global efforts at the IMO and ICAO remain insufficient, States need to take further action in order to discharge these obligations. Further detail on these obligations is set out in Opportunity Green's written statement ("**Opportunity Green's Submission**") to the International Court of Justice in the advisory proceedings on *Obligations of States in respect of Climate Change*.

Appended to this submission are:

i. The ITLOS Advisory Opinion (Appendix 1); and

ii. Opportunity Green's Submission (Appendix 2).

Opportunity Green would like to respectfully invite the Commission to read Opportunity Green's Submission as well as the ITLOS Advisory Opinion, should the Commission require further information regarding the above response.

B. Global context and technologies for the decarbonisation of shipping and aviation

Transport & Environment believes that the Commission should acknowledge that technological and sectoral pathways exist to decarbonise shipping[2] and aviation[3] by 2050. This means that both aviation

[2] Transport & Environment, *Decarbonising European Shipping: technological, operational, and legislative roadmap* (April 2021) <https://te-cdn.ams3.digitaloceanspaces.com/files/202104_Shipping_Technological_Roadmap_to_Decarbonization.pdf> accessed 30 May 2024.

[3] Transport & Environment, *Roadmap to climate neutral aviation in Europe* (March 2022) <https://te-cdn.ams3.digitaloceanspaces.com/files/TE-aviation-decarbonisation-roadmap-FINAL.pdf> accessed 30 May 2024.

and shipping can be included within Aotearoa New Zealand's budget without creating the need for additional emissions removal outside these sectors (as the Commission suggests on page 38).

The Appendix of the discussion document details the opportunities for emissions reduction through energy efficiency in shipping in this decade, while reducing non-necessary flying, for example business travel, should be highlighted as an extra tool to reduce emissions in the short time in aviation. This will not happen through the market alone, though, so the government should put in place a political framework to make this happen, starting with including international shipping and aviation in Aotearoa New Zealand's climate targets.

In terms of the global context for shipping decarbonisation, the Commission should note that a significant amount of the world shipping fleet by number will be regulated under shipping regulations of the European Union ("**EU**") 60% of the world fleet by ship numbers currently operating have reported to the EU's Monitoring, Reporting and Verification Regulation since its entry into force in 2018.[4] It should also be noted that under its current trajectory, the EU's Emissions Trading System ("**ETS**") will run out of pollution credits (known as EU Allowances) by the 2040s. A significant amount of the global fleet will therefore transition to sustainable fuels and technologies by this time, demonstrating the value of national policy in the global context and showing that there will be important technology opportunities for green shipping in the next decades.

Finally, the Commission should recognise that, given the low price elasticity of demand in shipping, it is unlikely that climate measures would lead to job losses or connectivity for Aotearoa New Zealand. On the contrary, the development of renewable alternative fuels (made from green hydrogen) represents an opportunity for job creation.[5]

Chapter 3: Potential impacts and the choice to make

13. Is there any further information or evidence the Commission should consider on the potential impacts or policy options if international shipping and aviation emissions were included in the target?

<u>Emissions pricing options available internationally and in this country</u>

We note the following further information that we submit the Commission should consider in respect of emissions pricing options and the associated legal barriers referred to on page 55.

i. In respect of the statement "[t]he Chicago Convention and Aotearoa New Zealand's air services agreements exempt aviation fuel from customs duties and any similar charges" on

[4] Transport & Environment, *New climate demands will spread far beyond Europe's borders* (January 2024) <https://www.transportenvironment.org/articles/new-climate-demands-will-spread-far-beyond-europes-borders> accessed 30 May 2024. The Commission should also note that the EU ETS will regulate methane (CH_4) and nitrous oxide (N_2O) emissions from 2026. The Commission's report currently states that only CO_2 will be regulated.

[5] Global Maritime Forum, *Decarbonisation of shipping could create up to four million green jobs* (May 2024) <https://www.globalmaritimeforum.org/press/decarbonisation-of-shipping-could-create-up-to-four-million-green-jobs> accessed 30 May 2024.

page 55, the Convention on International Civil Aviation (the "**Chicago Convention**") contains no general prohibition on the taxation of aviation fuel. Article 24(a) of the Chicago Convention exempts fuel 'on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State' from duties and charges, rather than fuel which is taken on board on or after arrival.

ii. As alluded to on page 55, the Court of Justice of the European Union confirmed the validity of the EU's (then planned) directive including aviation activities in its emissions trading scheme (*Air Transport Association of America and Others v Secretary of State for Energy and Climate Change*, Case C-366/10), which was intended to apply to all flights departing to and arriving at EU airports. This should provide some comfort regarding the perceived legal barriers to such schemes.

iii. For additional context, please note that if the Carbon Offsetting and Reduction Scheme for International Aviation ("**CORSIA**") remains insufficient to reduce aviation emissions in light of the objective of the Paris Agreement, the European Commission has indicated it will make a proposal to extend the scope of the emissions trading scheme to all flights departing from the European Economic Area.[6]

14. Which of these options for whether international shipping and aviation emissions should be included in the 2050 target do you support?

- *Include in the 2050 target*
- *Do not include in the 2050 target at this point.*
- *Amend the Climate Change Response Act to reconsider this issue in future reviews of the 2050 target.*

What are your reasons or evidence for thinking this?

Opportunity Green supports including international shipping and aviation emissions in the 2050 target.

We concur with the Commission's initial assessment that such inclusion would be consistent with the purposes of the Act and with global efforts to limit global warming to 1.5°C above the temperature limit. In addition, we consider that such inclusion is consistent with, and should help to meet, Aotearoa New Zealand's international legal obligations, including without limitation under UNCLOS and the Paris Agreement (see our response to consultation question number 8 above).

[6] Council of the European Union, *ETS aviation: Council and Parliament strike provisional deal to reduce flight emissions* (December 2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/12/07/ets-aviation-council-and-parliament-strike-provisional-deal-to-reduce-flight-emissions/> accessed 30 May 2024.

Opportunity Green believes that the interpretation of the Paris Agreement as laid out above in response to consultation question number 8 supports the need for adopting economy-wide emission reduction targets including net zero targets. Ultimately, complying with the Paris Agreement's temperature limit of 1.5°C requires global efforts across all sectors, including international shipping and aviation. This conclusion is further bolstered by the outcome of the Global Stocktake 2023 which encourages States to adopt ambitious, economy-wide emission reduction targets covering all sectors.

The ITLOS Advisory Opinion handed down on 21 May 2024 further makes clear that States' have separate obligations under UNCLOS to take 'all necessary measures' to prevent, reduce and control marine pollution of anthropogenic GHG emissions, including from aircraft and vessels. When determining 'necessary measures' ITLOS has stressed the paramount importance of objective factors, including, first and foremost, the best available science, and further, the global temperature goal of 1.5°C as well as the timelines for emission pathways to achieve that goal.

Opportunity Green submits that the inclusion of international shipping and aviation emissions in the 2050 target could help Aotearoa New Zealand to meet such international obligations.

Chapter 4: Options for measuring emissions

16. If international shipping and aviation emissions were included in the 2050 target, which of these options for counting the emissions would you support and why?

Option 1: Refuelling – fuel sold in this country

Option 2: To/from next port – for the specified travel leg

Option 3: To/from final port – for the entire journey

Option 4: Fuel use within the Exclusive Economic Zone

Option 5: Share of global emissions

Option 6: Fuel used by operators based in this country

Why would you support this/these option(s)?

While all options that include Aotearoa New Zealand's share of international transport emissions are valid and could be considered, Transport & Environment believes Options 2 and 3 are the best options. This is because 'directional', 'trade-based' or 'voyage-based' emissions is the truest representation of international transport's relationship to national economies. For aviation emissions, the flight option makes most sense given the ease of implementation and the fact that planes tend to have to refuel at either end of flights to and from Aotearoa New Zealand. On shipping, the European Union has taken regulated emissions in its ETS and fuel standard under Option 2, given that this approach is 'a practical

way to solve the issue of common but differentiated responsibilities and capabilities'.[7] That is, this approach correctly reflects each sector's value to national economies without unduly burdening exporters or importers. Previous analysis carried out for the European Commission on shipping emissions analysed different scope options in-depth and similarly recommended a directional-based scope of application.[8]

It should be noted that Options 1 and 6 would not be optimal solutions. Refuelling (Option 1) relates to each country's fuel business, so is not a good indicator of a country's actual transport emissions, as evidenced by the fall in Aotearoa New Zealand's marine fuel sales in 2020 related to the IMO 2020 Sulphur Cap regulation. Option 6 (operators based in each country) would open possibilities for evasion, given the ease with which companies can out-shore their headquarters or flag so that their emissions are not accounted for.

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[7] Council Directive (EU) 2023/959 of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system [2023] OJ L130/134, paragraph 20.

[8] CE Delft, *Technical support for European action to reducing Greenhouse Gas Emissions from international maritime transport* (February 2010) 132–140 <https://cedelft.eu/wp-content/uploads/sites/2/2021/04/7731_finalreportJF.pdf> accessed 30 May 2024.