Board of Airline Representatives NZ
6 Leonard Isitt Drive, Auckland Airport
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He Pou a Rangi Climate Change Commission
Wellington

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Submission to He Pou a Rangi Climate Change Commission on whether emissions for international shipping and aviation should be included in Aotearoa New Zealand's 2050 emissions reduction target, and if so, how

Introduction

Thank you for the opportunity to provide submissions on this important matter.

The Board of Airline Representatives New Zealand (BARNZ) is an industry group representing 26 member airlines as well as suppliers to aviation including ground handlers, food suppliers and waste management services to aviation. Together, we deliver aviation connectivity to, from and within New Zealand. Our businesses support connection of New Zealanders domestically and with the world and facilitate critical import and export trade.

This submission presents the views of the majority of BARNZ member airlines. Individual member airlines may choose to provide their own submission reflecting their specific situation. Air New Zealand has alternative views noted below which it will detail in its own submission[i].

Summary

The BARNZ position is that **emissions from international aviation should not be included** in the 2050 national targets for Aotearoa New Zealand. Inclusion would fail to recognise and support existing multi-lateral mechanisms that are essential to maintain international uniformity and support global aviation's ultimate path to net-zero emissions.

We also **do not support any approach that seeks to merely defer the question** of how to treat Aotearoa New Zealand's international aviation emissions. This would not

provide the stable long-term policy environment necessary to achieve our common goals of net-zero emissions by 2050.

The basis for these positions is provided below.

BARNZ members are committed to net-zero carbon dioxide emissions by 2050

The global airline industry has proactively recognised the need to decarbonise air travel and is leading efforts in this area. International Air Transport Association (IATA) airline members, which include the majority of BARNZ members, have collectively committed to committing to net-zero carbon dioxide emissions by 2050[ii]. This target date aligns with the requirements of the Climate Change Response (Zero Carbon) Act.

BARNZ members are committed to working collaboratively with a full range of Government and private sector partners to find more sustainable ways to keep Aotearoa New Zealand connected with the world and reach our goal of net zero carbon emissions by 2050.

Scope of our Submission

Our submission is appropriately focused on the international aviation sector. However, there is one important area of cross-over with the international maritime sector. This involves the importation of aviation fuel and, in the future, Sustainable Aviation Fuel (SAF). SAF will be a critical enabler for us in reaching our goal of net zero carbon emissions by 2050

BARNZ is a strong advocate for the need for Aotearoa New Zealand to maintain security and resilience in its aviation fuel supplies and for appropriate policy actions that will incentivise the domestic production of SAF. Accepting this, it is acknowledged a material proportion of our future SAF requirements will need to come from overseas. Any actions that result in significant additional costs for imported SAF flowing from the way international maritime emissions are treated will result in unavoidable price pressures on air travel and the movement of time critical cargo by air.

Acknowledging this we highlight the need for careful analysis to ensure that the treatment of international maritime emissions does not result in perverse outcomes on the cost and supply of imported SAF to the New Zealand aviation market.

Matters informing our submission

Before responding to the Commission's specific questions, it is useful to note and expand on various matters that have informed our positions. They inform our responses to multiple questions in some cases.

A commitment to sustainability

As noted above, we are committed to working collaboratively with partners to find more sustainable ways to keep Aotearoa New Zealand connected with the world and reach our goal of net zero carbon emissions by 2050.

Recognition of existing multi-lateral mechanisms is essential to maintain international uniformity and support aviation's ultimate path to net-zero emissions

The international aviation market operates in a complex global and networked ecosystem. The benefits that aviation has and continues to deliver to Aotearoa New Zealand and the wider world are the result of internationally harmonised and coordinated policy and technical approaches on matters impacting aviation flowing from the work of the International Civil Aviation Organisation (ICAO) and bodies such as IATA.

Article 2 of the Kyoto Protocol (of which Aotearoa New Zealand is a cosigner), mandated ICAO to manage and deal with all emissions from international aviation. Specifically, the Protocol indicates that "*[nation states] shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through [ICAO] and [IMO] respectively*". Thus, it is the role of ICAO and IMO and not individual nation states to ensure that international emission reduction goals are being both set and met.

ICAO and its member States, including New Zealand, have adopted the international Standards and Recommended Practices for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to address carbon emissions from international aviation. This marks the first time that a single industry sector has agreed to a global market-based measure in the climate change field.

The airline industry first proposed this approach in 2009 and has supported the ICAO process ever since. The international standards for the implementation of CORSIA have in the meantime been adopted as an Annex to the Chicago Convention, which all of ICAO's 193 member states, including New Zealand, must apply.

While the Paris Agreement did not include international aviation emissions, the primacy of ICAO in leading global efforts to meet international reduction goals remains unchanged. The 41st ICAO Assembly adopted a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050 in support of the Paris Agreement's temperature goal. It is important to note that the LTAG does not attribute specific obligations or commitments in the form of emissions reduction goals to individual States.

This historic agreement that lead to the adoption of the LTAG reinforces the leadership of ICAO on issues relating to international aviation and climate change, as previously established under the Kyoto Protocol. The LTAG agreement follows the resolution passed by IATA member airlines committing them to achieving net-zero carbon emissions from their operations by 2050, at the 77th IATA Annual General Meeting in 2021.

This approach, in which ICAO continues to take global leadership, recognises the challenges inherent in attributing international aviation emissions to any one State – which is the main reason why the Kyoto Protocol allocated responsibility to ICAO. By including international aviation emissions in its emissions reduction target, Aotearoa New Zealand risks assuming responsibility for emissions from international airlines that are the responsibility of others.

The offsetting mechanism that CORSIA provides is not intended to replace efforts to reduce the sector's carbon emissions through technology, operational and infrastructure advances. CORSIA will not make airlines strive any less to increase the use of SAF and advocate for greater production, increase fuel efficiency as well as the roll out other technological developments - as part of our net zero commitment. Rather, CORSIA can help the sector achieve its climate targets in the short-and medium-term by complementing emissions reduction initiatives within the sector.

In order to avoid a patchwork of uncoordinated regional and domestic policies for international aviation, political agreement for CORSIA was achieved on the condition that it would be the only market-based measure applied to international flights and on the basis that emissions should not be accounted for more than once.

The success of CORSIA may be jeopardized by any national polices that seek to address emissions from international aviation, on top of CORSIA. Such policies do not only conflict with the international commitments of ICAO member States, they also undermine multilateral efforts to deal with climate change and put at stake the credibility of the global approach, potentially compromising the international support for CORSIA at a critical time for its implementation.

Potential distortion of competition is another element of concern: in order to preserve the competition that all consumers benefit from, individual State approaches should not disadvantage airlines from different regions.

We acknowledge the need for the ongoing strengthening of CORSIA that the Commission refers to in its consultation document. However this need for strengthening does not justify departure from the globally coordinated and agreed

approach CORSIA represents. Aotearoa New Zealand's efforts should be focused on working with like-minded international partners to allow CORSIA to fulfil its potential.

International uniformity, including that by Aotearoa New Zealand, is not only key to preserving the environmental integrity of CORSIA but also preventing market distortions.

Acknowledging these factors we do not support moves that would seek to treat emissions from international aviation on top of CORSIA, with their associated potential for additional carbon pricing instruments or ticket tax.

Understanding the consequences – New Zealand-specific economic modelling is needed

Notwithstanding our position set out above we acknowledge the Commission's role in providing its independent advice to Government. The following provides commentary on the need for that advice to be accurately informed.

New Zealand is dependent on aviation

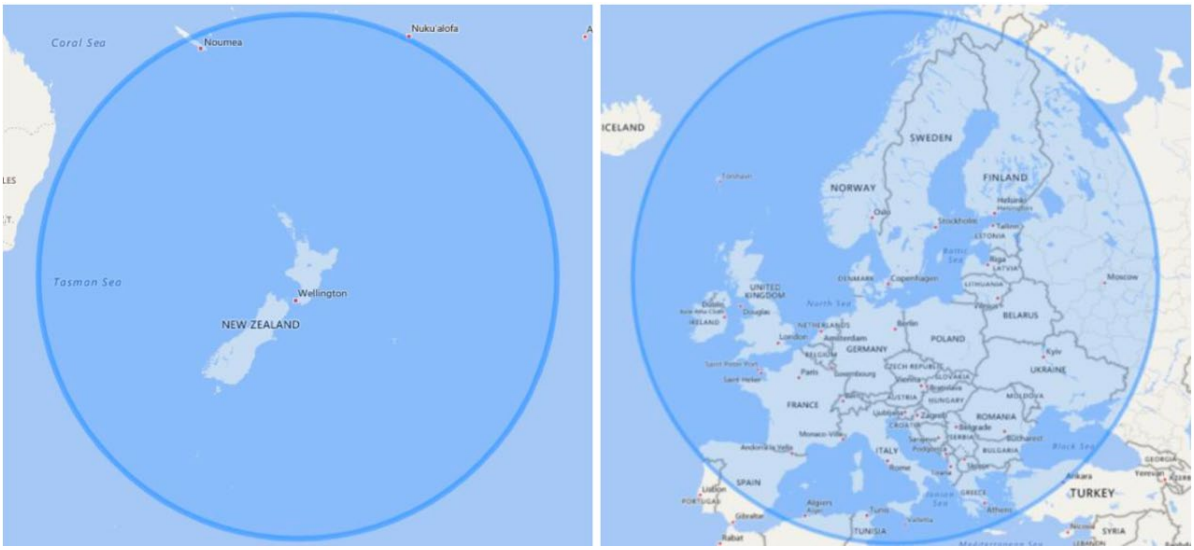
New Zealand is dependent on aviation – much more so than many other countries and regions. The Commission's consultation document rightly recognises this where it notes that (at p. 26) "*As an island nation located far from other major economies, Aotearoa New Zealand relies heavily on international shipping and aviation to connect with the rest of the world.*

The necessary high use of use of international shipping and aviation is also correctly noted in the consultation document along with the fact Aotearoa New Zealand cannot use international land transport, meaning it cannot reduce its international shipping and aviation emissions by transitioning to electric trucks, cars, or rail in the same way other countries can (pp.33 – 34 of the consultation document) .

Our dependence on aviation is one that needs emphasising for current purposes. It is starkly demonstrated in the figure below showing a 2,000km radius around Auckland versus Berlin.

This shows that a 2,000km radius around Auckland does not include any large land masses or large economies. By contrast, a 2,000km radius around Berlin encompasses almost all of Europe. This highlights how analysis informing policy solutions implemented or being considered by other countries and regions where alternative means of surface transport exist will not be fully appropriate in addressing the challenges facing us.

Figure 1: 2000-kilometre radius centred on Auckland (left) and Berlin (right)



A reliance by the Commission on EU economic impact analysis is of concern

Acknowledging the dependence referred to above, there is one area of significant concern regarding the Commission's analysis to date – its apparent reliance on economic impact analysis from the European Union (EU) to inform its initial analysis supporting the inclusion of international emissions in Aotearoa New Zealand's 2050 emissions reduction target.

At page 48 of the consultation document the Commission notes that '*in a well-supported transition to alternative fuels, where the price difference is brought down and efficiency increases, the flow-on impacts of a fuel cost increase to the rest of the economy are likely to be relatively small".*

While we do not disagree with this statement, the Commission then goes on to note *"For example, the European Union (EU) has modelled for its policies to reduce international shipping and aviation emissions:*

…

- *Requiring a 63% sustainable aviation fuel blend by 2050 would increase airfares up to 8.2%, demand would increase 77% from 2015 levels but be 5.8% lower than it would otherwise be, and employment would increase*

For the reasons outlined above relating to our geographic remoteness, Aotearoa New Zealand's aviation market has major differences from the EU. These include:

- Smaller size and scale.
- Higher dependence on aviation for short, medium and long haul travel and import and export freight.
- Greater distance from all trading partners.
- Greater proportion of long haul flights.
- Lower margins/higher investment needs for airlines.
- Lower levels of competition.[iii]
- Lower likelihood of a domestic SAF industry of significant scale with a resulting reliance on global and regional SAF pricing and supply.
- Distance from existing SAF production centres with impacts on regional pricing.

The last two points also speak to the need previously stated for any treatment of international maritime emissions to not result in perverse outcomes on the cost of supply of SAF to the New Zealand aviation market.

In summary the discussion document lacks the New Zealand-specific economic modelling critically necessary to ensure the Commission's eventual advice to Government is well founded and takes account of Aotearoa New Zealand's specific circumstances. While we appreciate that the actual level and nature of economic impact would be dependent on the specific details of any regime the Government may decide to introduce, we believe it is feasible to conduct informative modelling based on potential scenarios and the associated likely characteristics of any such regimes.

New Zealand-specific modelling needs to be a key component of the next stage of the Commission's work to test whether the EU-focused assumptions can be carried through to the New Zealand market, or whether the characteristics of the New Zealand market would lead to different cost outcomes.

Options exist to address the concerns – and we are willing to work with the Commission on these

Options to address the need for New Zealand-specific modelling could include:

1. A New Zealand review of the market/context differences compared with the primary EU reference, the *"Study supporting the impact assessment of the ReFuelEU Aviation initiative":*
2. A fresh set of modelling, using:

a. Current and estimated future global price for SAF
b. Current and estimated future fuel demand in New Zealand
c. Projected impact on airfares
d. Overlay price elasticity and tourism demand and consider the resulting scale and viability of our aviation connectivity

We are willing to work with the Commission and other stakeholders over coming months to address this need.

Alignment with Australia

Aotearoa New Zealand's aviation market is closely connected with Australia's acknowledging the size and importance of the many Trans-Tasman specific routes, and that many airlines flying here transit through Australia.

Airlines flying to, from and through Australian uplift fuel from that market in support of their operations to and from this country.

This close connection is an unavoidable factor that must be considered when assessing how best we can achieve our common goal of net-zero emissions by 2050.

The need for a stable long-term policy environment

There are a range of considerations essential in the development of effective responses to the challenges that exist in achieving net-zero emissions by 2050. These include, in the case of SAF specific policies and programmes for example, the need to:

- Be stable, predictable, and consistent in implementation in order for the private sector to be willing to make investments
- Be of a sufficient duration to reflect project development timelines (e.g. 10 years or longer provides a degree of predictability for investors/developers[iv]).

Acknowledging this need for a long-term stable policy environment, not only in the case of SAF, but for wider purposes, we do not support any approach that seeks to merely defer the question of how to treat Aotearoa New Zealand's international aviation emissions.

This would not provide the stable long-term policy environment necessary to achieve our common goals of net-zero emissions by 2050.

Responses to specific questions

As submitted above **we are of the strong view that international emissions should not be included in Aotearoa New Zealand's 2050 emissions reduction target**. However, as also commented on above, we acknowledge the Commission's important independent role in providing advice to Government, and the associated need for this advice to be well informed.

It is in this spirit that the following responses to the Commissions specific questions are provided.

Further information or evidence the Commission should consider

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?

There is a critical need, as discussed above, for New Zealand-specific economic modelling to ensure the Commission's eventual advice to Government is well founded and takes account of Aotearoa New Zealand's specific circumstances.

As previously noted we are willing to work with the Commission and other stakeholders to address this need.

Whether emissions should be included

Which of these options for whether international shipping and aviation emissions should be included in the 2050 target do you support? What are your reasons and evidence for that?

- 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.

We do not support inclusion in the 2050 target. As outlined above we do not support moves that that would seek to treat emissions from international aviation on top of CORSIA, with the associated potential for additional carbon pricing instruments or ticket tax.

In the interests of a long-term stable policy environment, which is essential for the reasons previously outlined, **we do also not support any approach that merely defers the question of how to treat Aotearoa New Zealand's international aviation emissions**. As commented on above, this would not provide the stable long-term policy environment necessary to achieve our common goals of net-zero emissions by 2050.

Options for counting emissions

If international shipping and aviation emissions were included in the 2050 target, which of these options for counting the emissions would you support? What are your reasons and evidence for that?

- Option1: Refuelling–fuel sold in this country.
- Option2:To/from next port–for the specified travel leg.
- Option3: To/from final port–for the entire journey.
- Option4: Fuel use within the Exclusive Economic Zone.
- Option5: Share of global emissions.
- Option6: Fuel used by operators based in this country.

We note the results of the Commission's initial analysis (p. 66 of the consultation document) which points towards the options of refuelling (in New Zealand) and an estimate of emissions on fuel used to/from the next port as potential appropriate ways to measure Aotearoa New Zealand's international shipping and aviation emissions – if these emissions were included in the 2050 target.

We also note the Commission's reasoning that the other measures considered all appear to present difficulties in accurately measuring the amount of emissions, or create a risk of emissions leakage.

We do not disagree with the Commission's findings in these areas.

Accepting this we highlight that any viable options need to support **close alignment with any Australian Government approaches** in this area noting the previously commented on close connections with the Australian market – in particular taking account of the fact that many airlines flying to, from and through Australian uplift fuel from that market in support of their operations to and from this country.

It will also be important that **any approach taken does not negatively impact on the security and resilience of fuel supplies in Pacific Island Countries** by unintentionally incentivising greater levels of fuel uplift in those countries for flights to and from Aotearoa New Zealand.

Other impacts

Is there any further information or evidence the Commission should consider on other impacts from international shipping and aviation contributing to climate change?

If international shipping and aviation emissions were included in the 2050 target, which of these options for addressing other impacts would you support? What are your reasons and evidence for that?

- Option1: Include other impacts through a multiplier.
- Option2: Exclude other impacts from the target at this point.
- Option3: Reconsider in future 2050 target reviews–or possibly earlier if there was a significant change.

BARNZ agrees with the Commission's initial assessment of the options for accounting for other impacts of international shipping and aviation on the atmosphere, i.e. that the science related to their warming effects is still developing – and that it is too early to make decisions about accounting for these impacts until the science is more certain.

The validity of this position, albeit with specific regard to contrails, is affirmed by the contents of a report released by IATA in late April 2024, after the release of the Commission's consultation document.

That report, *Aviation contrails and their climate Effect - Tackling uncertainties and enabling solutions*[v], highlights the degree to which the science on relevant questions is uncertain.

Target structure

If international shipping and aviation emissions were included in the 2050 target, which of these options for the structure of a target would you support? What are your reasons and evidence for that?

- Option1: Include in the net zero component of the target.
- Option2: Separate combined international shipping and aviation gross component of the target.
- Option3: Separate gross international shipping and aviation components of the target.
- Option4: Separate net international shipping and aviation components of the target.

We note the results of the Commission's initial analysis on these questions (p. 75 of the consultation document) showing that either inclusion in the net zero component of the 2050 target, or separate gross components of the target, could be effective target structures.

We also note the Commission's observations Including these emissions in the net zero component of the 2050 target enables pursuing the lowest cost emissions reductions overall, while separate gross components of the target would enable a clear focus on reducing international shipping and aviation emissions specifically.

Any target structure needs to take specific account of the complex global ecosystem within which international aviation operates - it does not involve the operation of fixed installations. To this end we support models that allow for a dedicated focus on aviation.

Levels of target reduction

Different global models have put the gross emission reductions possible for shipping at up to 91% and for aviation up to 65% accounting for emissions involved in the production of their fuels. If not accounting for emissions involved in producing fuels, reductions could be up to 100% if full adoption of alternative fuels is achieved.

If international shipping and aviation emissions were included in the 2050 target, are those more ambitious levels of gross emissions reductions appropriate to target or are there other circumstances that should be considered? What are your reasons and evidence for that?

- High ambition of emissions reduction – near or at what models have shown is possible
- Moderately ambitious emissions reduction
- Emissions remain the same or increase

If international shipping and aviation emissions were included in the 2050 target, should the existing net zero component of the target's level of emissions reduction be changed to match any residual international shipping and aviation emissions?

In the interests of maintaining critically necessary international uniformity, we strongly encourage the Commission to apply the approaches to target reduction ambition set out in established and science and technology informed international reduction roadmaps, in particular the IATA Net-Zero Roadmap S2.

In this regard we refer to the recently published (April 2024) IATA document, *Aviation Net Zero CO_2 Transition Pathways Comparative Review*.[vi] This provides the first comprehensive review of fourteen leading net-zero transition roadmaps for the aviation sector.

Its contents also serve to highlight the extensive nature of the existing commitments made by ICAO, IATA and other global bodies to the decarbonisation of aviation – a level of commitment that would make any move by Aotearoa New Zealand to include international aviation emission in its 2050 emissions reduction target both unnecessary and inconsistent with the globally coordinated and agreed approach CORSIA represents.

Iwi/Māori considerations

What is necessary to enable an effective and equitable Crown–Māori relationship around international shipping and aviation emissions and the 2050 target?

How could different te ao Māori worldviews influence the decisions on whether, and if so how, to include international shipping and aviation emissions in the 2050 target?

What specific impacts and opportunities for iwi/Māori should be considered if international shipping and aviation emissions were included – or remain outside – the 2050 target?

We acknowledge the importance of these questions but note that other submitters will be more competent on the matters they refer to and can more appropriately comment on them.

We note that the Interim Aviation Council has been recently established by the Ministry of Transport. We consider that te ao Māori world views with respect to aviation may be usefully canvassed in this strategic forum, and ask that the Commission consider the work of this Council in preparing future advice.

In conclusion I would like to thank the Commission for its willingness to engage proactively and transparently on these important matters. Please do not hesitate to contact me if you require any further information on the contents of this submission. BARNZ is willing to assist the Commission in any appropriate manner as it continues to formulate its advice to Government.

Your sincerely,

Cath O'Brien
Executive Director
Board of Airline Representatives New Zealand

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[i] "Air New Zealand supports the inclusion of international aviation emissions in New Zealand's 2050 target (measured using the "refuelling" methodology) provided that this is underpinned by urgently needed long-term and targeted policy approaches that limit competitive risks and focus on supporting and accelerating the aviation sector's transition away from fossil fuels to lower impact alternatives, thereby building resilience in New Zealand's international connectivity. Air New Zealand does not support the inclusion of these emissions if it is underpinned by any policy lever that introduces material competitive distortions that will disproportionately impact Air New Zealand relative to its competitors and that is not complementary to measures introduced by ICAO. This includes the use of the New Zealand Emissions Trading Scheme as the primary tool for regulating international aviation if it is included in New Zealand's 2050 target. For Air New Zealand's full position, please refer to its detailed submission." *Air New Zealand.*

[ii] See https://www.iata.org/en/programs/environment/flynetzero/

[iii] In respect of this point and that immediately preceding it, it is important to note that airlines have highly mobile assets and, in the Aotearoa New Zealand context, have considerable choice to relocate aircraft from routes to and from this country in the event of pricing pressures impacting on the viability of those routes – with the potential for investment 'flight' and market competition distortions and resulting less choice and higher prices for consumers.

[iv] Guidance on potential policies and coordinated approaches for the deployment of SAF, ICAO, 2022, pp. 4-4. Available at https://www.icao.int/environmental-protection/Documents/SAF/Guidance%20on%20SAF%20policies%20-%20Version%201.pdf

[v] https://www.iata.org/contentassets/726b8a2559ad48fe9decb6f2534549a6/aviation-contrails-climate-impact-report.pdf

[vi] https://www.iata.org/contentassets/8d19e716636a47c184e7221c77563c93/nz-roadmaps.pdf