AIR NEW ZEALAND SUBMISSION ON THE ZERO CARBON BILL DISCUSSION DOCUMENT

1. Air New Zealand welcomes the opportunity to submit on the Zero Carbon Bill discussion document. We consider the kaupapa of the Zero Carbon consultation will underpin future environmental, economic and social outcomes for New Zealand.

2. Air New Zealand is committed to a future as a sustainable airline – socially, environmentally and economically. These three dimensions are critical when considering the Zero Carbon Bill discussion document – as the choices we face now will affect New Zealand’s social fabric, economic success and environmental future. We are happy to discuss any part of this submission with government and industry as we move forward together towards a sustainable, carbon neutral future.

The natural environment is linked to economic success

3. New Zealand’s environmental assets and reputation on the world stage are critical to ensuring economic success. Tourism, agriculture, horticulture, forestry and seafood are key export sectors. \(^1\) New Zealand’s landscapes and natural environment drive international tourism, and our primary production sector leverages New Zealand’s brand and natural environment in key export markets. Air New Zealand is New Zealand’s largest tourism business. We are motivated to protect New Zealand’s natural environment and to play our part in a global response to climate change.

Carbon emissions from aviation

4. The aviation industry has a significant role to play in ensuring commitments in the Paris Agreement can be achieved. Aviation currently contributes 2-3% of global carbon emissions, and Air New Zealand is committed to reducing our own contribution to these global totals.

5. Air New Zealand has invested in advanced technology and currently has one of the youngest and most fuel-efficient fleets in the world.\(^2\) Numerous fuel efficiency measures

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\(^2\) The average seat-weighted age as at the end of June 2018 was 7.5 years and is projected to be 6.9 years by the end of June 2020. (Calculated as the sum of each aircraft seat multiplied by the age of that seat, divided by the total number of seats.)
have been adopted over the past decade, and together these have resulted in operations achieving aviation fuel efficiency improvements of 20 percent since 2009.\(^3\)

6. Currently there are no large-scale commercially available alternatives to aviation jet fuel. Emissions from aviation jet fuel currently comprise \( \sim 99.5\% \) of Air New Zealand’s total Scope 1 and 2 greenhouse gas emissions.\(^4\)

7. Until aviation biofuels are readily available in New Zealand and/or electric aircraft technology developed for commercial use, Air New Zealand is unlikely to deliver further significant domestic carbon emissions savings through its own operations. To achieve lower overall net emissions now and in the near-term, Air New Zealand will need to purchase carbon units (including forestry) and invest in projects that can generate emissions savings.

Air New Zealand supports CORSIA

8. Carbon emissions from international aviation are excluded from New Zealand’s country target within the UNFCCC Paris Agreement and are dealt with separately by the International Civil Aviation Organization (ICAO).

9. The international aviation industry has committed to several targets, including 1.5 percent annual fuel efficiency improvements between 2009-2020; achieving carbon neutral growth from 2020; and halving 2005 emissions by 2050.

10. The global mechanism for achieving carbon neutral growth in the international aviation industry from 2020, via the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is the subject of ongoing dialogue between ICAO States. Air New Zealand supports development of the CORSIA to address emissions from the international civil aviation sector, and to encourage meaningful action to reduce net emissions, in a way that also ensures no anti-competitive impacts.

Transition to zero carbon

11. Air New Zealand is supportive of the clear and long-term signals for business set out in the Zero Carbon discussion document. We consider that a stable and well-planned low emission transition will traverse election cycles. Such certainty will assist corporate New Zealand to invest in a lower-emissions future.

Nick Judd
Chief Strategy, Networks and Alliance Officer
Air New Zealand

\(^3\) This is calculated based on CO2-e emissions per Revenue Tonne Kilometre (RTK). Emissions are based on aviation fuel used and RTK is based on the weight paid on the aircraft (freight and passengers) multiplied by the number of kilometres transported.

SPECIFIC QUESTIONS

Responses to the specific questions asked in the Zero Carbon discussion document are found below. Air New Zealand is happy to engage in further discussion on any of the points raised.

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<th>Question</th>
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<td>1</td>
<td><strong>The Government should set a new 2050 emissions reduction target in legislation now.</strong>&lt;br&gt;Benefits of this approach include:&lt;br&gt;• A clear pathway for long term emissions reduction for the economy as a whole;&lt;br&gt;• Alignment with the Paris Agreement.</td>
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<td>2</td>
<td><strong>The best target for New Zealand is net zero emissions across all greenhouse gases by 2050.</strong>&lt;br&gt;Benefits of this approach include:&lt;br&gt;a. <em>Paris Agreement alignment</em>: Net zero emissions across all greenhouse gases by 2050 is more closely aligned to the Paris Agreement ambition of remaining under 2°C above pre-industrial levels and pursuing efforts to limit that temperature increase to 1.5°C.&lt;br&gt;b. <em>Signals that change behaviour</em>: Targets and policies need to send the signal that all emissions need to be reduced. Excluding some gases does not drive total emissions reductions and creates sectoral asymmetry across the economy.&lt;br&gt;c. <em>Economy wide policy intervention</em>: To achieve meaningful emissions reductions, the full economy needs to be engaged. The latest progress report of the UK Climate Change Committee (UKCCC) to Parliament (released 28 June 2018), notes that meeting future budgets will require policy interventions across the economy, stating “The legally binding carbon budgets will only be achieved if effective policy extends beyond waste and power, into sectors that have not so far achieved significant reductions”.&lt;br&gt;d. <em>Fair burden sharing</em>: Methane comprises 43 percent of New Zealand’s total greenhouse gas emissions. Continuing to exclude methane places the burden to compensate for climate change compliance costs on businesses and consumers within certain economic sectors. These costs should be incurred and met across the economy.&lt;br&gt;e. <em>Minimal cost impact</em>: The NZIER modelling provided by government shows negligible difference between the ‘net zero long-lived gases and stabilised short-lived gases’ option and the ‘net zero emissions’ option.</td>
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Of note, such a target that includes all greenhouse gases still enables short and long-lived gases and specific sector challenges (including relative cost abatement and technology considerations) to be considered when emissions budgets are set.

New Zealand should meet its targets by domestic emissions reductions (including from new forest planting) and using some emissions reductions from overseas (international carbon units) that have strong environmental safeguards.

Benefits of this approach include:

a. Prioritising domestic decarbonisation

In early 2017, Motu released a research paper commissioned by Air New Zealand on the barriers to native forestry entering the New Zealand Emissions Trading Scheme (NZ ETS). That research noted that although over one million hectares of economically marginal land could revert to native forestry cover, very little native forest land is registered in the NZ ETS (~8 percent of registered forest) and almost none is new native forestry established since 2008. It also noted some key barriers for native forestry generating carbon benefits for New Zealand including policy uncertainty, complexity for landowners and a bias towards exotic species. Air New Zealand in its efforts to encourage reforestation continues to experience these challenges which, if resolved, could dramatically increase domestic abatement from forestry.

Forestry unlocks climate benefits and multiple other co-benefits, including biodiversity enhancements, prevention of soil erosion, improved waterway health, eco-tourism opportunities, regional development and related social indicators. Air New Zealand therefore continues to seek positive change and policy that can incentivise native and permanent forestry regeneration across New Zealand. Air New Zealand welcomes further engagement on public-private partnership opportunities to unlock such forestry benefits.

b. Meeting the Paris Agreement target requires international emissions reductions

The need to purchase international emissions reductions to meet New Zealand’s Paris Agreement target has already been acknowledged. In the event that international emissions reductions are included, Air New Zealand proposes the following considerations apply:

- Imposing a quantity limit to ensure a stable local carbon price and continued domestic abatement;
- International emission reductions must meet stringent quality standards relating to additionality, environmental and social credibility, monitoring, reporting and verification standards, and be transacted only where generated below agreed baseline; and

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8 Briefing for the Incoming Minister of Climate Change, October 2017.
Air New Zealand also recommends Government consider extending the ability to issue units under the NZ ETS for other emission reduction or removal activities (beyond forestry) in a similar way to the previous ‘Projects to Reduce Emissions’ programme.

Yes, the Zero Carbon Act should allow the 2050 target to be revised but only if circumstances change.

Benefits of this approach include the ability for government to respond to extreme or unforeseen situations. However, Air New Zealand recommends changes to the target should be legislative, and only following a recommendation of the Climate Change Commission.

Yes, three emissions budgets of five years each should be in place at any given time.

Yes, the third budget should be able to be changed, but only when the subsequent budget is set.

Yes, the Government should have the ability to review and adjust the second emissions budget within a specific range under exceptional circumstances.

Benefits of these approaches include:

a. Stable and predictable investment signals for business, particularly those investing in long term operational infrastructure.

b. Resulting emissions budgets will be bipartisan and able to endure political cycles.

c. A balance of certainty for government and business with flexibility to manage future events.

In this regard, Air New Zealand considers:

- The first emissions budget (years 1-5) must be fixed.
- The second emissions budget (years 6-10) should only be reviewed in exceptional circumstances i.e. with new information that fundamentally changes the economics for the country or a sector if the budget is implemented or in extreme circumstances where events occurred that were not foreseeable e.g. natural disaster or major technology breakthrough. The review should also occur (and any changes must be effective from) no less than two years prior to the next five-year period commencing, so that business always has a minimum certainty of seven years.
- The third emissions budget (years 11-15) should be able to be changed only when the subsequent budget is set.

Yes, we agree with the proposed considerations for Government to take into account when advising on and setting budgets, subject to the comments below.
Air New Zealand agrees with the factors that need to be considered when setting emissions budgets as set out on page 44 of the Zero Carbon discussion document. We also support the other design choices of emissions budgets on the following basis:

a. Borrowing from a future budget period (e.g. Years 6-10) to meet commitments made in an earlier budget period (e.g. Years 1-5) should not be permitted outside of a stipulated band as it may lead to a shock in that second period.

b. Aligning emissions budgets with the objectives and any cap set under the NZ ETS is critical. Under the UK Climate Change Act, each carbon budget provides a statutory cap on economy-wide emissions over a period of five years.

c. The emissions budget, and unit supply and pricing in the NZ ETS, need to be managed in a way that generates a more predictable long-term emission price signal to guide efficient domestic decarbonisation, and cost-effectively manage New Zealand’s overall contribution to global emission reductions.

d. The emissions budgets need to be transparently divided up into sectors with careful consideration for those sectors who do have viable emissions reductions options and those who do not. The UK Climate Change Committee recently recognised the challenge for aviation: “In its projections, the Committee has made a relatively generous provision for aviation emissions compared to other sectors”.9

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<th>Yes, the Zero Carbon Bill should require governments to set out plans within a certain timeframe to achieve the emissions budgets.</th>
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<td>Benefits of this approach include transparency from governments. Government transparency on plans for transitioning to a low emissions economy, and future settings for emissions budgets will greatly assist businesses in strategic planning processes.</td>
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Air New Zealand considers the below issues are important as we continue the Zero Carbon discussion:

a. Air New Zealand seeks that future climate change policy enables and encourages: development and uptake of low-emissions technology and innovation in all sectors of the economy; and actual emissions reductions where those can be achieved most efficiently.

b. Aviation does not currently have any viable short or medium-term fuel switch or technology alternatives to burning fossil fuels. However, Air New Zealand is actively investing in lower emissions alternatives including electric vehicles and biofuel options. Emissions budget setting discussions at a sectoral level need to incorporate the existence and viability of lower emission alternatives, the impacts that emissions pricing has on consumer behaviour in those sectors, and the efforts and investments being made by actors in those sectors to reduce emissions in their operations and create viable low emissions alternatives. Without affecting the integrity of the core policy levers, namely the NZ ETS,

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government needs to work in partnership with such sectors to explore complementary policy measures that could support lower emissions investments and industry innovation.

c. Air New Zealand would particularly welcome engagement and dialogue with the government regarding specific policies within the aviation sector to reduce emissions and achieve the emissions budget together with exploring incentives to support low emissions alternatives. This could include tax credits for research and development, incentives for investment and other levers that can support lower emissions strategies for the aviation sector.\(^\text{10}\) Air New Zealand also supports continued engagement on more efficient flight paths into New Zealand airports, and development of future electric charging infrastructure at airports to enable rapid charging of electric aircraft.

d. Large scale and practicable volumes of biofuel remain some way from becoming a commercial reality, particularly in the absence of clear policy incentives to encourage production in Australasia. To date, aviation biofuel supply only occurs in overseas jurisdictions where state and federal government policy incentives are in place to ensure that production is more competitive with fossil fuel.

Specific measures that would be of direct benefit to New Zealand (and reduce domestic aviation emissions), include incentivising development of local sustainable biofuels for scalable and cost-effective supply. Encouraging aviation biofuel production in New Zealand could deliver significant carbon emissions savings, whilst also generating regional development and employment benefits.

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11 Yes, Air New Zealand agrees that the Climate Change Commission should advise and monitor New Zealand’s progress towards its goals

Air New Zealand submits that:

a. The Commission should have an advisory and monitoring role, which holds the government accountable to targets. We also agree with the specific advisory and monitoring functions set out on page 42 of the discussion document.

b. The Zero Carbon Bill needs to require government to publicly respond to the Commission’s recommendations and concerns and, where relevant, be required to explain its points of departure from them.

We note that the UK model requires that UKCCC advice must be considered and responded to by Ministers – and debated in Parliament. This system allows a clean divide between a non-elected expert body, and an elected government, while maintaining a transparent process without in any way diluting accountability of Government.

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\(^{10}\) The Government has recently introduced its proposed research and development tax policy in a discussion paper “Fuelling Innovation to Transform our Economy”. The research and development tax credit policy (R&D policy) targets the type of innovation discussed in this submission and as such Air New Zealand fully supports it. A large focus of Air New Zealand’s separate R&D policy submission is the importance of it being included in the proposed tax credit regime.
The UKCCC was largely dominated by energy specialists at its formation. A lack of expertise in areas such as land-use and behaviour change, was an oversight that has had flow-on consequences for the lack of contribution that those sectors have made in the UK.

c. The Commission should have no direct policy role; and no direct implementation role (whether for the Zero Carbon Bill itself, or the NZ ETS).

d. The Commission should be empowered to offer comment on any aspect of national policy (beyond climate change) where such policy may inadvertently have the potential to jeopardise New Zealand’s ability to stay within future carbon budgets.

The Climate Change Commission should have an advisory role on policy settings in the NZ ETS (but without a direct policy role).

Air New Zealand submits:

a. That the Climate Change Commission’s advisory power be extended to making recommendations on unit supply in the NZ ETS. For clarity, this should include alignment of the NZ ETS with the target and emissions budgets, input into setting an emissions cap, unit allocations, unit auctioning, unit banking, importation of international emissions reductions and any flow-on implications for the cap and any safeguards.

b. To ensure meaningful and timely accountability, response timeframes by the government to any monitoring report from the Commission need to be shorter than 6-12 months.

Yes, Air New Zealand agrees with the proposed range of essential and desirable expertise for the Climate Change Commissioners subject to the additional criteria below.

Getting the right combination of expertise onto the Commission is crucial to ensuring its effectiveness. Air New Zealand submits that the below areas of expertise should be included:

a. Transport/mobility;

b. Macro-economics and business competitiveness to ensure that recommendations take into account larger economic and commercial impacts;

c. Agriculture/land-use;

d. Housing/the built environment: This is important given the quality of New Zealand’s housing stock;

e. Energy, including the new energy system, that taps into the power of digitisation;

f. Carbon markets (emissions trading); and

g. Strategic risk analysis and systems thinking skills: these skills are critical if the Commission is to identify and analyse the risks and opportunities across complex systems and design optimal response strategies.

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11 The UKCCC was largely dominated by energy specialists at its formation. A lack of expertise in areas in the UKCCC such as land-use and behaviour change, was an oversight that has had flow-on consequences for the lack of contribution that those sectors have made in the UK.
Yes, the Zero Carbon Bill should set out adaptation provisions to help decision-makers manage climate risks in a systematic way and establish the proposed functions for doing so.

Air New Zealand submits:

a. That all countries will not only need to mitigate climate impacts by reducing net greenhouse gas emissions, but will also need to adapt to a changing climate. Air New Zealand supports the Zero Carbon Bill establishing a broad architecture for scientific reporting on how New Zealand should best adapt to the impacts of climate change. This should include development of a national climate change risk assessment and national adaptation plans that can then inform planning for significant infrastructure – for both central and local government investment choices, and decisions from the private sector.

b. It will be important for any national climate change risk assessment and resultant national adaptation plans to consider the range of impacts possible, including low-probability outcomes with potentially very significant consequences. It is important New Zealand prepares for the impact that climate change will have, not only on assets and operations, but also on supply chains, markets, and critical infrastructure.

c. One of the advantages of having the Climate Change Commission consider and prepare the national climate change risk assessment is that this should also depoliticise these assessments and their findings, and ensure continuity of this process over time. In addition, having data readily available on the likely climate change impacts to New Zealand will better enable communities, as well as public and private sector organisations, to plan for necessary future adjustments in a consistent and comprehensive way.

Yes, the requirement for a targeted adaptation reporting power could be explored.

However, Air New Zealand submits that climate change risk disclosure reporting is evolving internationally - most notably through the recommendations from the Financial Stability Board’s Taskforce on Climate-related Financial Disclosures. It is difficult to see merit in any proposal that would duplicate (or fragment) existing and emerging global frameworks on adaptation (or risk) reporting. In the short-medium term, at least, the policy objectives are more likely to be facilitated by support for, and endorsement of, these global reporting frameworks than by further regulation.