QUEENSTOWN LAKES DISTRICT COUNCIL

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31 May 2024
Via online submission

Kei te rangatira, tēnā koe,

RE: SUBMISSION TO THE CLIMATE CHANGE COMMISSION ON ADVICE AND REVIEWS FOR GOVERNMENT

Queenstown Lakes District Council (**QLDC**) would like to thank the Climate Change Commission (**the Commission**) for the opportunity to present this submission on the three consultations related to emissions budgets and targets.

After an opening section outlining general context, this submission is set out in the following separable parts:

Part A - Preparation of emissions budgets

Part B - Review of the 2050 Emissions Target

Part C - Review of inclusion of emissions from international shipping and aviation in 2050 target

QLDC would also like to thank the Commission for its targeted engagement in the district on this important topic.

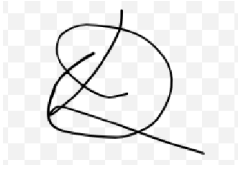
This submission has been prepared in partnership with QLDC's Climate Reference Group and reflects their joint views. The Climate Reference Group is an independent expert advisory group that provides advice to QLDC on climate change issues.

QLDC supports the direction being taken by the Commission and is committed to transitioning to a decarbonised economy that maintains and enhances well-being in the district for current and future generations. In general, QLDC and the Climate Reference Group support the Commission's review on increasing ambition for the 2050 target and including international shipping and aviation in the 2050 target; and its proposed advice on the 2036-40 emissions budget. Areas of concern are outlined in the attached submission.

QLDC is also in general agreement with the points made in the submission by NZ Airports Association and notes that QLDC is a majority shareholder (75.01%) of the Queenstown Airport Corporation.

Thank you again for the opportunity to comment.

Nā māua noa, nā,



Michelle Morss
General Manager, Strategy and Policy

Victoria Crockford
Deputy Chair, Climate Reference Group

1.0 Context of the Climate Change Commission's discussion documents and advice in relation to QLDC

1.1 The Queenstown-Lakes district (**the district**) has an average daily population of 70,205 (visitors and residents) and a peak daily population of 99,220. By 2053, this is forecast to increase to 150,082 and 217,462 respectively.[1]

1.2 The district's residents are highly climate-conscious and passionate about the integrity of the environment, participating in climate action, sustainability and conservation initiatives. **Vision Beyond 2050** is the community's vision for the district that includes becoming a zero-carbon community that sets the standard for regenerative, low-impact living, working and travel.[2]

1.3 In June 2019, the Council **declared a climate and ecological emergency** and has put in place a Climate and Biodiversity Plan that focuses on reducing emissions, preparing for climate adaptation and promoting biodiversity restoration.[3] The **2022-2025 Climate and Biodiversity Plan** sets out 70 actions to address the biodiversity, climate adaptation, and climate mitigation goals of the plan. QLDC has a mitigation goal of 44% reduction[4] in greenhouse gas emissions by 2030 and net-zero greenhouse gas emissions from all gases by 2050.

1.4 Climate action is a key element of the QLDC **Spatial Plan 2021-51**.[5] The Spatial Plan is an output of the Whaiora Grow Well Partnership, which is an Urban Growth Partnership between Central Government, Kāi Tahu, QLDC and Otago Regional Council. The Spatial Plan sets out the partnership's long-term approach to grow well, identifying priority areas for growth, transport, community facilities, infrastructure, and economic development. Emissions reduction, sustainability, resilience, and community wellbeing underpin all aspects of the Spatial Plan through to 2050.

1.5 Kāi Tahu as mana whenua of the district and QLDC is committed to working in partnership with the 7 papatipu runaka with shared interests in the district. This includes protecting and restoring the district's natural and physical environments so they provide for the wellbeing of future generations.

1.6 The Queenstown-Lakes is one of Aotearoa NZ's premier visitor destinations, drawing people from around New Zealand and the world. Tourism and the visitor economy play a substantial role in the economy of the district and of Aotearoa NZ. The Queenstown Regional Tourism Operator area accounted for 17% of all international guest nights with only 0.7% of New Zealand's resident population in the 2023-24 year.[6]

1.7 QLDC is a partner, alongside local Regional Tourism Organisations and a new Destination Management Organisation, to the Destination Management Plan: "**Travel to a thriving future: Regenerative Tourism Plan**".[7] The Regenerative Tourism Plan is designed to work towards attracting values-driven visitors to the district and ensuring they are served by products that drive down their carbon footprint as far as possible. This plan contains the ambitious target to decarbonise the Queenstown-Lakes visitor economy by 2030. The roadmap to achieve this world-first goal is highly contingent on decarbonisation of the district's transport system.

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[1] https://www.qldc.govt.nz/community/population-and-demand

[2] Vision Beyond 2050

[3] Climate and Biodiversity Plan 2022-2025

[4] Against a 2019 baseline

[5] Spatial Plan - QLDC

[6] MBIE accommodation data programme and StatsNZ

[7] The Plan | Regenerative Tourism by 2030 (queenstownnz.co.nz)

1.8 It should be noted that the content of this submission is based on the achievement of the targets as outlined at a national level within the consultation documents, but that QLDC would like to encourage all opportunities to decarbonise faster and to achieve these targets more quickly.

2.0 Context of the Climate Change Commission's discussion documents and advice in relation to the Climate Reference Group

2.1 QLDC's Climate Reference Group was established in 2020 to be an independent, multidisciplinary and regionally representative team to offer expert climate action and biodiversity advice to the QLDC. The group works together to evaluate best practice, identify key challenges and recommend priority action areas.[8]

2.2 The Climate Reference Group has Kāi Tahu representation, community representatives, and individuals with expertise in climate science, climate finance, energy, ecology, archaeology, waste reduction, transport and housing. It has been instrumental in developing QLDC's Climate and Biodiversity Plan 2022-25 and guiding Council in its implementation of the plan, and advocacy for the district.

PART A: SUBMISSION TO THE CLIMATE CHANGE COMMISSION ON ADVICE FOR PREPARATION OF EMISSIONS BUDGETS

3.0 QLDC and the Climate Reference Group agree with the approach taken in setting the proposed level of the fourth emissions budget (2036-40)

3.1 QLDC and the Climate Reference Group agree in general with the approach taken in setting the proposed level of the fourth emissions budget (**EB4**) and with the Commission's draft advice. Aotearoa NZ needs to accelerate decarbonisation. Global temperatures indicate that an overshoot of 1.5˚C global warming is highly likely.[9] Recent extreme weather events demonstrate the urgency in reducing gross emissions and EB4 is an opportunity to be more ambitious.

3.2 Gross emissions reductions must be the main focus for reaching the 2050 target. Aotearoa NZ has a history of favouring and incentivising carbon sequestration through exotic forestry over the need for gross reductions in emissions. Although this approach has been cost effective in reducing the net emissions of the country, it has contributed to an underinvestment in gross emissions reduction opportunities and resulted in a range of negative environmental effects including the loss of native biodiversity and heightened risk of wildfire.

3.3 New sources of emissions and removals will need to be carefully considered to ensure they do not reduce Aotearoa NZ's emissions reductions or its contribution to global efforts to limit warming to 1.5°C. If changes are considered to pre-1990 forestry settings it is important to ensure that retention of, or revegetation with, native forest is not disincentivised in any way.

4.0 Focusing on gross emissions reductions creates the opportunity to incentivise native afforestation

4.1 The Commission's assessment suggests less afforestation may be needed to meet the 2050 target and this creates the opportunity to incentivise investment in native revegetation and afforestation. Native species may have slower rates of sequestration but have whole-of-system benefits that include biodiversity, soil, water, cultural, and socio-economic benefits. This approach is consistent with an integrated biodiversity

[8] Climate Reference Group | Climate Action and Biodiversity (qldc.govt.nz)

[9] Analysis: When might the world exceed 1.5C and 2C of global warming? - Carbon Brief

approach outlined in QLDC's climate and biodiversity plan.[10] Native afforestation or reforestation will also bring long-term carbon sequestration benefits post-2050.

4.2 The topography and climate in the district make it challenging to grow trees for carbon sequestration as plant growth is typically slow. Ninety-seven per cent of the district is categorised as either an outstanding natural landscape/feature or a national park, which limits the amount of suitable land for exotic afforestation.[11] Further, afforestation of sheep and beef land classified as land use capability (LUC) classes 7 and 8 is not appropriate in much of the district due to extensive pastoral farming practices, elevation, ecological and landscape values.

4.3 The typical slow growth of trees does not apply to exotic wilding species. The district continues to experience the adverse effects of the wrong tree in the wrong place with widespread, costly, and difficult removals of wilding species. Wilding species have been encroaching on remnant indigenous ecosystems, altering the district's outstanding natural landscapes, and increasing the risk of wildfire from exotic species. This has necessitated the early harvest of QLDC-owned forestry as a contributor to the spread of wilding species. Forestry must be incentivised to consider broader biodiversity implications beyond sequestering carbon in order to avoid creating another environmental crisis.

5.0 There is a need for large-scale investment in electricity infrastructure to allow the district to support EB4 reduction targets

5.1 There are a number of challenges faced by the district in contributing to the emissions reductions proposed in EB4, especially in relation to decarbonisation of transport and electrification. The district's electricity needs are met almost entirely from the national grid.[12] The district faces a complex electricity challenge due to limited capacity of the infrastructure, its topography, landscape values and protections, seismic risk of the landscape, rapid increases in energy demand and the affordability of asset investment and maintenance programmes. Currently, the district has significant vulnerabilities to disruptive shocks to the transmission network and insufficient capacity to manage the expected increased electricity demand from decarbonisation activities.

5.2 A systems approach is needed to meet electrification needs of the district through increased supply, reduced demand and improved resilience. The district will need to generate more renewable electricity locally, whilst working with households and businesses to reduce demands on the grid (e.g. through improved insulation and efficient heating solutions for homes).

5.3 Transport is the highest source of greenhouse gas emissions in the district, with all modes of transport accounting for 45% of gross emissions.[13] Although enabling mode shift is a priority, it is anticipated that the adoption of decarbonisation technology will be the key driver for reducing the district's transport emissions. This will significantly increase the levels of demand on the electricity supply.

5.4 Regional electricity infrastructure deficits impact on the feasibility of the reduction targets. The challenges around capacity and security of electricity supply will need to be resolved to enable the district to contribute effectively to the EB4 reduction targets. This will require support and investment from traditional and non-traditional power actors and regulators in order to make a step-change difference to decarbonisation.

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[10] Climate and Biodiversity Plan 2022-2025

[11] qldc-carbon-sequestration-study-final-report.pdf

[12] Queenstown_Lakes_Carbon_Zero_Discussion_Paper_3369ba2f-9d38-432a-9255-83de6c18162f.pdf (simpleviewinc.com)

[13] otago-region-ghg-profile-report_v4.pdf (orc.govt.nz)

Recommendations:

R.A1. Agree with the recommendation to set EB4 to 134 MtCO2e (total) and 26.8 MtCO2e (annual average), and that the budgeted reductions are necessary to keep Aotearoa NZ on track to meet the 2050 target and making sufficient contribution to global efforts to limit global warming.

R.A2. Agree with the balance of emissions and removals that the Commission has proposed, and with the focus on reducing gross emissions wherever there are technically and economically feasible options. Higher rates of afforestation, whilst enabling a reduced EB4, should not be a signal to take the pressure off gross emissions reductions.

R.A3. Agree with the need for the government to implement policies that deliver emissions reduction for each greenhouse gas as proposed by the Commission.

R.A4. Agree with limiting offshore mitigation for EB4, except in circumstances beyond Government's control (e.g. a force majeure event).

R.A5. Agree in principle with revising the first three budgets to reflect methodological changes as proposed by the Commission.

R.A6. Agree in principle with the proposed changes to the rules for measuring progress including: the need to adopt principles of additionality and permanence; the need to develop and implement long-term measurement and monitoring plans; and the need to develop plans for managing accuracy and uncertainty risks.

R.A7. Consider the range of levers needed to incentivise native revegetation and afforestation that increases long-term carbon sequestration and improves biodiversity outcomes.

PART B: SUBMISSION TO THE CLIMATE CHANGE COMMISSION ON THE REVIEW OF THE 2050 EMISSIONS TARGET

6.0 QLDC and the Climate Reference Group agree with the Commission's assessment that the 2050 emissions target is not a sufficient contribution to global efforts and that an increase in ambition is necessary

6.1 Aotearoa NZ must make an equitable contribution to global commitments to limit the average global rise in temperature to 1.5°C. QLDC and the Climate Reference Group support an increase in ambition for the 2050 emissions target. Evidence shows that the world is not on track to limit average global temperature increases to 1.5°C, and that Aotearoa NZ's contribution is falling behind other countries.[14] The latest estimate is that the current trajectory will take global temperatures to an average 2.0°C between 2034 and 2054.[15]

6.2 A step change in ambition for the 2050 target increases the necessity of policy support and investment from central government to enable the targets to be met. There needs to be a systems-wide focus on providing the infrastructure and technology that underpin the assumptions in the Commission's scenario planning. As an example, rapidly electrifying transport options and changing modes of travel are priorities in the district, however there are significant energy network challenges to be overcome to enable extensive and rapid decarbonisation of transport modes. Businesses will also need government assistance and support to decarbonise, as they will need to make a significant contribution to meeting the target.

[14] https://climateactiontracker.org/countries/new-zealand/

[15] Analysis: When might the world exceed 1.5C and 2C of global warming? - Carbon Brief

7.0 Pathways to meet the 2050 target should help Aotearoa NZ meet both the 2050 target and post-2050 emissions reductions

7.1 The 2050 target is fast approaching given the rapid scale of change that is needed. The actions put in place now must not only help Aotearoa NZ to meet the 2050 target but also limit any contribution to global warming after 2050. A long-term approach requires a strong focus on immediate gross emissions reductions rather than relying on overseas credits or forestry offsetting. Making the necessary gross emissions reductions now will have a greater future impact – delays will only increase the cost and level of reductions needed.

7.2 Reaching the 2050 target requires each sector to do everything it can to reduce emissions, including from biogenic methane. Any carbon accounting changes that reduce the contribution required for biogenic methane from agriculture, would be inequitable to other sectors and would lessen Aotearoa NZ's contribution to global climate change efforts.

7.3 The Commission has identified key indicators of distributional impacts but does not include household food security, which is an important indicator of an equitable transition. The Paris Agreement considered safeguarding food security as a fundamental priority and Aotearoa NZ has comparatively high and inequitable rates of food insecurity.[16] Further, much of our food supply and food production relies on imported food, ingredients or inputs that could be impacted by an increase in costs from adding international shipping and aviation to the 2050 target.[17] [18]

Recommendations:

R.B1. Agree there has been significant change in global action and scientific understanding of climate change that justifies an increase in ambition for the 2050 target.

R.B2. Agree the pathway to meet the 2050 target should be through emissions reductions rather than offsetting or offshore mitigation.

R.B3. Food security should be added as an indicator to monitor distributional impacts.

PART C: SUBMISSION TO THE CLIMATE CHANGE COMMISSION ON A REVIEW OF INCLUSION OF EMISSIONS FROM INTERNATIONAL SHIPPING AND AVIATION IN 2050 TARGET

8.0 QLDC and the Climate Reference Group support the inclusion of international shipping and aviation in the 2050 target

8.1 The district has an ambitious goal to decarbonise the visitor economy by 2030 and for the district to reach net zero for all emissions by 2050. To align with these goals, QLDC and the Climate Reference Group agree with the inclusion of international shipping and aviation in the 2050 target. The first deliverable from the district's Destination Management Plan was to open the conversation around how tourism emissions are measured and considered. This is a complex space, as aviation emissions are widely distributed and difficult to assess. Understanding the true volume attributable to a high-appeal destination like Queenstown is complicated, but we took significant steps to look at a range of scenarios in our discussion document. This demonstrated that depending upon the methodology used, emissions attributable to aviation could vary wildly.[19]

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[16] Ministry of Health. 2023. Annual Data Explorer 2022/23: New Zealand Health Survey

[17] Policy Brief 27: Rethinking New Zealand's food security in times (landcareresearch.co.nz)

[18] Food exports and imports of New Zealand in relation to the food-based dietary guidelines - PubMed (nih.gov)

[19] Carbon Zero Discussion Paper

8.2 Tourism makes a considerable contribution to the local and national economy. It is central to the economic well-being of many of the residents in the district.[20] Manaakitaka (hospitality) and tautiakitaka (stewardship) run deeply in the tourism industry and are guiding principles in the district's Regenerative Tourism Plan that is leading many to take significant steps within their spheres of influence to effect positive and meaningful change.

8.3 The two main pillars of Aotearoa NZ's economy are agricultural exports and tourism, both of which are reliant on shipping and aviation. As the Commission noted, Aotearoa NZ is an island nation, a long way from anywhere. It is reliant on shipping and aviation for all its imports and exports. Unlike continental countries, Aotearoa NZ does not have the option of international transport modes such as trains. This makes it essential to get the settings for international shipping and aviation in the 2050 target right.

8.4 The settings for international shipping and aviation also need to consider the risk of emissions leakage and ensure that Aotearoa NZ's aviation and shipping industry is not put at comparative disadvantage. Progress will need to keep in-step with international action. There is a high level of uncertainty in relation to pathways and impacts for decarbonising international shipping and aviation, which are likely to differ for the two sectors, and further work is needed to understand these.

8.5 The district has undertaken a significant piece of work to understand the emissions profile of the tourism sector in the district, identifying that land transport, aviation and energy remain the most significant challenges.[21] The four biggest levers for decarbonising the visitor economy were identified as adjusting visitor volume, visitor origin, the emissions intensity of transportation, and the emissions intensity of in-destination activity. As directed by the Destination Management Plan, an optimum visitation project is currently launching to explore the district's social, cultural, economic and environmental capacity in far more detail.

8.6 Decarbonising the aviation sector is a significant challenge. As there is not yet a clear pathway to achieve gross emissions reductions in aviation (including the feasibility and viability of sustainable aviation fuel), initial reductions are likely to need to be met in part by other sectors. As the Commission has indicated, it will need to consider the combined impact of increasing ambition of the target itself and including international shipping and aviation in the target across sectors.

8.7 Including international shipping and aviation in the 2050 target brings with it an obligation on government to enable a pathway to meet the target. A mix of policies, signals and investments will be needed to decarbonise the shipping and aviation sectors, for example, exploring options for a domestic supply of sustainable aviation fuel. This is a complex, but extremely important challenge for industry, community and government to face together. Failure to address this will have long-term implications for our communities, businesses and trading partners.

Recommendations:

R.C1. Agree that international shipping and aviation should be included in the 2050 target.

R.C2. International shipping and aviation should have separate net targets, as they are likely to have different pathways and timeframes for decarbonisation.

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[20] 38% of people work in tourism, accommodation, and hospitality. https://ecoprofile.infometrics.co.nz/queenstown-lakes%2bdistrict/Tourism/TourismEmployment

[21] Carbon Zero Discussion Paper at page 6. Regenerative Tourism By 2030 (queenstownnz.co.nz)

R.C3. The approach to counting emissions needs to be consistent internationally to avoid under- or over-counting, for example international agreement to count emissions to next port.

R.C4. The combined impact on the 2050 target of both increasing ambition and including international shipping and aviation should be considered.