

Climate Change Commission – 2021 Draft Advice

New Zealand Wind Energy Association Submission

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Introduction

1. The New Zealand Wind Energy Association (NZWEA) welcomes the opportunity to provide a submission on the Climate Change Commission's Draft Advice for Consultation.
2. The Association has submitted on most recent consultations relating to climate change and reducing greenhouse gas emissions including The Productivity Commission's Low-emissions Inquiry ¹, MBIE's Accelerated Renewable Energy and Energy Efficiency Discussion Document ², the Zero Carbon Bill ³ and ETS Reform ⁴. The Association has also engaged with the Interim Climate Change Committee in relation to their review of the 100% renewable electricity target ⁵ and has had regular meetings with the Climate Change Commission to provide updates on the wind industry.
3. In addition NZWEA has submitted on the Electricity Price Review (EPR) ⁶, the Ministry of Transport's discussion paper on moving the light vehicle fleet to low-emissions ⁷, the Ministry for the Environment's draft National Policy Statement for Freshwater Management ⁸, the draft the National Policy Statement for Indigenous Biodiversity ⁹ and the Electricity Authority in their consultations on transmission pricing ¹⁰ and hedge market enhancements ¹¹.
4. There will be a number of organisations also submitting on the CCC's Draft Advice in a similar position to the Association. The breadth of recent submissions highlights the interconnectedness and need for policy alignment if the impacts of climate change are to be mitigated and a meaningful reduction in emissions achieved. The need for a co-ordinated and aligned approach is recognised throughout the CCC's advice and essential to having confidence in the achievability of proposed emission reduction budgets.
5. The focus of the Association's submissions has been related to the decarbonisation of the energy sector and, in particular, the opportunity for renewables including wind generation to displace the use of fossil fuel. The range of NZWEA submissions highlights the importance of appropriate regulatory settings to enable new investment and the

¹ Productivity Commission, Low-emissions Economy Report, August 2018.

² MBIE Accelerating renewable energy discussion document, December 2019.

³ Climate Change Response (Zero Carbon) Amendment Bill May 2019.

⁴ MfE Consultation – Reforming the NZ Emissions trading Scheme: Proposed Settings, December 2019.

⁵ Interim Climate Change Committee, Accelerated Electrification Report, April 2019.

⁶ Electricity Price Review, May 2019.

⁷ Moving the light vehicle fleet to low-emissions: discussion paper on a clean car standard and clean car discount, July 2019.

⁸ Action for healthy waterways, a discussion document on national direction for our essential freshwater, September 2019.

⁹ He Kura Koiora, Proposed national policy statement for indigenous biodiversity, November 2019.

¹⁰ Electricity Authority, Transmission Pricing Review, July 2019.

¹¹ Electricity Authority, Hedge Market Enhancements (market making), Discussion Paper, November 2019.

commercial imperative that comes from the matching of electricity demand growth with supply.

6. The Association is supportive of CCC's direction of travel in the electricity and wider energy sectors and in this submission focuses on two key areas namely the importance of the energy trilemma as the electricity system transitions to a higher level of renewable generation and the importance of appropriate regulatory settings to enable new generation to be built.

Executive Summary

7. The Association acknowledges that the Climate Change Response (Zero Carbon) Amendment Act and the Climate Change Response (Emissions Trading Reform) Amendment Bill, along with proposed changes to ETS settings, represent a step change in approach to achieving a coherent and integrated way forward in achieving a meaningful reduction in emissions and a pathway that commences New Zealand's transition to a low carbon economy.
8. What has been disappointing is the lack of alignment of New Zealand's targets with actions that result in an actual reduction in emissions. The Association acknowledges the CCC's recognition of earlier reports on New Zealand's opportunity to decarbonise and welcomes the call for greater ambition to reduce greenhouse gas emissions quickly, significantly and permanently.
9. The Association supports the CCC's vision, call to action and key recommendations in the transport, heat industry and power sectors which are the key areas of focus for the wind industry.
10. NZWEA has placed reliance on the analytical approach and expert analysis undertaken by the CCC and supports the proposed budgets as a challenging but progressive pathway to a net zero 2050 target for greenhouse gases other than biogenic methane.
11. In the following section the Association responds to CCC recommendations and in particular focuses on two key areas which the Association considers present a significant risk to the achievement of carbon reduction budgets in the transport and energy sectors:
 - A lack of integration of government policy making across climate change and other domains. Of immediate concern is the implications of proposed resource management system reforms which have the potential to significantly limit the industry's ability to consent new renewable generation.
 - Sustaining the energy trilemma in the transition of the electricity sector to a higher level of renewables particularly in a dry year situation when combined with a projected significant growth in demand.

Comments on the Draft Advice

CCC Vision

12. The Association supports the CCC's vision of a thriving climate and low emissions Aotearoa with hydro, wind, solar and geothermal energy powering our country.
13. A perspective, that as a Country we should only use our fair share of the remaining global carbon budget, is one the Association supports as is the view that a permanent reduction in greenhouse gas emissions is the desired goal.

14. The CCC highlights that the use of low emission fuels and that energy should be affordable and accessible. The Association supports this position but considers that New Zealand has a unique and material risk to manage in achieving a successful transition given the current dependence on fossil fuels to meet the significant variation in hydro inflows and generation.

Community Energy

15. The CCC vision also includes communities generating their own electricity using low emissions generation.
16. The Parliamentary Commission for the Environment ¹² has identified a significant opportunity for small scale community wind projects.
17. There are many current barriers to enabling community energy which were explored in MBIE's Accelerated Renewable Energy and Energy Efficiency Discussion Document ¹³
18. Community wind projects are unlikely to proceed without Government support with planning and process information and advice. RMA reform to simplify and reduce the cost and uncertainty of obtaining a consent is a prerequisite to smaller new developments. The current one size consenting process favours large-scale developments where the high cost of consenting has a lower impact on commercial viability.
19. The Association considers smaller scale wind projects a key opportunity to support regional growth and improve energy resilience.

Accelerate the Emissions Reduction Effort

20. NZWEA supports the recommendation that the Government must act with urgency and the CCC's view *that 'Aotearoa will not meet its targets without strong and decisive action now to drive low emissions technologies and behaviour change across all sectors. 2050 is not far away – particularly if you consider the life span of infrastructure, vehicles, buildings – and people'*
21. The Association notes that the Productivity Commission's Low-emissions Inquiry Report ¹⁴ was published in August 2018 and that in relation to the energy sector the key shift recommended by the Commission to stop burning fossil fuels and where possible, switch to use of electricity and other low-emission energy sources was also supported by the Interim Climate Change Committee ¹⁵ and now the CCC Draft Advice.
22. To decarbonise the energy sector New Zealand's key challenge is accelerating electrification to drive demand growth not the availability of new sources of renewable generation. There is an abundance of renewable generation options as detailed in MBIE's recent stack update reports. The Wind Stack Report ¹⁶ identified over 11,000 MW of economic wind generation which could be built subject to electricity demand growth and ability to consent new developments.
23. Sustaining future demand growth to support investment in generation is necessary to deliver on the carbon reduction opportunity offered by electrification particularly given limited development resources.

¹² PCE Report Wind power, people and place (2006b).

¹³ Section 9 Facilitating local and community engagement in renewable energy and energy efficiency.

¹⁴ Overview section and Productivity Commission, Low-emissions Economy Report, August 2018.

¹⁵ Accelerated Electrification Report, April 2019.

¹⁶ MBIE Wind Stack Update, June 2020 <https://www.mbie.govt.nz/assets/wind-generation-stack-update.pdf>

Emissions Budgets

24. NZWEA supports the principles outlined and the strategy of having budgets that are consistent with putting Aotearoa on track to meeting the 2050 target under a wide range of future circumstances.
25. The CCC notes the budgets are ambitious, but achievable and that they represent a significant reduction on current levels of emissions, and step down considerably over time.
26. The Association supports a challenging and measured approach with a focus on domestic mitigation as this provides certainty emissions reductions are achieved and should improve long term competitiveness as international carbon prices increase.
27. NZWEA also supports the recommendation that Aotearoa must focus on decarbonising and reducing emissions at the source as this significantly reduces the risk of relying on forestry which itself may be at risk from the impacts of climate change.

Cross Party Support and Central and Local Government Alignment

28. NZWEA considers having a consistent long term and co-ordinated approach is essential to providing investor certainty and achieving the net zero target. Cross-party support for the emissions budgets is therefore essential.
29. The balancing of local and national interests has been an ongoing issue for wind industry when seeking consents. Aligning legislation and policy to enable local government to take wider climate change considerations into account when making decisions is paramount particularly in relation to resource management system reform and national direction instruments.

Transport Sector

30. NZWEA supports a focus on reducing transport emissions and given current emission levels, that doing so is pivotal to meeting climate targets.
31. The recommendations in relation to electric vehicle uptake are key and that Government support and incentives are needed for EV's to be widely adopted.

Electricity Sector

32. The Association supports a path of the rapid expansion of renewable generation to meet the increase in demand from the electrification of other sectors.
33. The CCC's modelling has wind generation increasing to 13.3 TWh by 2035. To achieve this level of output around 2,800 MW of new generation will be required comprising between 20 and 30 new wind farms at an annual growth rate of over 180 MW post the completion of the Waipipi and Turitea wind farms.
34. The growth projection is challenging but achievable with the appropriate policy settings, particularly in relation to resource management system reform.
35. The Association notes the importance of stability in electricity market settings to encourage new investment and that the new transmission pricing model, with benefits-base charging for new investment, does create additional risks for new and existing generation assets.
36. The transition from fossil-fuelled generation and renewables growth also requires a significantly more responsive electricity system than today's which is largely a one-way

flow. New technologies and a focus on demand response and distributed energy resources offer approaches to manage the daily and seasonal peaks and the variability of renewables in a low-emissions way that minimise the cost of new transmission and distribution investment.

Industry and Heat

37. Maximising to the use of electricity in the heat, light and power sector is supported.

Energy Sector

38. The Association supports the decarbonisation of the energy sector and setting of a renewable energy target of 60% by 2035 with the 100% renewable electricity target viewed as aspirational and secondary to the energy sector target.
39. NZWEA considers that an energy trilemma that balances availability and cost is essential to achieving the proposed emission reduction budgets.
40. The CCC notes *'the Government needs to plan to manage the risk around affordability and security of supply as a result of moving to a low emissions energy system.'*
41. The CCC also advises of *'uncertainty around the solution to the dry year challenge – solutions for generating sufficient renewable electricity in years when hydro lake levels are low.'*
42. The Association has concerns that the dry year challenge, where low inflow periods are currently supported by thermal generation and the future gas supply position, presents a material risk to the achievement of the emissions reduction targets in the energy sector.
43. Consequences could include security of supply issues and / or electricity price increases which limit the incentive to move away from fossil fuel use.
44. NZWEA considers further analysis is required to assess the risks arising from the energy sector transition particularly in relation to dry years and security of supply and supports the CCC's recommendation that this be considered under the framework of a national energy strategy.

Regulatory Alignment

45. In the land sector recommendations, the CCC has highlighted that *'the Government needs a cohesive strategy that includes water, biodiversity and climate.'* The Association supports this approach. Consistency of climate goals across all policy areas is essential to decarbonising the energy sector and notes the current Resource Management System Reform proposals as an example where a lack of alignment will have unintended consequences.
46. The electricity industry view is that the reforms proposed by the Randerson review do not go far enough in recognising climate change impacts or the national importance of renewable electricity generation and will significantly limit new generation development.
47. NZWEA has joined major generators in highlighting significant concerns with the draft purpose and principles of the Natural and Built Environments Act (NBA).
48. The key issues relate to NBA Part 2 in the recognition of the importance of renewable electricity generation and the outcomes which prioritise environmental bottom lines without countervailing consideration such as mitigations, offsetting and compensation programmes widely used in wind farm consenting.

49. Key enhancements the industry is seeking include the recognition of climate change limits and targets in the legislation and specific provision for electricity infrastructure and renewable electricity generation.
50. A copy of both the sector's briefing note and the critical role of a reformed resource management system are included with this submission.
51. The Association notes and supports the CCC's call for a multisector strategy which integrates government policy making across climate change and other domains.

Emissions Trading Scheme

52. The Association endorses the ETS as the key market mechanism to reduce emissions.
53. The Association supports the CCC's conclusion that targeted interventions are required in addition to the ETS, particularly in sectors where the ETS carbon price signal is less direct. The transport sector, where investment barriers may limit / and or delay the transition to low emission vehicles, is a key area where additional policies are needed.
54. The Association also supports the view that provisional emission budgets should be aligned with the Commission's recommendations and the movement of auction reserve and cost containment reserve prices in line with forecast marginal abatement costs to encourage electrification.

About the NZ Wind Energy Association (NZWEA)

- The NZWEA is an industry association that promotes the development of wind as a reliable, sustainable, clean and commercially viable energy source.
- We aim to fairly represent wind energy to the public, Government and the energy sector.
- Our members are involved in the wind energy sector and include electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting organisations and other providers of services to the wind sector,
- By being a member of NZWEA you are assisting the development of wind energy in New Zealand and helping to reduce our greenhouse gas emissions to meet climate change targets.

The Association's strategy focuses on three key areas:

- Leveraging NZ's emission reduction imperative to enable the energy transition to renewables, particularly wind energy.
- Optimising wind energy's position and ensuring the regulatory environment supports wind farm development.
- Expanding the opportunity for wind energy development to enable community and industrial projects including wind's integration with other technologies.

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