

# **Climate Change Commission**

## **First package of Advice**

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## **Submitter details**

1. Nelson Marlborough Health (Nelson Marlborough District Health Board) (NMH) is a key organisation involved in the health and wellbeing of the people within Te Tau Ihu o Te Waka a Maui. NMH appreciates the opportunity to comment from a public health perspective on the first package of advice from the Climate Change Commission (the Advice).
2. NMH makes this submission in recognition of its responsibilities to improve, promote and protect the health of people and communities under the New Zealand Public Health and Disability Act 2000 and the Health Act 1956.

## **General Comments**

3. NMH strongly supports the general intention of the Advice on actions the Government needs to take in order to reach net-zero by 2050 and reduce the impact of climate change on New Zealand. Climate change has the potential to adversely affect the health of New Zealand's people, environment and economy. By planning across all sectors now, the government and government agencies have the opportunity to make effective changes that can reduce emissions so we can meet our international obligations. If New Zealand waits, then there is potential that sudden changes need to be made, placing further burden on future generations and impacting on people's health and wellbeing.
4. Health and health equity and climate change are inseparable therefore the Advice needs to focus on opportunities to greatly improve the mental and physical health of all residents as well as the environmental health of the land, water and air.
5. NMH has read the draft submission of Ora Taiao and endorses the key principles in the Advice which include acknowledging the special partnership relationship required with Maori as climate change may mean further displacement and dispossession from land and heritage as sea level rise along with a loss of cultural resources such as kai moana, marae and burial grounds. Iwi who have smaller land areas they affiliate to or where these are predominantly coastal land areas especially vulnerable
6. NMH also supports the inclusion of the concept of kaitiakitanga and the integration of the principles of the Treaty of Waitangi into the advice. It is important that Maori aspirations and values are included to ensure that the indigenous relationship to the environment is acknowledged and also so that collectively different community groups can work together on climate change solutions. A

disproportionate number of Māori and Pacific people in Aotearoa live in deprived circumstances, and deprivation is a significant driver of poor health outcomes.<sup>1,2</sup> We could anticipate that the effects of climate change are likely to exacerbate inequities with loss of land.

7. Those most affected by climate change will be those living in low-lying coastal regions (including those living in our neighbouring Pacific countries), and those who have a lower socio-economic status. Low-income and remote populations are more vulnerable to physical hazards, undernutrition, infectious diseases, and the health consequences of displacement.<sup>3</sup>
8. It is essential that there is specific reference to the need for any intervention to be fair and equitable to ensure that the most vulnerable are not disproportionately affected.

### **Specific Comments regarding the Six Big Issues**

#### ***The Pace of Change: Do you agree that the emissions budgets we have proposed would put Aotearoa on course to meet the 2050 emissions targets?***

9. **Disagree:** New Zealand has a greater responsibility as a developed nation to contribute to a globally equitable response, so at a minimum our IPCC 2030 targets should be met. NMH agrees with Ora Taiao that without more ambitious emissions budgets, New Zealand will contribute to deepening health, social and economic inequities. The health and socioeconomic impacts of climate change disproportionately harm populations who have contributed the least to the problem. Moreover, climate change interacts with existing determinants of health exacerbating long standing health inequities within and between countries.
10. The proposed budgets delay necessary cuts until the second and third budget which will result in further intergenerational inequity.
11. NMH supports the focus on decarbonisation

#### ***Future Generations: Do you agree we have struck a fair balance between requiring the current generation to take action, and leaving future generations to do more work to meet the 2050 target and beyond?***

12. **Disagree:** As stated at the start of this submission, NMH advocates for more action to occur now. Failing to implement healthy and equitable climate policies

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<sup>1</sup> Marmot, M., Friel, S., Bell, R., Houweling, T. A. J. & Taylor, S. Closing the gap in a generation: health equity through action on the social determinants of health. *The Lancet* vol. 372 1661–1669 (2008).

<sup>2</sup> Bennett, H. et al. Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate action. *N. Z. Med. J.* 127, 16–31 (2014).

<sup>3</sup> McMichael, A. J. & Lindgren, E. Climate change: present and future risks to health, and necessary responses. *J. Intern. Med.* 270, 401–413 (2011).

now accepts an avoidable burden of ill-health in future generations, disproportionately affecting already marginalised children.<sup>4</sup>

***Our contribution: 3. Do you agree with the changes we have suggested to make the NDC compatible with the 1.5°C goal?***

13. **Disagree:** NMH recommends that all levels of government significantly reduce emissions from today. COVID response has shown that governments can use many mechanisms to make rapid change. Further emission reductions will contribute to reducing the risk of an overshoot beyond 1.5°C with its incrementally greater health risks.<sup>5</sup>
14. NMH agrees with Ora Taiao recommendation that the Commission should consider and account for the health co-benefits in their advice on how much the government should strengthen the Nationally Determined Contribution beyond 35% and the policies used to achieve it. Beyond health costs/savings in economic terms, the Commission should be compelled to strengthen our contribution and centre health in its strategy based on everyone's right to the highest attainable standard of health.
15. NMH recommends that the Commission reports annually on a wide range of data in order to manage risks. This data collection should use a framework similar to the Treasury's Living Standards framework and identify such things as health and employment benefits.

***Role and type of forest: Do you agree with our approach to meet the 2050 target that prioritises growing new native forests to provide a long-term store of carbon?***

16. **Agree:** NMH supports the significant increase of new native forests, and the extension of protections for existing forests, wetlands and tussock.

***Policy priorities to reduce emissions: What are the most urgent policy interventions needed to help meet our emissions budgets?***

17. NMH advocates for public health presentation on the Commission's board and the immediate establishment of a multidisciplinary health advisory group to the Commission of the purpose of ensuring health impacts are accounted for in the Commission's advice to the Government.

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<sup>4</sup> Bennett H., Jones R, Keating G, et al (2014) *Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate change*. NZ Medical Journal 127 (1406)

<sup>5</sup> Watts, N. Et al. (2021) The 2020 report of The Lancet Countdown on health and climate change: responding to converging crises. *The Lancet*. 397 (10269); 129-170.

18. NMH concurs with Ora Taiao that healthy equitable climate policy that promotes affordable active transport, sustainable food systems and healthy homes can substantially reduce the burden of non-communicable diseases and contribute to reducing health inequities
19. **Active Transport:** NMH agrees with many of the recommendations to reduce greenhouse gas emissions in the transport sector but would like to have more emphasis placed on significantly increasing active and public transport modes as this provides environmental and public health benefits such as more equitable access to transport, further reduced air pollution from reduced tyre wear and brake use, increase in physical activity and improved liveability.
20. The targets around promoting active transport need to be more ambitious, with a focus on promoting walking/ cycling and joined up public transport routes rather than a focus on electric personal vehicles.
21. NMH strongly supports significantly increasing the share of central government funding for walking, cycling, and low emissions public transport. It was disappointing to see that Waka Kotahi's funding for walking and cycling projects in the latest Nelson/Tasman/Marlborough Regional Land Transport Plan will stay static between 2021-2031. NMH acknowledges that Waka Kotahi's budgets have been significantly affected due to COVID response, however in order to create momentum for change in relation to transport, funding for active travel modes in all regions must be prioritised immediately.
22. In addition, Councils should be required to (rather than "encourage") implement first and last kilometre travel solutions so that people have a range of transport options.
23. NMH recommends that the speed limit is reduced in all urban areas from 50km/h to 40km/h. Speed affects the likelihood and impact of all crashes. Small reductions in impact speeds greatly increase the chances of surviving a crash, particularly for pedestrians and cyclists. The Ministry of Transport's Safer Journey report<sup>6</sup> shows that there is a 10% probability of death for pedestrians struck by cars travelling at 30km compared with 50% probability for pedestrians struck by cars travelling at 45km. Speed limits should be reduced in order to create safer walking/cycling environments. It is only by having safe active transport that we will encourage its use and create modal shift.

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<sup>6</sup> <http://www.saferjourneys.govt.nz/assets/Safer-journeys-files/SaferJourneyStrategy.pdf>  
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24. **Vehicle Fleet:** Until recently, New Zealand was one of only three developed countries that does not have regulations on vehicle emissions quality, and as a result, has one of the most fuel inefficient and polluting fleets of any OECD country. This has serious implications on the health and wellbeing of New Zealanders, including high rates of asthma, respiratory illnesses, and lung cancer. Children, the elderly, and low income families are particularly vulnerable to poor air quality<sup>7</sup>. It will take time to update the entire vehicle fleet to a no/low emitting fleet therefore private vehicle use should be curtailed through measures such as prioritising active transport, cycle and pedestrian only zones, increased parking charges, zero emissions zones, widespread adoption of traffic calming measures and reduced speed limits.
25. All light vehicles entering the country should be zero emissions by 2030 (only battery electric vehicles). NMH supports the introduction of subsidies for EVs. Price is a barrier for people wishing to purchase EVs.
26. There needs to be a comprehensive plan to map and scale up EV charging infrastructure throughout the country in order to meet the increasing demand for EVs. The plan should also include measures to promote electrification of public and active transport (e.g. electric rail and buses, e-bikes, e-scooters). In addition, the environmental effects of electrification should be continually reviewed to ensure that the carbon footprint of E-Vehicles is constantly improved.
27. The scheme should also include education around where to access public charging. Those living in rental units may not be able to arrange a charging point with their landlord. Considerations should be given for incentives for installing charging outlets on their properties.
28. Access to charging stations in workplaces should also be readily available. There is an opportunity for hospitals and other health centres to provide charging facilities to enable those travelling longer distances to recharge their vehicles and bicycles during their visit. A fund for public charging infrastructure at sites such as hospitals, libraries and councils could provide a platform for better public engagement and uptake.
29. **Food resilience:** There seems to be little written in advice about the effects on climate change on food resilience. This appears to be an oversight. Climate change could change what we consider to be highly productive land. Changes in weather

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<sup>7</sup> WHO (2014). FAQ: Ambient and Household Air Pollution and Health.  
[https://www.who.int/phe/health\\_topics/outdoorair/databases/faqs\\_air\\_pollution.pdf](https://www.who.int/phe/health_topics/outdoorair/databases/faqs_air_pollution.pdf)



patterns across regions and extreme weather events will affect New Zealand soils. Climate change has the potential to increase erosion rates through hotter, drier conditions that make soils highly productive land more susceptible to wind erosion as well as intense rainfall events triggering surficial erosion and shallow landslides.<sup>8</sup> Highly productive soils suitable for food production do have high structural stability, and less prone to water logging and erosion, flooding or salt contamination however this could change over time.

30. Funding could be given to future proofing and diversifying our food production system so that it is not as susceptible to extreme weather events. WHO has stated<sup>9</sup> that climate change is expected to lead to modified bacterial, viral and pathogenic contamination of water and food by altering the features of survival and transmission patterns through changing weather characteristics, such as temperature and humidity.
31. NMH also recommends that the plant-based protein sector is further developed as noted in the Advice as this sector has “lower emissions, water and land use footprint than conventional animal agriculture products”. In addition, there is a reduced risk of bacterial contamination from animal land use. The EAT-Lancet Commission summary states that “a large body of work has emerged on the environmental impacts of various diets, with most studies concluding that a diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits”.<sup>10</sup> Plant-based diets are also associated with lower BMI, cholesterol, and blood pressure, therefore lowering risk of non-communicable diseases.<sup>11</sup> NMH would like to see the Climate Commission actively advocate for the promotion of healthy and sustainable diets as part of its climate change plan.
32. NMH notes that New Zealand does not have a policy for food security. New Zealand’s population is growing which is placing further demand on highly productive land, and given the potential effects of climate change on productive land, further consideration needs to be given to food security issues for the domestic food chain. Horticultural NZ identifies that developing a food security

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<sup>8</sup> Palmer, A (undated) *The issue of Protection of Class I and Class II soils in the One Plan*, Soil and Earth Sciences. <https://www.horizons.govt.nz/HRC/media/Media/One%20Plan%20Documents/One-Plan-Versatile-SoilsStandard-Copy.pdf?ext=.pdf>

<sup>9</sup> World Health Organization (2018) *Food Safety Climate Change and the Role of WHO* [https://www.who.int/foodsafety/\\_Climate\\_Change.pdf](https://www.who.int/foodsafety/_Climate_Change.pdf)

<sup>10</sup> EAT-Lancet (2019) *Food in The Anthropocene: the EAT-Lancet Commission on Healthy Diets From Sustainable Food Systems*. [https://eatforum.org/content/uploads/2019/07/EAT-Lancet\\_Commission\\_Summary\\_Report.pdf](https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf)

<sup>11</sup> Tusso, P. J., Ismail, M. H., Ha, B. P., & Bartolotto, C. (2013). Nutritional update for physicians: plant-based diets. *The Permanente journal*, 17(2), 61–66. <https://doi.org/10.7812/TPP/12-085>



policy is central to addressing sustainability concerns<sup>12</sup> and NMH recommends that the Climate Change Commission, Ministry for the Environment and Ministry for Primary Industries considers a food security policy.

33. **Housing:** The Advice, in relation to housing, has put a lot of emphasis on new builds. There are many quick gains to be had by focusing on energy standards for new dwellings. However, the bulk of the population lives in older houses which require additional work to make them more energy efficient. NMH would like to stress the importance of warmer drier homes from both an energy efficiency point of view and a health perspective.
34. People who live in warmer drier homes tend to be healthier, with fewer GP and hospital visits and fewer days away from work due to illness. Poor housing exacerbates existing health conditions and heighten the impacts of impairment. This triggers dislocation from their communities, admission to an unnecessarily high level of care and support, and shift the cost of what is primarily a housing problem onto the health and social services sectors.<sup>13</sup>
35. Badly ventilated and poorly heated homes reduce the occupants' comfort and can adversely affect health. An analysis conducted by the World Health Organisation found that those over 65 years of age showed increased respiratory problems when living in cold dwellings in winter and children 0 to 17 years of age showed twice the prevalence of respiratory problems in poorly heated homes.<sup>14</sup> Energy efficient homes result in reduced energy costs, which is important for low income households on fixed incomes, as well as helping meet the Government's sustainability objectives. The cost of electricity has risen 79% since 1990, and New Zealand's residential prices have risen faster than most other OECD countries.<sup>15</sup> The Electricity Price Review shows that 175,000 households spend more than 10% of their income on domestic energy (excluding housing costs) and that children are over represented in households experiencing energy hardship.<sup>16</sup>

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<sup>12</sup> Horticulture NZ (2017) New Zealand domestic vegetable production. <http://www.hortnz.co.nz/assets/Media-Release-Photos/HortNZ-Report-Final-A4-Single-Pages.pdf>

<sup>13</sup> Saville-Smith, K. & Saville, J., (2012) *Getting Accessible Housing: Practical Approaches to Encourage Industry Take-up and Meeting Need*, Centre for Research, Evaluation and Social Assessment for the Office for Disability Issues and the Ministry of Business, Innovation and Employment

<sup>14</sup> Saville-Smith, K. & Saville, J., (2012) *Getting Accessible Housing: Practical Approaches to Encourage Industry Take-up and Meeting Need*, Centre for Research, Evaluation and Social Assessment for the Office for Disability Issues and the Ministry of Business, Innovation and Employment

<sup>15</sup> Ministry of Business, Innovation and Employment (2018) *Electricity Price Review August 2018* <https://www.mbie.govt.nz/info-services/sectors-industries/energy/electricity-price-review/consultation/first-report.pdf>

<sup>16</sup> Ibid



36. NMH would like to see more incentives and education given to property owners to improve the energy efficiency of houses such as for solar power, double glazing, insulation and the use of heat pumps as an alternative to fireplaces.

***Technology and behaviour change: Do you think our proposed emissions budgets and path to 2035 are both ambitious and achievable considering the potential for future behaviour and technology changes in the next 15 years?***

37. **Strongly disagree:** The Commission's advice should focus on actions that we can achieve as soon as possible rather than being reliant on future technology changes. NMH notes that the section focusing on reducing biogenic methane emissions assumes that "methane inhibitors, methane vaccines and low emissions breeding are developed and widely adopted". NMH concedes that these assumptions are ambitious however there is no guarantee that they are achievable therefore there is a risk that we cannot meet our obligations putting a greater burden on future generations.

**38. *Heat, industry and power***

NMH recognises that Advice explicitly recommends that public sector building takes a lead on zero carbon. As work on an indicative business case for rebuild of Nelson Hospital actively underway, consideration could be given to Nelson Hospital being showcased as a low carbon building for the Nelson/Tasman region. This would need to occur with the support of the Climate Change Commission, the Ministry of Business, Innovation and the Environment and the Ministry of Health. Additional funding could be given for all new DHB builds including the development of Nelson Hospital in order to achieve higher Greenstar ratings including passive solar design and double glazing within the design to reduce the need for heating. In addition, there should be additional funding for green space in health settings. These have been shown to be beneficial for the health for both patients and their families as well as staff.

39. Hospital site development should include well positioned cycling infrastructure and bus stops so there is easy access for those wishing to use active modes.

40. When the effects of climate change are more pronounced in terms of extreme heat waves, then the provision of shade and water on hospital sites will be important. Carbon storage needs to be high priority to create resilience and strategic tree planting can reduce ambient air temperatures on site.

## **Waste**

41. NMH supports reducing waste at the source and by diverting waste to composting and recycling schemes over landfills when it is sensible. Waste should be reduced at the source (p.124), and can be incentivised by conducting life cycle assessments of the 'cradle-to-grave' environmental cost of a product or service and passing on these costs to the producer and/or consumer.
42. Composting is an environmentally friendly solution to waste but is mentioned only twice in the draft advice. Compost can also be used in energy production and horticulture. Government-led industrial composting programmes and proliferation of green bins would create an incentive structure that facilitates the choice to compost organic waste.
43. Clear advice on recycling as an option for waste management is required, especially since COVID-19 has now disrupted Aotearoa's normal recycling export markets.

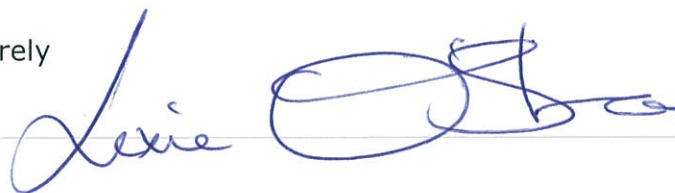
## **Collaboration**

44. NMH recommends that a public health expert is included on the Commission to give oversight regarding public health risks, the level of health benefits of any recommendation, and to assess the impacts for vulnerable populations.
45. NMH supports integrated work programmes across government agencies to support climate work.
46. NMH supports inclusive and effective consultation. It is important that consultation processes focus on targeting youth. Traditionally submitters on government consultations tend to be older. Therefore consultation pathways need to include social media platforms as a way of targeting younger demographic groups

## **Conclusion**

47. NMH thanks the Climate Change Commission for the opportunity to comment on the first package of advice on climate change actions.

Yours sincerely



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