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**The Royal Australasian College of
Physicians' submission to the
Environment Select Committee**

Climate Change Response (Zero Carbon)
Amendment Bill
July 2019

Introduction

The Royal Australasian College of Physicians (RACP) welcomes the opportunity to submit feedback to the Environment Select Committee on the Climate Change Response (Zero Carbon) Amendment Bill (the Bill).

The RACP works across more than 40 medical specialties to educate, innovate and advocate for excellence in health and medical care. Working with our senior members, the RACP trains the next generation of specialists, while playing a lead role in developing world best practice models of care. We also draw on the skills of our members, to develop policies that promote a healthier society. By working together, our members advance the interest of our profession, our patients and the broader community.

Anthropogenic climate change is a global public health emergency. It is, at the same time, a major threat and a major opportunity for planetary health and health equity. The health impacts of climate change are mediated by environmental exposures such as ambient heat, air pollution, storms, floods, reduced water quality, reduced food production, increased food spoilage, and change in disease vectors. These exposures underlie health effects including heat stress illnesses, cardiovascular disease, infectious gastrointestinal disease, physical trauma, malnutrition, psychological stress, vector-borne disease, and other epidemic illness^{1 2 3 4}.

The RACP welcomes the continued activity by the government to respond to the challenges and opportunities of anthropomorphic climate change.

Key points

The RACP:

- supports the intention of the Bill and believes it signals a positive direction for Aotearoa New Zealand
- supports the target of global average increases in temperature no more than 1.5 degrees Celsius as part of New Zealand's commitments under the 2015 Paris Climate Agreement
- calls for health to be at the heart of the Bill
- recommends the Bill includes stronger emissions targets
- advocates for Te Tiriti o Waitangi to be embedded, to enable greater equity for Māori
- recommends the Select Committee amend the Bill to strengthen accountability and enforcement capabilities

¹ The Royal Australasian College of Physicians. Climate change and health position statement. Sydney: The Royal Australasian College of Physicians; 2016. Available from <https://www.racp.edu.au/advocacy/policy-and-advocacy-priorities/climate-change-and-health>. Accessed 10 July 2019.

² Watts N, Adger WN, Agnolucci P, Blackstock J, Byass P, Cai W et al. Health and climate change: policy responses to protect public health. [Internet] Lancet 2015;386(10006):1861-914. Available from [https://linkinghub.elsevier.com/retrieve/pii/S0140-6736\(15\)60854-6](https://linkinghub.elsevier.com/retrieve/pii/S0140-6736(15)60854-6). Accessed 10 July 2019.

³ Costello A, Abbas M, Allen A et al. Managing the health effects of climate change: Lancet and University College London Institute for Global Health Commission. [Internet] Lancet 2009;373(9676):1693–1733. Available from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)60935-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60935-1/fulltext). Accessed 10 July 2019.

⁴ Smith, KR, Woodward A, Campbell-Lendrum D, Chadee DD, Honda Y, Liu Q et al. 2014: Human health: impacts, adaptation, and co-benefits. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Field CB, Barros VR, Dokken DJ, Mach KJ, Mastrandrea MD, Bilir TE, Chatterjee M et al. (eds.]. Cambridge and New York: Cambridge University Press; 2014. pp. 709-754.

Response to the Bill

Keep global average temperature increases to 1.5 degrees Celsius

The RACP supports the Bill's target of no more than 1.5 degrees Celsius in average temperature increases globally. We recognise that even at 1.5 degrees, our planet and our people will still face significant impact from warmer temperatures – particularly where this leads to greater likelihood of weather events such as floods and drought.

Place health and health equity at the heart of the Climate Change Response Act

Health impacts are commonly-relegated direct and indirect effects of climate change: evidence in the literature base and in wider societal discourse tends to centralise the economic and environmental impacts. While these outcomes will be key considerations in any emissions reduction and adaptation scheme, understanding how the health of our communities, individuals and whānau will be affected by climate change is critical.

Using climate change models with conservative assumptions, the World Health Organization estimates that, between 2030 and 2050, an extra 250,000 deaths per year globally from malnutrition, malaria, diarrhoea, and heat stress will be attributable to climate change⁵. Repercussions of climate change include ambient heat, air pollution, storms, floods, reduced water quality, reduced food production, increased food spoilage, and change in disease vectors. Exposure to these can lead to heat stress illness, cardiovascular disease, infectious gastrointestinal disease, physical trauma, malnutrition, psychological stress, vector-borne disease, and other epidemic illness.

Evidence shows that the most vulnerable communities in our society will experience an undue and inequitable burden from climate change: Māori, Pasifika peoples and people living on lower incomes⁶. Climate change will exacerbate the social gradient found in housing, income, access to nutrition and other social determinants of health⁸.

The RACP recommends the Select Committee amends the Bill by explicitly including health, wellbeing and health equity to strengthen its purpose and mandate to protect and promote health in the face of the climate change emergency our society is confronted with. Further, health, wellbeing and health equity should be embedded in the functions, duties and powers of the Commission and the Climate Change Minister (subclauses 5H(1)(d)(i) 5L(d), 5ZD(3), 5ZM(1)(a), and 5ZQ(4)) to ensure these core principles inform decision-making, reporting and monitoring.

The incorporation of health, wellbeing and health equity recognises that some people in our communities – particularly Māori as tangata whenua, as well as Aotearoa New Zealand's neighbours in the Pacific – will experience greater adverse impacts. The Bill should prioritise strategies which

⁵ World Health Organization. Climate change and health fact sheet. [Internet]. Updated 1 February 2018. Available from <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>. Accessed 11 July 2019.

⁶ Jones R, Bennett H, Keating G, Blaiklock A. Climate change and the right to health for Māori in Aotearoa/New Zealand. Health Hum Rights [Internet] 2014;16(1):54–68. Available from <https://www.hhrjournal.org/archives/volume-16-issue-1/>. Accessed 11 July 2019.

⁷ Bennett H, Jones R, Keating G, Woodward A, Hales S, Metcalfe S. Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate action. N Z Med J [Internet] 2014;127(1406):16–31. Available from <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2014/vol-127-no-1406/6366>. Accessed 11 July 2019.

⁸ World Health Organization. Closing the Gap in a Generation: Final report of the Commission on the Social Determinants of Health. [Internet] Geneva: World Health Organization; 2008. Available from https://www.who.int/social_determinants/publications/9789241563703/en/. Accessed 10 July 2019.

seek to partner with tangata whenua to protect the access to and longevity of wāhi tapu and traditional fishing and shellfish gathering sites.

In recognising that there will be benefits, costs and risks to both emissions reductions, adaptation and mitigation strategies, the RACP recommends the Environment Select Committee amends the Bill to clarify the definitions of “impacts” and “distributional effects” in Section 4 (Interpretation) with respect to health and health equity.

The health benefits of mitigating climate change can create positive impacts at all levels: from individuals and whānau to communities and wider society at the population level⁹. For example, reductions in trips by private vehicle and increases in the use of energy-efficient public transport options, as well as active transport like walking and cycling will reduce people’s risk of developing noncommunicable diseases associated with sedentary lifestyles – cardiovascular disease, stroke, diabetes and some cancers¹⁰.

The Bill’s explanatory note states the imperative for the Commission’s planning cycles to align with those of local government and transport investment: the RACP believes alignment across key government agencies and industries will be critical to enable collaborative decision-making which takes account of a diverse range of functions and systems, including infrastructure, urban design, transport, housing, and resource management.

Establishing the Climate Change Commission

The RACP welcomes the establishment of the Climate Change Commission as an independent statutory body to provide expert advice and monitoring of New Zealand’s climate change adaptation and mitigation progress to government.

We strongly recommend the Commission has a dedicated position for health expertise, and the Commission establishes a health directorate.

The health impacts of unchecked climate change are broad, and include increased respiratory disease from pollution, non-communicable diseases, heat stroke, infectious diseases, and mental health conditions as people cope with the stress of climate-related relocations¹.

We urge the Commission to mandate health expertise as a desirable knowledge base in its membership, and seeks specialist advice in epidemiology, noncommunicable diseases, respiratory conditions, mental health, public health, occupational and environmental medicine to inform its reports and recommendations.

Stronger emissions targets

In the RACP’s submission to the Ministry for the Environment’s discussion document on the Zero Carbon Bill in 2018, we advocated for a bold target of net zero emissions by 2040 across our three

⁹ The Royal Australasian College of Physicians. The health benefits of mitigating climate change position statement. [Internet] Sydney: The Royal Australasian College of Physicians; 2016. Available from https://www.racp.edu.au/docs/default-source/advocacy-library/health-benefits-of-mitigating-climate-change-position-statement.pdf?sfvrsn=3d34361a_5. Accessed 10 July 2019.

¹⁰ Ewing R, Meakins G, Hamidi S, Nelson AC. Relationship between urban sprawl and physical activity, obesity, and morbidity – update and refinement. Health Place [Internet] 2014;26:118–126. Available from <https://www.sciencedirect.com/science/article/pii/S135382921300172X?via%3Dihub>. Accessed 11 July 2019.

main greenhouse gases (GHG) carbon dioxide, nitrous oxide and methane. All three continue to damage our climate and/or oceans and this impact will last for hundreds of years^{11 12}.

The International Panel on Climate Change's (IPCC) special report on global warming of 1.5 degrees Celsius offers a series of evidence-informed statements which, together with the Crown's obligations, responsibilities and commitments under te Tiriti o Waitangi should inform the development of and rationale for emissions targets in Aotearoa New Zealand¹³. Reductions in emissions **and** mitigation **and** adaption strategies must be utilised, as the IPCC Report states

- Warming from anthropogenic emissions from the pre-industrial period to the present will persist for centuries to millennia and will continue to cause further long-term changes in the climate system, such as sea level rise, with associated impacts [high confidence rating of this statement], but these emissions alone are unlikely to cause global warming of 1.5°C [medium confidence].
- Reaching and sustaining net zero global anthropogenic carbon dioxide emissions and declining net non-carbon dioxide radiative forcing would halt anthropogenic global warming on multi-decadal timescales [high confidence].
- Climate-related risks for natural and human systems are higher for global warming of 1.5 degrees Celsius than at present, but lower than at 2 degrees Celsius [high confidence]. These risks depend on the magnitude and rate of warming, geographic location, levels of development and vulnerability, and on the choices and implementation of adaptation and mitigation options [high confidence].

Recent research into the co-dependencies of food systems and climate change have posited that our world is in a syndemic – that is, a synergy of pandemics co-occurring in time and place, and interacting with each other to produce complex sequelae, while sharing and reinforcing common underlying drivers. These pandemics are obesity; undernutrition and the health effects of climate change, which compound the global challenges of nutrition and ineffective food systems¹⁴.

Aotearoa New Zealand's greatest emissions are contributed by primary industries – predominantly agriculture. The Bill proposes reductions in biogenic methane from 2030; that is, are 10 per cent less than 2017 levels (2030-2049) and at least 24 to 47 per cent less than 2017 levels by 2050.

The RACP strongly recommends emissions targets for biogenic methane are set in line with IPCC scenarios and are not reliant on yet-to-be-proven technologies:

- 24-48% by 2030 (relative to 2010), and
- 33-69% by 2050 (relative to 2010)

Ambitious targets for reducing biogenic methane will have real, positive benefits for health and health equity in Aotearoa New Zealand as well as our food system. While the RACP acknowledges the

¹¹ Zickfield K, Solomon S, Guilford DM. Centuries of thermal sea-level rise due to anthropogenic emissions of short-lived greenhouses gases. *Proc Natl Acad Sci USA*. [Internet] 2017;114(4):657-62. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5278445/>. Accessed 11 July 2019.

¹² Royal Australasian College of Physicians. Submission to the Ministry for the Environment on the Zero Carbon Bill discussion document. Available from https://www.racp.edu.au/docs/default-source/advocacy-library/racp-submission-to-the-ministry-for-the-environments-zero-carbon-bill-discussion-document.pdf?sfvrsn=d2820e1a_6. Accessed 12 July 2019.

¹³ International Panel on Climate Change. Special Report 15: Global warming at 1.5 degrees Celsius. [Internet] October 2018. Available from <https://www.ipcc.ch/sr15/>. Accessed 12 July 2019.

¹⁴ Swinburn BA, Kraak VI, Allender S, Atkins VJ, Baker PI, Bogard J et al. The global syndemic on obesity, undernutrition and climate change: the Lancet commission report. [Internet] *Lancet* 2019; 393(10173):791-846. Available from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32822-8/fulltext?utm_campaign=tlobesity19&utm_source=HubPage](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32822-8/fulltext?utm_campaign=tlobesity19&utm_source=HubPage). Accessed 12 July 2019.

nutrition gains from consuming animal products, particularly for young children, consuming less animal protein and dairy (especially red meat and processed meat) will result in lower population risks for cardiovascular disease, type-2 diabetes and some cancers¹⁴. Adapting to healthy, sustainable food systems which allow all people to access locally-produced, nutritious foods will increase equity of health outcomes and reduce emissions.

Te Tiriti o Waitangi and equity for Māori

The RACP finds that while the Bill makes mention of adverse impacts te ao Māori may experience due to climate change, there is little substantive content in the Bill around how partnership and collaboration with tangata whenua as a basic principle could articulate the benefits of climate change mitigation and adaptation for Māori.

While we welcome references to te Tiriti, tikanga Māori and mātauranga Māori, the RACP recommends the Select Committee amend section 5H(1)(d)(ii) to incorporate explicit reference to hauora Māori (Māori health) as an area of desired expertise, skills and experience.

The Bill should list the principles of te Tiriti (expanded to cover all sections from the preamble to the fourth article) in the Bill: Whanaungatunga; Kāwangatanga; Tino Rangatiratanga; Ōritetanga; Wairuatanga¹⁵. These principles should be articulated in the explanatory note and embedded in the operational aspects of the Commission, including assessment, reporting and monitoring in mitigation and adaptation functions.

The Commission must reflect equal partnership as enshrined in Te Tiriti and include permanent Māori delegates among the Commission's membership. Further, the RACP strongly recommends the Select Committee amend section 5L to add 5L(g) responsiveness to Māori, mātauranga Māori and te Tiriti o Waitangi as a matter the Commission must consider.

Strengthen accountability and enforcement

Climate change is no longer an amorphous threat in a distant future – our planet is experiencing warmer average temperatures, increased rainfall, extreme heatwaves and drought patterns now. Local and national governments around the world are declaring a climate emergency in their jurisdictions: in New Zealand, Wellington City Council and Hutt City Council have declared climate crises in the past month¹⁶.

We strongly recommend that the accountability and enforcement mechanisms in the Bill are strengthened to hold government and high-emitting industries to account. The RACP recommends the Select Committee makes the following adjustments to the Bill

1. Establish duties relevant to more organisations, specifically those companies in the private sector that contribute significantly to emissions under Section 5ZV;
2. Set out more explicitly the roles and responsibilities of relevant Ministers and government agencies, in addition to those of the Climate Change Commission;

¹⁵ Berghan G, Came H, Coupe N, Doole C, Fay J et al. Te Tiriti o Waitangi-based practice in health promotion. Auckland: STIR: Stop Institutional Racism; 2017. Available from <https://trc.org.nz/treaty-waitangi-based-practice-health-promotion>. Accessed 12 July 2019.

¹⁶ Woolf AL and Demarais F. Wellington City declares climate emergency, but councillors remain divided. Stuff [Internet]. Available from <https://www.stuff.co.nz/environment/113633374/wellington-city-council-declares-climate-emergency-but-councillors-remain-divided>. Accessed 12 July 2019.

3. Require government ministers and public leaders to consider emissions budgets in the execution of their duties – for example, health sectors are significant emitters globally¹⁷ – where can the health system improve its sustainability and reduce emissions in Aotearoa New Zealand?
4. Allow for decision-making by government ministers and public leaders, as well as emissions reduction outcomes, to be subject to judicial review.

Conclusion

The RACP thanks the Environment Select Committee for the opportunity to provide feedback on this consultation. To discuss this submission further, please contact the NZ Policy and Advocacy Unit at policy@racp.org.nz.

Nāku noa, nā

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¹⁷ The Royal Australasian College of Physicians. Environmentally sustainable healthcare position statement. [Internet] Sydney: The Royal Australasian College of Physicians; 2016.