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SUBMISSION ON
Ministry for the Environment Discussion Document on New Zealand's Climate Change Targets

To: Ministry for the Environment

Details of Submitter: The Southern District Health Board

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Our Reference: 15May07

Date: 27/05/2015

Background

The Southern District Health Board (Southern DHB) presents this submission through its public health service, Public Health South. This Service is the principal source of expert advice within Southern DHB regarding matters concerning Public Health. Southern DHB has responsibility under the New Zealand Public Health and Disability Act 2000 to improve, promote and protect the health of people and communities. Additionally there is a responsibility to promote the reduction of adverse social and environmental effects on the health of people and communities. With 4,250 staff, we are located in the lower South Island (South of the Waitaki River) and deliver health services to a population of 306,500.

Public health services are offered to populations rather than individuals and are considered a "public good". They fall into two broad categories – health protection and health promotion. They aim to create or advocate for healthy social, physical and cultural environments.

This submission by Public Health South addresses the questions asked by the Ministry for the Environment in the discussion document; "New Zealand's Climate Change Target". Public Health South would like to acknowledge the information provided by Auckland Regional Public Health Service in preparing this submission.

Climate Change

Climate health and human health are intricately linked. Having a healthy climate provides quality air, adequate food production and a habitable environment to support humanity. Climate change is expected to have significant human health impacts already described in many publications including the following: IPCC's 5th Assessment Report series (Intergovernmental Panel on Climate Change, 2014), New Zealand College of Public Health Medicine (New Zealand College of Public Health Medicine, 2013), Ora Taiao (Ora Taiao, 2015), and the Lancet series (Lancet, 2009).

Impacts are commonly divided between direct and indirect:

- Direct impacts include mortality from extreme weather events including heat, cold, storms and flooding.
- Indirect impacts include the impact of rising sea levels leading to reduced land mass (leading to migration from low lying communities including Pacific Islands), more transmission of vector borne disease, and reduced food security and crop yields.

The Southern District Health Board also recognises that it has a responsibility to exhibit a sense of environmental responsibility under Section 22 of the Health and Disability Act and acknowledges that this needs to be addressed in the future. Health services are high users of carbon-based energy and need to make changes to internal processes as part of the transition to a low carbon economy.

Objectives for the contribution

1a. We have set the following three objectives for our contribution:

- **it is seen as a fair and ambitious contribution – both by international and domestic audiences**
- **costs and impacts on society are managed appropriately**
- **it must guide New Zealand over the long term in the global transition to a low emissions world.**

Do you agree with these objectives for our contribution?

Yes

No

1b. What is most important to you?

Fair and Ambitious: The discussion document states that New Zealand's current contribution to Global Greenhouse Gas (GHG) emissions is around 0.15%, however it is one of the highest emitters per capita in the world. Any fair international contribution from New Zealand will have to be substantial.

Costs and Impacts:

- The costs and impacts of climate change mitigation need to also factor in the costs of a failure to meet emission reduction targets or a failure to set adequate targets.
- It is both important to distribute the costs of emission reductions so that those who have benefitted most from carbon emissions are most responsible for the reductions, and important to consider that a failure to reduce emissions will most likely impact on the most vulnerable members of society.
- The costs of adaptation to the consequences of climate change are high, and likely to have significant impacts on Otago and Southland. The cost of mitigation should also consider the benefits to health and savings that can be made from having a healthier population as a result of strategies for reducing emissions.

Guidance to a low emission New Zealand: Setting appropriate targets so that New Zealand can join in ensuring the “global carbon budget” is met sends a strong message on its commitment to reducing emissions. Health services will require clear targets and guidance from the government when planning their own emission reduction strategies.

What would be a fair contribution for New Zealand?

2. What do you think the nature of New Zealand’s emissions and economy means for the level of target that we set?

- New Zealand has a unique emission profile for a high income country because it already relies on plenty of renewable energy and has a large agricultural sector.
- Nationally it can reduce its emissions by reducing methane from livestock, increasing energy efficiency especially from housing, moving towards more use of active transport and encouraging diets with more plant based material. Reducing deforestation and the use of fossil fuels still needs to be addressed.
- The New Zealand Annual Health survey for 13/14 reports 30% of adults as being obese, and 10% of children (Ministry of Health, 2014). Only two-thirds of adults eat adequate vegetables and many long term conditions experienced by the population (including diabetes) can be attributed to poor diet and lack of exercise. Strategies that can be used to reduce emissions also encourage better diet and more physical activity.

How will our contribution affect New Zealanders?

3. What level of cost is appropriate for New Zealand to reduce its greenhouse gas emissions? For example, what do you think would be a reasonable impact on annual household consumption?

- The cost of reducing carbon emissions should also be balanced against the cost of not reaching an adequate emissions target globally.
- If the global emission budget is exceeded, there will be significant social and economic impacts on all New Zealand including Southland and Otago.
- NIWA reports parts of Invercargill and Dunedin as at risk of coastal inundation (NIWA Taihoro Nukurangi, 2011). Rising sea levels as a result of climate change could lead to large local populations becoming displaced.
- Rising sea levels will lead to further displacement of Pacific Island Communities, countries with close social and economic ties to New Zealand, including Otago and Southland.
- More than half the population of Otago and Southland lives rurally and agriculture is a large part of regional industry (Statistics New Zealand, 2005). Rural agriculture is a significant contributor of carbon emissions, but it is also exposed to the impacts of climate change and would be affected by reduced yields and food production if emission targets are inadequate or are not met.
- Winter tourism is also a part of the local industry and warmer temperatures may mean that there is no longer the required snowfall to support this industry.
- The cost of inaction and a failure to meet adequate climate change targets may be detrimental to the health and wellbeing of people in Otago and Southland.
- Any cost analysis should also consider the health benefits to individuals and households. Benefits of reducing carbon emissions include less air pollution from burning fossil fuels, more physical activity from active transport, and higher fruit and vegetable consumption. These are all factors known to reduce chronic disease such as asthma, diabetes, cardiovascular disease and arthritis.

4. Of the opportunities for New Zealand to reduce its emissions (as outlined on page 15 of the discussion document), which do you think are the most likely to occur, or be most important for New Zealand?

- Considerable gains in the health sector are expected from mitigation for the reasons outlined in Question 3. Chronic conditions lead to a significant reduction in labour participation (diabetes 42% reduction and stroke 59% reduction) (Holt, 2010). Strategies that reduce emissions will lead to improved diet, air quality and physical activity. These factors are known to reduce the risk of many chronic diseases including diabetes and stroke reducing the number of people unable to participate in the workforce for reasons of chronic disease.
- Internationally, health services like the NHS England's Sustainable Development Unit have taken initiatives to reduce carbon emissions while maintaining quality (Itineri, 2015).
- Addressing public health issues through emission reductions demonstrates the benefits of considering the impacts on health in all policies. Health gains may be found in a range of policy options.

Summary

5. How should New Zealand take into account the future uncertainties of technologies and costs when setting its target?

There are actions that can be taken already that will improve public health and reduce GHG emissions. These actions will likely lead to health cost savings from reductions in the prevalence of respiratory disease and lifestyle diseases. A healthier population requires less health interventions and can participate more in the workforce.

Other comments

6. Is there any further information you wish the Government to consider? Please explain.

Emissions Trading is important for reducing emissions. It must result in reductions of net national emissions and assist in New Zealand reaching its emission reduction target. Public Health South agrees that the current structure does not enable sufficient incentives to reduce emissions.

The discussion document appears to prioritise economy over climate change, steering the dialogue towards one of the costs of mitigation, rather than the benefits of addressing climate change and the consequences of not setting or reaching appropriate targets.

Significant public health opportunities can be found in emission reductions. New Zealand is a country that has a growing issue with chronic disease associated with poor diet, inactivity and poor air quality. Chronic disease not only affects quality of life and burdens the health system, it also affects workforce participation and participation of New Zealanders in the wider society. Reducing global warming is not the only benefit of reducing emissions. It provides an opportunity to improve the quality of life for many New Zealanders overall.

Thank you for the opportunity to provide feedback on the discussion document for New Zealand's Climate Change Target.

Yours sincerely,



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Public Health Physician

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