



4 June 2015

Climate Change Contribution Consultation
Ministry for the Environment
PO Box 10362
Wellington 6143

Re: Consultation on setting New Zealand's post-2020 climate change target

Thank you for the opportunity to provide a written submission on this consultation document.

We are happy to provide further advice or clarification on any of the points raised in our written submission. The contact point for this submission is:

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Kind regards

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A. Overview

Regional Public Health is a regional service, organisationally part of Hutt Valley District Health Board but serving the greater Wellington region. Our business is public health action - working to improve the health and wellbeing of our population and to reduce health disparities. We aim to work with others to promote and protect good health, prevent disease, and improve quality of life across the population. We are funded mainly by the Ministry of Health but also have contracts with District Health Boards and other agencies to deliver specific services.

We have a particular focus on children, Māori and Pacific populations. Our staff include a range of occupations comprising: medical officers of health/public health physicians, public health advisors, public health analysts, health protection officers, vision and hearing technicians and public health nurses.

We have worked in coordination with Auckland Regional Public Health Service and Southern District Health Board in order to ensure a shared consensus on the advice provided to the Ministry for the Environment on New Zealand's Intended Nationally Determined Contribution (INDC).

RPH works to ensure equitable, sustainable and healthy futures for our communities. We believe that the process of determining New Zealand's INDC forms an integral step in ensuring such an outcome is possible.

Our primary reason for submitting is climate change is a population health issue. It affects environmental systems that people rely upon and impacts on determinants of health and wellbeing.

Climate change as a public health issue

Evidence is clear on the connections between climate and health¹. RPH notes there are uncertainties on the extent of the impacts on public health from climate change. Some of these health impacts will be related to the direct effects of climate change. However, climate change could also bring about indirect effects on the health of New Zealanders. Secondary effects such as these will be more difficult to measure and plan for.

In brief, the health impacts of expected climate change include:

- Direct impacts of climate and weather on health and community wellbeing, including impacts from extremes of heat and cold and extreme weather events such as storms and flooding.

¹ World Health Organization and World Meteorological Organization (2012) Atlas of Health and Climate Change, WHO Press, Geneva

- Impacts from ecosystem changes, including increased risk of vector-borne diseases, food- and water-borne disease.
- Changes in domestic food production patterns (crop yield fluctuation) and food security (local and imported foods) Intergovernmental Panel on Climate Change projections describe a net decreases in productive land because of climate change.
- Pressures on water resources are likely to be exacerbated by climate change. In many areas climate change is likely to increase water demand while shrinking water supplies.
- Greater effect on deprived and vulnerable communities from climate change effects.
- Flow on social and economic issues from environmental stress (including climate refugees and increases in conflict).

B. General comments on objectives

RPH agrees broadly with the three key objectives set out to determine New Zealand's contribution to emissions reductions. The following are key points that we wish to highlight within the objective framework set to determine targets.

It is seen as a fair and ambitious contribution internationally and domestically

- RPH notes the comments in the consultation document in relation to New Zealand's 'fair share' that emphasise our contribution to only 0.15 per cent of global emissions. We suggest that the Ministry recognise the scope for a more ambitious target. The discussion document states that New Zealand's current contribution to global greenhouse gas (GHG) emissions is around 0.6%, however it is one of the highest emitters per capita in the world.
- RPH suggest that the development of a national pathway to a low emissions economy will allow for a incentivised domestic policy environment for climate change planning.
- RPH is concerned that there will be a disproportionate impact on populations which are already considerably disadvantaged. For example there will be different impacts depending on age, ethnicity, health status and socio-economic vulnerability. Māori are at risk of disproportionate impacts compared to non-Māori. Importantly, costs should be distributed in a manner that does not exacerbate existing inequities.

Costs and impacts on society are managed appropriately

It is unclear whether the costs of uncontrolled climate change are considered. Nor is there any indication that the economic and societal benefits of mitigation and adaptation have been considered (for example the benefits of reduced air pollution on respiratory illness and the links between sustainable transport, physical activity and obesity).

- Costs and benefits would yield a more meaningful relationship, when compared to current strategies for climate change adaption and mitigation. Economic assessments need to be based on discounting rates applied on timescales that matches the long term changes in the climate.

- The cost of mitigation and adaptation need to be predominately borne by those who have gained most from cumulative emissions and are therefore best able to pay.

The Treasury² has noted the costs of meeting targets after 2020, which are expected to rise significantly as New Zealand's emissions are forecast to increase and global carbon prices are likely to be higher. Furthermore, Healthcare spending is also projected to grow from 6.8% GDP in 2010 to 10.8% GDP in 2060³. Pressures from climate change spending could compound the cost of healthcare spending by 2060.

It must guide New Zealand over the long term in the global transition to a low emissions world

Planning and service implementation in the health sector would benefit from a clear pathway to emission reduction. It would also be a benefit for building upon the renewable energy infrastructure, incentivise a low emission economy and allow for policy and planning incorporating low emissions measures to support a resilient, healthy and economically stable New Zealand. There are significant co-benefits for addressing public health and climate change together in the long term⁴.

RPH emphasises that there are a number opportunistic of co-benefits, that could be maximised, including:

- increasing energy efficiency especially from housing;
- increasing physical activity by encouraging active transport;
- encouraging better diets with more plant based material; and
- improving water quality by reducing fertiliser use associated with nitrous oxide emissions.

Globally, the principal drivers for climate change are burning of fossil fuels and land use change (primarily deforestation). Reducing these should be the focus both globally and nationally, while continuing to reduce methane emissions from livestock.

C. How the contribution will affect New Zealanders and the opportunities that exist

Costs

RPH does not agree with the methodology used to model costs to households. There are gaps in the modelling that have not accounted for costs to healthcare per household from the effects of climate change. As noted, direct and indirect effects on public health from climate change are well understood in research literature.

² The Treasury (2014) Treasury Report: Climate Change - Important Decisions Between Late- 2014 and Mid-2015. Available at: <http://www.treasury.govt.nz/publications/briefings/2014-climate-change>.

³ The Treasury (2013) Affording Our Future: Statement on New Zealand's Long-term Fiscal Position

⁴ Reisinger, A., Mullan, A.B., Manning, M., Wratt, D.W., Nottage, R.A.C. 2010. Global and local climate change scenarios to support adaptation in New Zealand. In: Climate change adaptation in New Zealand: Future scenarios and some sectoral perspectives. Nottage, R.A.C., Wratt, D.S., Bornman, J.F., Jones, K. (eds). New Zealand Climate Change Centre, Wellington, pp 26-43.

RPH suggests that further economic research be conducted on the impacts of climate change on public health, both at the central government level and at the local government level in order to best ascertain the costs and impacts that could be generated.

Opportunities

RPH reiterates that several mitigation activities that offer significant co-benefits that could be utilised to reach New Zealand's targets. These include:

- Investment in energy efficiency and energy affordability for low income earners living in poor quality housing; and
- Investment in sustainable and active transport options to reduce transport emissions and promote physical activity

A health impact assessment (HIA) was used, by a parliamentary commissioner report, to assess the health effects of energy policy choices. The HIA found small scale sustainable energy supply and energy efficient homes meant better health, as well as lower power bills and reduced emissions of greenhouse gases⁵.

Signalling sustainable development in the Greater Wellington region

RPH supports sustainable development in the greater Wellington region through its involvement with local government, central government agencies, communities and the health sector. For example we have supported Hutt City Council with their plans to implement an environmental sustainability strategy that fosters resilience and planning for their regional territory.

A clear mandate on a low emission economy would drive further initiatives in the climate change resilience area and support domestic policy decisions.

There are expected to be considerable health co-benefits from a substantial reduction in carbon use, especially from the need for improved public transport and active transport, and changes in urban spatial planning favouring re-localisation of services and activities. We expect major health and economic gains through improved productivity and reduced health sector costs resulting from a reduction in obesity and diabetes. We support and advise on creating built environments that support density and create links with active transport hubs.

D. Summary

Dealing with uncertainties and costs

We support the use of scenario planning as a useful tool in dealing with uncertainty. It has been used in the health sector for looking at the implications for health sector sustainability of different policy pathways. A good example is the UK National Health Service Sustainable Development Unity

⁵ Parliamentary Commissioner for the Environment. 2006. *Healthy, wealthy and wise. A health impact assessment of Future currents: Electricity scenarios for New Zealand 2005–2050*. Wellington: Parliamentary Commissioner for the Environment.

scenario tool “Fit for the Future”, which considers four reasonably likely scenarios under differing environmental, economic and social policy options⁶.

RPH recognises that scenarios can be selected from a range of possible futures but should not be seen as strict either/or options, nor as extreme alternative ends of the spectrum. The real world may lie in between those two scenarios and potentially outside of them. They represent one particular set of choices among a range of many as a tool to aid decision making.

Conclusions

To avert serious health consequences, emission reductions need to be substantial and rapid.

The health and socio-economic impacts of climate change are expected to be substantial and severe, and so need to be more prominent than short term costs in decisions on emission targets.

Furthermore there are significant co-benefits for public health from action to reduce carbon emissions. These benefits need to be included in the cost analysis on what is achievable in carbon emission reduction.

⁶ Department for Work and Pensions (2008) Working for a healthier tomorrow. London