

Ministry for the Environment
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New Zealand

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

Submitter: Dr Chris Booker

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Dear Ministry,

The proposals contained within the document "New Zealand's climate change target: our contribution to the new international climate change agreement" represent a wholly inadequate response to the challenge of future climate change and has entirely omitted aspects of climate change which will be particular challenging for New Zealand, as well as failed to consider the costs of inaction; without which the existing economic analyses are incomplete and cannot be used as the basis for decision making. The proposal needs to be entirely revised to take into account the costs of inaction, which would include the impact of climate change on our exclusive economic zone and wider Pacific, the health and social costs of ongoing greenhouse gas emission compared to a transition to a society powered by renewable, clean sources of energy, and the opportunity cost to our country of failing to act in terms of our international reputation and future economic prospects.

THE COSTS OF INACTION

Our geographic location

There are a number of aspects of climate change which will fall heavily on New Zealand. Further ocean acidification is likely to adversely affect the viability of our fishing industry,(1) with downstream economic impacts as well as possible health impacts through a reduced ability of New Zealanders to afford or have access to fish as a component of their diet. Whatever the costs to New Zealand of inaction, the biggest impacts of increasing ocean acidification, rising sea levels, and storm intensity in the Pacific is likely to fall on our smaller Pacific Island neighbours.(2) There is no mention

of this in the current proposal. This is likely to cause an increase in the number of climate refugees entering New Zealand, due to a declining level of self-sufficiency as fishing stocks become depleted and increasing storm damage renders these countries less habitable. The declining standards of living in many Pacific islands will lead to an increasing rate of migration away from vulnerable areas of the Pacific; New Zealand will be an obvious destination for many of these people. Furthermore, in the immediate aftermath of intense storms New Zealand is likely to send assistance and support in the wake of these disasters. None of these factors have been entered into the current cost analyses.

The health effects of ongoing fossil fuel emissions

Even though the transition away of greenhouse gas emissions is being framed, almost exclusively, as an environmental issue there has been sufficient medical and scientific evidence for a number of decades to make a transition away from fossil fuel-based transport and industry on the basis of the immediate health costs of fossil fuel emissions. Traffic-related air pollution increases the risk of stroke,(3) myocardial infarction and cardiovascular diseases (4) and respiratory problems.(5) In addition, there is increasing evidence that it contributes to the development of type 2 diabetes.(6,7) Exposure to traffic-related air pollution is one of the largest contributors to population rates of myocardial infarction.(8) These all represent ongoing costs of inaction. We have sufficient evidence available today to justify abolishing the use of petrol and diesel powered vehicles in densely populated areas (cities and towns) and transition to cleaner forms of transport purely for the substantial health benefits this would offer, and with it, social and economic benefits. Analyses conducted in the United States have shown that, depending on the carbon-limiting policies adopted (cap-and-trade, targeting specific industries, etc.) the monetised health benefits of improved air quality would offset any 'cost' of carbon mitigation by anywhere from 26% to 1050%.(9) Given that the economic benefits of health improvements alone could completely offset any cost of reducing carbon emissions, this desperately needs to be incorporated into the discussion document.

There are likely to be additional, more indirect health effects as a result of inaction, including personal injury and loss of life in storms of increasing frequency and/or intensity, increases in heat-related illnesses, changes in vector-borne diseases (which could also carry considerable risk to our economy for vector-borne livestock or agricultural diseases), and costs to psychological health and general well-being. None of these have been included in the discussion document.(10)

THE BENEFITS OF TRANSITION AND FUTURE OPPORTUNITIES

The current proposal has not only failed to take into account the costs of inaction, but also fails to take into account other benefits to New Zealand if we were to take an aggressive stance towards climate change and our country's role and response to this challenge.

The future is more certain than ever

In many ways, we are in a unique point in human history: the future is always uncertain, and yet we face a future where we can act with an unprecedented level of certainty that one of the defining features of the coming decades will be climate change. This is already happening and will continue to develop. Therefore, knowing that this is taking place and what the likely effects of this will be allows us to act and plan for the longer-term with a degree of certainty unknown to previous generations. It is inevitable that the world will transition further and further away from a fossil fuel-based society. This certainty substantially changes the risk-benefit balance of future decisions, and allows us to proceed with a vigorous, innovative plan to transition New Zealand away from a reliance on fossil fuels, and to do so without fear that we are going down the wrong path. We can be very, very certain that a transition to a New Zealand with zero carbon emissions will need to happen in the future, and that the sooner we begin this process the better. This degree of certainty is not reflected in the discussion document.

We risk being left behind

If New Zealand fails to act, we will be left behind. This will impact our international reputation, in particular, our reputation as a country with good environmental record, and will also have costs as the opportunities to pioneer and develop new technologies are taken up by other countries while we dither at the edges. The economic costs of inaction will accumulate rapidly due to the opportunity cost of not having been at the forefront of change.

The current proposal lacks willpower and ambition

One of the current objectives set forward for our contribution is that 'it is seen as a fair and ambitious contribution – both by international and domestic audiences'. However, perhaps the most disappointing aspect of the existing proposal is the attitude it embodies – we know the challenge of climate change faces us, and yet instead of taking this challenge on board and proving ourselves global leaders, we are proposing to respond with a lack of imagination, courage and willpower. The document as it stands is certainly not ambitious and the way in which 'fairness' is discussed throughout seems resolutely preoccupied with whether New Zealand will be doing 'too much' in

relation to others. Firstly, this completely ignores not only the global reality of this problem, but also the global reality of international trade and our place in it. It has already been pointed out numerous times that, while many Western countries attempt to shame China as a large contributor to global emissions, these same countries have progressively outsourced their own emissions by moving production overseas.⁽¹¹⁾ This has even happened in my own backyard – Fisher and Paykel, arguably one of New Zealand’s most recognised brands, has shut down its New Zealand-based production just outside of Dunedin and moved to factories in China and Mexico. This is just one example of many of the reality that New Zealand has to make changes because we are contributing to this problem.

Even if one were to ignore the point above, the question of whether New Zealand will do ‘too much’ in relation to others is a moot point – if we know this challenge exists, will not go away, and will only get worse, then we need to be asking ourselves to dig deep, do all we can, and aim high; not be preoccupied with what our peers are doing. When Sir Edmund Hilary was asked why he climbed Everest, he replied, ‘because it was there’. He didn’t achieve what he did by worrying about whether it was too much or more than others would do. There is only one path to success and it is not the path of mediocrity. But that is, in very definite terms, the path that the current proposal has set us on. As pointed out in the document, New Zealand already has 80% renewable energy. We only have a 20% shortfall to make up. International analyses show that 100% renewable energy is possible on a global scale with existing technologies; the only barriers are social and political, not scientific, not technological.⁽¹²⁾ We have a very small shortfall to make up and are not even trying. This is profoundly disappointing. New Zealand has always seen itself as an industrious, resilient country with a culture of people making do and getting on with it. This is still a powerful narrative in our society and could be utilised to further the innovation and passion required to front up to the challenge ahead of us.

We need to be aiming for a commitment to at least a 40% reduction from 1990 levels of emissions by 2030. We need to start implementing change, encouraging innovation and supporting a transition to a carbon free New Zealand now. The current proposal is incomplete as it does not take into account the costs of inaction, the health effects of ongoing fossil fuel use, and has not attempted to take into account the effect on our international reputation of an inadequate response (which is likely to translate into economic costs downstream). A complete analysis of the full costs of reducing carbon emissions is likely to show that an aggressive transition is, in fact, the most economically viable solution and offers us the best prospects of a viable, prosperous New Zealand in the future.

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