

SUBMISSION

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

Overview of this submission

Climate change is an urgent and serious problem. The costs of delaying action to address it are enormous. This context to any credible discussion on the nature of New Zealand's post 2020 emissions reduction target is entirely missing from the discussion document, and from the Government's approach to climate change policy thus far. Therefore, before addressing the specific questions posed by the discussion document, I will make brief comment on the context to this issue.

The world's scientists have told us that continued emission of greenhouse gases will cause further warming of Earth's climate and will increase the likelihood of severe, pervasive and irreversible impacts for people and ecosystems¹. These impacts include the extinction of a large fraction of species, food insecurity, increased extreme storm events and flooding, droughts, displacement of people by sea level rise and flooding, water scarcity and many other associated harms to people and the natural world.

The parties to the United Nations Framework Convention on Climate Change have agreed in 2010 that global warming should not rise above 2 degrees centigrade, in order to avoid 'dangerous' climate change. This will require developed countries to reduce their greenhouse gas (GHG) emissions by 80-90% by 2050². Without such emissions reductions, it is estimated that the world will warm by between 3.7 degrees and 4.8 degrees by 2100³. No one really knows what a 4-degree warmer world would look like, but presentations given at a 2009 conference in Oxford 4 Degrees and Beyond⁴ noted that this would be the highest temperatures on Earth for 30 million years, that sea level rise could be 0.9 to 1.8 metres, 40% of the planet's land mass would be in drought and there would be hundreds of millions of refugees. The level of human suffering, economic loss and environmental devastation that will ensue if we do not act is unthinkable.

New Zealand's approach to this issue, as is tragically illustrated by the discussion document⁵, is to treat climate change as if it were a minor issue to be dealt with in a low-key way that involves doing as little and spending as little as possible. The discussion document reflects the Government's failure to grasp that the costs of reducing greenhouse gases pale in comparison to the magnitude of the threat posed by climate change. If Winston Churchill had held the same attitude towards Hitler's advance on Britain, he would never have aimed to defeat the Nazis, but rather would have vaguely hoped to cause a minor inconvenience to a few of them on their way in.

1 IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC. IPCC, Geneva, Switzerland, p 8.

2 Reisinger, A, Nottage R, Lawrence J, 2011. NZCCC Climate Brief: The Challenge of Limiting Warming to Two Degrees. New Zealand Climate Change Centre. P 4.

3 IPCC, 2014, p. 20.

4 <http://www.eci.ox.ac.uk/4degrees/>

5 Ministry for the Environment 2015. New Zealand's climate change target: Our contribution to the new international climate change agreement. Wellington.

New Zealand needs to submit an ambitious target, such as a reduction of greenhouse gas emissions by 40% compared to 1990 levels, and back this up with effective policies to drive the necessary structural changes to our economy which a low carbon future demands.

Responses to questions

Question 1: 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?

1b. What is most important to you?

Yes, I agree completely with the objectives. However, I do not consider that the content of the discussion document in any way reflects these objectives.

New Zealand currently has a target of reducing emissions to 5% less than 1990 levels by 2020. The discussion document notes that we are expected to table a more ambitious target than this at the Paris conference in December. On p7 of the discussion document⁵, examples of ‘more ambitious’ targets are given, being 10% or 20% below 1990 levels by 2030. This leads me to believe that New Zealand will pitch its target at 10% below 1990 levels, or perhaps may stretch to 20%.

In order to assess whether a 10-20% target could be considered ‘ambitious’, it is useful to look at the targets already submitted by several other countries. These include:

- Switzerland: 50% below 1990 levels by 2030
- EU: 40% below 1990 levels by 2030
- Norway: 40% below 1990 levels by 2030
- US: 26-28% below 2005 levels by 2025.

The Minister for Climate Change Issues may well say that these countries are wealthier than us and that they can afford it. However, Mexico has tabled an unconditional target of 25% by 2030. Russia’s target is 25-30% from 1990 levels by 2030. Gabon has offered a 50% reduction in emissions over business-as-usual levels by 2025. New Zealand has the 25th highest GDP per capita out of 193 countries of the world. Russia is 55th, Mexico is 69th, and Gabon is 75th⁶. How can New Zealand’s target be either ‘fair’ or ‘ambitious’ if it does not match those of our peers in the developed world, let alone those much poorer than us?

Fairness demands that, as a country wealthy in financial, natural and human capital, we take our share of the responsibility for reducing global emissions. The discussion document is padded with excuses aimed at justifying a low target. New Zealand may have a small population, and therefore contribute only 0.15% of global emissions, but as always, we punch above our weight. Per capita, we emit 17 tonnes of GHGs per annum, compared to a global average of 8 tonnes. There is no special ‘national circumstances’ that make New Zealanders uniquely justified in emitting so much more GHGs than others, or in not making a serious effort to reduce them.

⁶

National Accounts Main Aggregates Database, December 2013, United Nations Statistics Division. Accessed on 4 Jan 2015.

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

As discussed above, I think that the nature of New Zealand's emissions (high and increasing) and economy (wealthy, well-educated populace) means that we are well-placed to set a genuinely ambitious and globally responsible target.

Much is made in the discussion document, and in our embarrassing and excuse-laden Sixth National Communication⁷ of the 'unique national circumstances' that make it particularly difficult for New Zealand to reduce its emissions. None of these arguments even remotely stand up to scrutiny. Every country has its own 'unique national circumstances', and can no doubt point to factors that make their emissions reductions particularly challenging. The emphasis on making excuses is not about any real barriers to New Zealand reducing its emissions. It is about our lack of will to do so.

As a trade-dependent, agriculturally-based and very open economy, New Zealand needs to be at the forefront of international action on climate change. Our economy, being dominated by agriculture, is vulnerable to the impacts of climate change. The 2007-08 drought had a \$2.8 billion economic impact⁸. In 2013, the Government declared the North Island a drought zone. Finance Minister Bill English said "There's really nothing else that can knock 30% off NZ's growth rate in a year. This underlines for us the importance of our primary production sector⁹. The IPCC has estimated that there will be up to 60 more hot days per annum for the northern areas of the North Island of New Zealand, and that drought in eastern and northern North Island is projected to double or triple by 2040¹⁰. As we cannot address climate change alone, it is in our best interests to contribute to strong international pressure on all nations to make major emissions reductions, as this gives us the best chance of avoiding the most severe impacts.

As a heavily trade-dependent nation, the impacts on the global economy arising from climate change will affect us. According to the 2006 Stern Review on the Economics of Climate Change produced for the British government, without action, the overall costs of climate change will be equivalent to losing at least 5% of global gross domestic product (GDP) each year, now and forever¹¹. The global economic impacts seem to me to be far more likely to reduce our GDP growth than policies aimed to reduce emissions.

There is a further risk to our economy from our current weak targets and flimsy domestic climate change policy. As the world moves towards more stringent measures, our failure to reduce emissions will leave us exposed to an ever increasing carbon debt. Currently, we have no effective policy instrument which will incentivise the reduction of GHG emissions. This means that, year on year, our emissions are increasing. We rely on being able to buy carbon credits overseas to cover the gap between our targets and our actual emissions. Without making the structural changes required to reduce our emissions now, we are locking ourselves into a long-term need to buy carbon credits, which leaves us vulnerable to increases in the carbon price. It has been estimated that, if we adopt a modest emissions reduction target and continue to increase our emissions on a business-as-

7 Ministry for the Environment. 2013. New Zealand's sixth national communication under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Wellington.

8 One News, Sunday March 17 2013. Drought could cost NZ \$2 billion – English. <http://tvnz.co.nz/politics-news/drought-could-cost-nz-2-billion-english-5370923> Accessed 28 May 2015.

9 Ibid

10 M Hollis. Climate Change: IPCC Fifth Assessment Report: New Zealand Findings. New Zealand Climate Change Centre, p 1.

11 Stern, N. (2006). "Stern Review on The Economics of Climate Change (pre-publication edition). Executive Summary". HM Treasury, London

usual trajectory, by CP3 (2021-30) we could be faced with a carbon bill of between \$15 and \$50 billion (depending on the price of carbon)¹².

A further cost associated with New Zealand's failure to reduce emissions is the great missed opportunity to be at the forefront of the technological innovation which a low carbon future will demand. Without putting a real price on carbon (which the ETS most definitely does not do), it is unlikely that New Zealand will develop much in the way of expertise in low-carbon technology to sell to the world, and we'll be stuck instead with our methane belching cows and lowly paid tourism sector.

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

There will be costs on New Zealand households from reduction of GHG emissions, and these do need to be considered. In particular, we need to ensure that vulnerable people on low incomes do not suffer undue hardship as a result of increased fuel and energy costs. However, this is a relatively straightforward policy design matter, and there are numerous ways that those on low incomes can be protected (for example, the application of carbon charges could be progressive, so that the more electricity a household uses the higher the carbon charges per unit are, or low income households could be given a straight subsidy).

The costs on New Zealand of reducing our emissions pale in comparison to the costs on New Zealand and the rest of the world of failing to do so. I have already mentioned some of the economic risks posed by climate change. New Zealand also faces costs associated with increased natural disasters such as floods, erosion, sea level rise and storms, which could be enormous. And will it be possible in ethical, political or practical terms to turn away large numbers of refugees from the South Pacific whose homes may become uninhabitable? What about those costs? Ultimately, it is absurd to use a relatively minor increase in costs as an excuse not to take the actions that are necessary to ensure that our planet remains stable and inhabitable for humans in the decades to come. It is like wringing your hands over the cost of getting vaccinated against a disease that could cause serious illness or death.

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?

Opportunities for New Zealand to reduce its emissions include:

- Improving the low standard of our cold, damp, uninsulated houses. This would obviously have positive spin offs for health.
- 17% of our emissions come from transport. Generally, New Zealand lacks decent public transport. Auckland in particular aspires to be a 21st century international metropolis, but is saddled with transport straight out of 1950s small town America (i.e. the private car). There is no great city in the world without great public transport. We also need fast, convenient and comfortable long distance trains as a viable alternative to driving or flying.
- Policies to promote walking and cycling in urban areas. In the Netherlands, cycling is the most common form of transport in urban areas.

¹²

Bertram, Geoff and Terry, Simon. 2010. *The Carbon Challenge: New Zealand's Emissions Trading Scheme*. Bridget Williams Books, Wellington.

- We have an aged and inefficient vehicle fleet, compared to other OECD countries. With our high levels of renewable energy, promoting uptake of electric vehicles could improve air quality while reducing emissions.
- We have achieved 80% renewable energy without even trying. It is wholly within our reach to get this to 100%.
- Technologies to reduce agricultural emissions, including managing soil as a potential carbon sink. Capping the dairy herd should also be considered, given the serious impacts that dairying has on water. Afforestation of farms, particularly on hill country to counter soil erosion and on riparian areas to act as a buffer for agricultural pollution could be another win-win solution.

It seems to me to be a somewhat stupid question to ask the public which of these opportunities are most likely to occur. Partly this depends on government policy which remains vague at this stage. Partly this depends on which technologies and approaches are most successful in the marketplace, which is notoriously difficult to predict and definitely beyond my expertise. It is not necessary to predict which technologies and approaches will be the most successful, we just need to incentive emissions reductions and implement climate-friendly policies and allow people, planners, businesses and communities to respond.

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

Every area of human endeavour faces uncertainty regarding future technology and costs. This does not generally stop us from pursuing necessary action. We do not know what technologies will be critical to future workplaces but this does not stop us from educating our kids. As I have discussed in this submission, while there may be uncertainty around the costs and the best ways to reduce emissions, it is certain that doing nothing will lead to catastrophe.

Given this, the best way to take into account future uncertainties is to pursue 'no-regrets' policies for emissions reductions. These are measures which, even if they turned out to be not the best way to reduce emissions, had other benefits that made them worth doing. All the opportunities I listed in the section above are 'no-regrets' strategies, which would contribute to better health, quality of life and prosperity, as well as resulting in likely emissions reductions.

Conclusion

Although the discussion document did not actually ask readers what they think New Zealand's post 2020 emissions reduction should be, presumably that is the point of this consultation, and therefore I would like to conclude by saying that I believe New Zealand should submit a target of a 40% reduction compared to 1990 levels by 2030. In the longer-term, we should aim for 80-90% by 2050 lowering to zero emissions thereafter. Even more importantly, we must back up our target with effective policies to drive New Zealand's transition to a low carbon economy. While this may seem ambitious, this is what the world's scientists tell us we must do. The world will move in this direction and swiftly because this is what the reality of climate change demands, and while we may try our best, reality cannot be avoided forever. For all the reasons outlined in this submission, I believe it is not only the right thing to do, but it is in New Zealand's best interests to step up.