

#Setting New Zealand’s post-2020 climate change target

Submission form

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Objectives for the contribution

You have set the following three objectives for New Zealand’s intended contribution:

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

We think these objectives look about right except for one critical omission. We will only be able to address climate change successfully if **all countries** are fully committed to a fair and ambitious contribution. As the IPCC 2014: Climate Change 2014: Synthesis Report succinctly says: “Effective mitigation will not be achieved if individual agents advance their own interests independently”.

The key theme over the past 20 years or so of climate change discussions and negotiations has nevertheless been the near-impossibility of getting countries to do anything other than “advance their own interests independently”.

Against this background, the contribution which a small country like New Zealand can make to reduced greenhouse gas emissions in absolute terms is not the issue. What is much more important is setting an example which will encourage **all** other countries to make fair and ambitious contributions.

We think your first objective would therefore be much better re-cast as follows:

“it is a sufficiently fair and ambitious contribution to encourage effective global action by all other countries, while also being sufficiently fair to domestic interests”.

You also ask which of the objectives are most important to us. We think they are all equally important.

What would be a fair contribution for New Zealand?

You ask for views on what we think the nature of New Zealand’s emissions and economy means for the level of target that we set.

Our views on this are influenced by the following key points:

(1) the well-established consensus in the international scientific community is that a 2 Centigrade degree rise in temperature is the maximum that can be tolerated if we are to avoid dangerous climate change impacts (e.g. see UN (2012), The Cancun Agreements. http://unfccc.int/key_steps/cancun_agreements/items/6132.php)

(2) limiting warming to below 2 degrees over the 21st Century is likely to require CO₂-equivalent concentrations in 2100 to be no higher than about 450 ppm compared to an estimated CO₂-eq concentration in 2011 of 430 ppm (e.g. see IPCC 2014: Climate Change 2014: Synthesis Report)

(3) this will require substantial cuts in man-made greenhouse gas emissions by mid-century, characterized by a 40 to 70% reduction in such emissions by 2050, relative to 2010 levels and longer term reductions to near zero or below by 2100 (ibid)

(4) the more we delay mitigation action, the more drastic the later action (and consequent economic shock) will have to be (ibid)

(5) many countries will be able to argue some special circumstances. So putting too much emphasis on our circumstances limiting our ability to contribute could encourage others to do the same, leading to a poor global result

(6) as your consultation document indicates, the bulk of effort required for any given target is to bring emissions back to 1990 levels. So, on the basis of your estimates, the cost of reducing emissions to 40% below 1990 levels would only be about half as much again as the cost of reducing just to 1990 levels

(7) your consultation document focuses heavily on the costs of climate change mitigation and largely ignores the costs that climate change will inflict if not mitigated (e.g. see the New Climate Economy Report 2014). It also underplays the multiple benefits which can arise from reduced use of fossil fuels including both environmental benefits and the economic benefits which may be derived from driving the transition to a low-carbon future (ibid). These points skew the cost-benefit debate in favour of limited action

In the light of all these points, we see substantial advantage and benefits in matching the European Union’s target of reducing greenhouse gas emissions by 40 per cent below 1990 levels by 2030.

How will our contribution affect New Zealanders?

You ask for views on the level of cost that would be appropriate for New Zealand to reduce its greenhouse gas emissions.

The estimates in the consultation document suggest that reducing greenhouse gas emissions by 40 per cent below 1990 levels by 2030 could cut annual household consumption by about 2%.

These estimates are broadly in line with IPCC figures (e.g. see the New Climate Economy Report 2014).

As that New Climate Economy Report indicates, such costs are small compared to the much larger underlying increase in consumption that would occur by 2030 and nor do they take full account of multiple compensating benefits.

We therefore agree with the New Climate Economy Report's authors that an impact on annual household consumption of this order would be reasonable.

You ask which of the opportunities for New Zealand to reduce its emissions do we think are the most likely to occur, or be most important for New Zealand.

We think that the opportunities are most likely to flow from a combination of existing New Zealand strengths and unexploited potential.

Strengths include the high level of expertise and investment in hydro power, a strong research base in pastoral farming and a large forestry sector.

Unexploited potential includes promising initial results on methane reduction, geothermal reserves, substantial tracts of unplanted land (including Maori land), and a poor public transport infrastructure (with scope, in the latter case, for integrated housing and public transport development in Auckland and Christchurch).

More generally, the optimum result is likely to require a contribution from a wide range of opportunities.

Many of the eleven National Science Challenges are likely, for example, to be able to contribute ideas and opportunities for emissions reduction, as well as contributing to their core aims, whether these are sustainable seas, resilience to nature's challenges, science for technological innovation, healthier lives, our land and water, building better homes, towns and cities, or whatever.

There may therefore be some benefit in establishing a cross-cutting climate change dimension in these National Science Challenges.

You also ask how New Zealand should take into account the future uncertainties of technologies and costs when setting its target.

We agree that there are large uncertainties. But it will be essential to ensure that these do not

lead to national and international commitments being so hedged about with assumptions and caveats that they effectively provide get-out clauses.

In the context of setting New Zealand's target, we would therefore advocate no more than a reasonable degree of flexibility on how the target will be reached (e.g. an overall commitment on CO₂-equivalent concentrations, rather than targets for each individual greenhouse gas).

In our view, the question of how New Zealand should take into account the future uncertainties of technologies and costs is much more pertinent to the development of an action plan for achieving the target.

To deal with the uncertainties, it will be important to develop a plan in a form which, if everything worked, could even exceed the target, so that, if and when technologies fail or turn out to be too costly, there is some contingency available.

Other comments

As our last comment implies, we think that New Zealand's target must be accompanied by the development of a comprehensive and credible plan of action for achieving the target.

We would also like to register our thanks for the opportunity to make these comments. The consultation period has been very short relative to the massively complex issue of climate change mitigation. But we nevertheless very much welcome the effort to stimulate public discussion of this critical issue and would like to offer our very best wishes for a constructive and successful United Nations Climate Change Conference in Paris.