Climate Change Contribution Consultation

Dr Joshua Freeman

[redacted]

Background

NZ's post 2020 emissions target needs to be considered in light of the global carbon budget (Figure 1 of the Discussion Document). For the world to stay within this carbon budget, approximately 80% of all known fossil fuel reserves must remain in the ground [1]. As stated, if we continue on the "business as usual" pathway, the world is set to exceed its total carbon budget by 2035.

This means the world is currently on course for warming of 4 degrees by 2100, with a 10% chance of 6 degrees [1]. At these temperatures, positive feedback loops are likely to be triggered, which means at that point further warming and runaway sea level rise will continue regardless of how we respond [2].

The World Bank has cautioned about this scenario in grave terms by stating there is: "no certainty that adaptation to a 4^{o}C world is possible"[3].

It is clear therefore that NZ and the World has a very short time frame within which to transition to a (close to) zero carbon economy.

Question 1

a) Do you agree with the above objectives for our contribution?

I think the objectives behind the setting of our INDC should be modified as follows:

i. It must set NZ on course for transition to a zero carbon emissions economy by 2050.

This means that annual reductions in emissions are required from hereon. Vague references to transitioning to "low emissions" over the "the long term" are inappropriate given the limited available carbon budget and the likelihood of this being exceeded by 2035.

ii. It must be a fair and ambitious contribution that meets our globally assessed responsibilities

NZ has high per capita emissions from agriculture, has abundant clean energy and is a relatively wealthy country. We are therefore in a better position than most to allow transition to a low carbon economy. NZ's agricultural emissions should be reduced initially through diversification. This will have the co-benefit of making our economy more resilient and less dependent on a single primary industry. Technological solutions to reduce agricultural emissions should be pursued but not counted on to do the job within the available time frame. It should also be noted that if our objective is to fairly meet our global responsibilities, per capita emissions are what matters, not absolute emissions. This means the fact that NZ contributes a small percentage of total global emissions is largely irrelevant.

iii. Costs and benefits need to be distributed fairly within NZ and between countries

Transition to a zero emissions economy must be pursued in conjunction with domestic policies that help build a more equitable society with greater opportunities for currently disadvantaged and vulnerable populations. Internationally and in NZ, the focus should be on alleviating poverty and ensuring greater equality of opportunity rather than simply increasing consumption-based GDP growth. A substantial body of research indicates that societies with less inequality do better on a whole range of important health and social outcomes [4]. More equitable and fair societies result in higher levels of social cohesion and well-being, with even those at the top of the income scale benefiting [4].

By showing leadership in the move to a zero emissions economy, NZ may also benefit by enhancing its international reputation and "getting ahead of the curve".

b) <u>What is most important for you?</u>

The transition to a low carbon economy is entirely compatible with building a more efficient, equitable and resilient economy. Addressing escalating levels of wealth and income inequality is not only compatible with transitioning to a zero carbon economy but necessary. High levels of status-driven consumption is a powerful driver of carbon emissions and arguably does little to enhance societal health and well-being [4]. Transitioning to a zero carbon economy should therefore be viewed as an opportunity rather than a threat.

Question 2

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

Given the way the issues have been framed in the discussion document, this question appears somewhat leading.

Bearing in mind the global carbon budget and NZ's relatively high per capita contribution, a fair contribution from NZ will necessarily be ambitious. Working toward a zero carbon economy by 2050 would require a reduction of at least 40% relative to 1990 levels by 2030. This should apply to gross GHG emissions, including methane emissions from agriculture.

It should also be noted that in light of the limited global carbon budget explained in the discussion document, exploration for new fossil fuels in NZ must cease immediately. The global budget dictates that roughly 80% of known fossil fuel reserves must stay in the ground. Under these circumstances, exploration for new reserves in NZ is clearly inappropriate and signifies a lack of seriousness about meeting our international obligations.

Contrary to the argument put forward in the discussion document, NZ's high capacity for renewable energy generation puts us in a stronger position to transition to a low carbon economy rather than a weaker one. Other countries have far greater challenges in generating reliable power supplies for their populations.

The profitability of NZ's dairy sector should not be used as an excuse for not setting a fair target based on our high per capita emissions. If all countries applied a similarly low bar for excusing themselves from setting ambitious targets, then there would be little hope of the world living within the "carbon budget" described in the discussion document.

Question 3.

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

By framing the discussion purely in terms of *costs* to households, this section of the discussion document presents a distorted picture of the costs and benefits of climate change mitigation.

In view of the way the discussion is framed, the above question is therefore very leading.

The reality is that reducing carbon emissions will have benefits as well as costs. More importantly, the costs of continuing on our current course are enormous and unmentioned in the discussion document. Without hyperbole, continuing on the current course poses an existential threat. Failing to balance the discussion with this information is a crucially important omission.

Moreover a*verage* reductions in household consumption say nothing about how those reductions are distributed across the population. As explained above, if domestic policy settings are appropriate then transitioning to a zero carbon economy can iron out imbalances in the current system that help drive increasing income and wealth inequalities and diminished equality of opportunity for NZ children.

There are also enormous health co-benefits of climate change mitigation that are unaccounted for in the discussion including the benefits of having better insulated homes; shifting people from cars to active transport (bikes and walking); reducing particulate air pollution and reducing excessive red meat and dairy intake [5-10]. These and many other co-benefits should be factored into the decision making process and should have been presented in the discussion document.

Question 4.

Of these opportunities which do you think are most likely to occur, or be most important for NZ?

All of these opportunities are real and represent likely co-benefits of climate change mitigation, but once again, the costs of inaction should also be considered. Transitioning to a zero carbon economy has many "win-wins" but the consequences of failing to act are equally important to consider. If inaction will predictably led to very dire threats then action is necessary even *despite* the many likely co-benefits and opportunities.

The key point is that health, environmental and social well-being do not equate with consumption-based GDP growth (implied by 4th bullet point).

Question 5.

How should NZ take into account the future uncertainties of technologies and costs when setting its target?

What is *least uncertain* is the dire consequences of continuing with "business as usual" emissions and exceeding the global carbon budget.

New technologies may help with the transition but should not be relied upon as there is no guarantee they will eventuate within the time frame required.

Failure to act based on the assumption that future technologies will rescue us from the prospects of severe climate change is an act of faith and is not based on science. On the other hand, given the relatively certain consequences of inaction, it is appropriate to apply the precautionary principle. If future technologies do make the transition easier, then that should be considered a bonus. If they do not eventuate, then we will have still taken the best available course of action.

Setting a weak target – essentially gambling on some kind of new technology eventuating within the required time frame - would be reckless and extreme.

Other comments

Health and wellbeing needs to be at the centre of the government's climate action.

We therefore suggest:

- A parliamentary climate and health summit
- Health sector leadership on mitigation and adaptation to locked in climate impacts on health
- Health (including equity) Impact Assessment (HIA) routinely used to inform climate-relevant policies

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