Submission on ‘Aotearoa New Zealand’s 2035 international climate change target’

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1 Do you have any comments on the Climate Change Commission’s advice?

None of their scenarios are fully compliant with the 1.5 ºC target, with the Paris Agreement, or with the Climate Change Response Act. Their HTHS scenario comes closest, and arguably reduces emissions sufficiently by 2050, but does not cut emissions fast enough in earlier decades. The evidence for this has been developed in detail by Paul Winton at the 1.5 Project, among others.

Following global pathways for developed countries that are consistent with the global 1.5 ºC goal would see New Zealand’s gross emissions falling to around 40 MtCO2e by 2035 (cf. HTHS 50.6 Mt). Together with removals of 24 MtCO2e (HTHS value), this would leave net emissions of 16 MtCO2e or **a reduction of 81% on gross 2005 levels**. This would almost meet the 1.5ºC target of 2.5 tCO2e per capita emissions, albeit five years late and with heavy use of forestry.

Even though this target would require some strong policy and some technical progress (eg on biogenic methane reduction), it is achievable domestically. Indeed, New Zealand’s net emissions could easily have been at half of present levels now if we had followed pathways that were well known and accepted already in 1990.

NDC2 should include international aviation and shipping emissions along the lines of the accounting suggested by the CCC in their preliminary report. Regulation of these emissions is vital to New Zealand’s future as we are heavily reliant on international transport; they are covered by the Paris Agreement’s temperature target and allowing them to increase without limit puts New Zealand in an increasingly exposed and risky position.

2 What factors should the Government prioritise when setting NDC2?

Priority 1: a) Represent New Zealand’s highest possible ambition in light of national circumstances
Priority 2: b) Align with the Global Stocktake recommendations
Priority 3: d) Minimise costs from meeting the target

I would also prioritise global equity and historical responsibility, which do not appear in your list.

I would phrase “minimise costs” and “minimise economic impact” as “maximise net benefits to the economy”.

I reject factor (c), “Align with the temperature goal of the Paris Agreement”, as New Zealand already has the stricter target of 1.5 ºC enshrined in law and endorsed 1.5-compatible NDCs at COP28 and again at COP29 as well as in separate statements by Climate Change Minister Simon Watts.

3 What factors in New Zealand’s economic outlook should be taken into consideration when setting NDC2?

This is a potentially misleading question. ‘Economic’ factors are often used as a post-hoc justification for an action. An example would be when the incoming Key government cited the GFC as a reason for cancelling the proposed fuel efficiency standards. In fact, had those standards gone ahead, New Zealand would have been far better off economically with lower emissions as well.

Any economic assessment should take into account the benefits of rapidly phasing out fossil fuels. These include not just the direct health and economic benefits, but also the increased resilience to international supply chain disruptions and the benefits both global and national to faster climate action. The global disruption if we continue heading to a 4 ºC world (which is the pathway we would be on if everyone acted like New Zealand) is unimaginably dire.

4 What factors do you think are most important for deciding a “fair share” for New Zealand for its NDC2?

The headline –50% figure of NDC1 meets the global 1.5 ºC target at first sight, and perhaps it was chosen for that reason. However, it only meets the global average emissions reductions required and does not truly take into account the requirements of the Paris Agreement (‘highest ambition’, ‘national circumstances’ etc.).

The ‘equity’ section of NDC1 leaves a lot to be desired – most of the space is taken up with excuses for our inaction. While some of these have some merit, a distorted view is presented and no responsibility is assumed for our poor emissions track record. NDC1 does do well on comprehensiveness and transparency, however.

Negative factors including changes to forestry emissions accounting, shifting the baseline year from 1990 to 2005, net/gross accounting, unusually heavy reliance on forestry, unusually heavy reliance on international mitigation, and our slow action in getting this in place all reduce the equity of our climate response. The 1990 baseline was chosen for a good reason and we should accept our responsibility and stick to it. With a fixed baseline, net/gross accounting makes some kind of sense. With a shifting baseline it just muddies the waters and dodges responsibility.

In 1990 our Prime Minister said, ‘Global climate change threatens the existence of the world as we know it.’ This was in our first big public report, ‘Responding to climate change: A discussion of options for New Zealand’. 93 options were presented, all of them well known internationally. They would have worked. It was literally not rocket science – for example, large-scale wind farms were already operating in Denmark and California in 1990, and we were world leaders in geothermal power. Instead we built new thermal power stations.

Another example: two of the options in 1990 were fuel efficiency standards and fuel efficiency labelling. They only made it into policy in 2002; labelling finally happened in 2008, and it was meant to be accompanied by standards, but these were cancelled in 2009 by the incoming Key government. Labelling by itself had no effect. Efficiency standards only arrived in 2021 (31 years after first appearing in a policy document) and were drastically weakened in 2024, again following a change of government. It is a record of 34 years of vacillation.

In 1990, our target was a reduction of 20% by 2000. Instead, gross long-lived gases and net all gases are both up 40%. We have hardly started reducing emissions – many of the actions listed in NDC1 have been cancelled already.

I mention the transport example because the consultation document says “Aotearoa also has high per-capita transport emissions, at 2.7 t CO2-e compared to the developed-country average of 2.0 t CO2-e. This is due to Aotearoa New Zealand's small but widely distributed population, and long narrow geography, resulting in road transport being the central element of the transport system.”

This is quite wrong. The main causes are a failure to address transport emissions (as noted above) and increasing direct government funding of a car-based transport system. It was completely avoidable and we are all worse off because of it.

Agricultural methane is often mentioned as relevant to New Zealand. A recent important study (Shindell, D. et al. (2024). The methane imperative. *Frontiers in Science*, *2*, 1349770) concluded that For a 1.5 ºC future, global methane emissions must fall 35% by 2030 and 53% by 2050. The article supports the split gas approach in which agricultural methane emissions do not need to reach net zero; nevertheless, they should fall 20% by 2030 and 30% by 2050. Thus, the global methane pledge (-30% by 2030) and our 2030 domestic target are arguably not ambitious enough. Our political commitment under the Global Methane Pledge is laudable but our 2022 implementation plan provided under that pledge is now out of date as some of the actions have been discontinued.

5 Should NDC2 be set at a level that is achievable with domestic action only or should it be set at a level that is achievable with a mix of domestic action and international cooperation (offshore mitigation)

My suggestion of an NDC2 of –81% on 2005 levels should be aimed to be achieved domestically but some international cooperation may be required as a backstop. Our large international commitment in NDC1 puts us in a difficult position that we should try to moderate.