Fertiliser Association
Shaping profitable and sustainable farming

SUBMISSION

on

Review of the 2050 emissions reduction target

to

He Pou a Rangi, Climate Change Commission

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About the Fertiliser Association of New Zealand

The Fertiliser Association of New Zealand is an industry association funded by member companies to address issues of common public good. Member companies include Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both are farmer co-operatives with some 35,000 farmer shareholders. Between them, our members supply the majority of fertiliser used in New Zealand. As co-operatives, they are driven by delivering best value to farmer shareholders rather than maximising the value of product sales.

The Association member companies have invested significantly in products, systems and procedures which support responsible nutrient management to enable a viable primary industry within environmental limits.

The Association submits on national policy and regulation, with the view that policy and regulation should be enabling, and that controls are both appropriate and necessary while providing for sustainable primary production.

The Fertiliser Industry is committed to supporting New Zealand's 2050 net zero emissions target and to enabling its farmer shareholders to achieve their ambitions in environmental management including reduction of agricultural greenhouse gas emissions.

Introduction

The Climate Change Commission position is that there is no evidence to support weakening the current 2050 target, and enough evidence to consider strengthening it.

Ināia Tonu Nei provided foundational advice on the direction for New Zealand's emissions reduction. It argued that New Zealand needs to be proactive and courageous in tackling the challenges the country will face in the years ahead and that budgets and policies need to be both ambitious and achievable, as our actions will impact generations to come. Such consideration and balancing is important for securing on-going support for the transition ahead.

The intent and purpose of a target is to set direction; inform policy development; provide a goal to measure progress against; provide a degree of certainty and confidence for business and communities in planning; enabling an orderly transition without dislocating the New Zealand economy. Regular review, as is currently being undertaken, is an important element. However, the legislation deliberately sets a high bar for change. The Act review provisions, provide some certainty on direction but at the same time create some flexibility to respond to material change.

Our submission

Our submission focusses on the Commission's assessment of significant change since the 2019 target commitments were made. We focus on four of the factors outlined in the Climate Change Response Act 2002 that should be considered before a change to the target is recommended:

- Global Action
- Scientific understanding of climate change
- New Zealand's economic or fiscal circumstances
- Technological developments

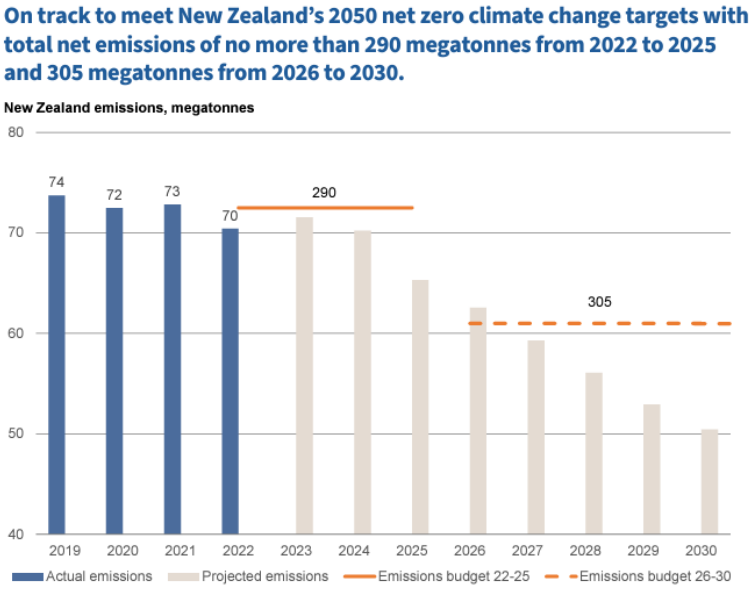
Global Action

The consultation document considers global action in response to commitments to limit warming to 1.5 degrees, and compares the target proposed by NZ, to that of its international peers.

Since 2019, a number of countries have revised their commitments to emissions reduction. The document identifies Australia, Canada, the European Union, Israel, Japan, Norway, and the United States, as countries that have set long-term emissions reduction targets that are more ambitious than New Zealand's 2050 target. With the exception of Norway and Canada, current projections suggest that these countries are not on track to meet their targets. Norway has significant use of renewable energy domestically, and has also indicated that they will rely on international offsetting to meet their target. For Norway, substantive export of oil and gas will presumably continue to generate revenue for the purchase of international offsets. In the case of Canada, the 2023 Emissions Reduction Plan Progress Report suggests that they will not meet their 2030 target and that a range of additional measures will be needed including putting a cap on emissions from gas and oil production.

All countries are struggling with their response to climate change, so it is not appropriate to be critical of international initiatives. However, rather than reviewing other countries' climate targets, it may be

more appropriate to consider the progress they are actually making against such targets. DPMC has advised that New Zealand is currently on track to meet our target[1]:



It is important to recognise New Zealand's role and contribution to global efforts. New Zealand is almost unique among OECD countries in terms of its emissions profile with a high proportion of emissions coming from its economic base of agriculture/food production. New Zealand's single greatest contribution to limiting atmospheric temperature rise will likely come from developing reductions in GHG emissions associated with ruminant food production and demonstrating how these techniques can be adopted globally.

Scientific understanding of climate change

The AR6 synthesis report released in 2023 provided information on the increased risks associated with every degree of warming, and suggested that these risks may happen sooner than previously anticipated.

Domestically the risks for NZ have been recently outlined in the Ngā Kōrero Āhuarangi Me Te Ōhanga Climate Economic and Fiscal Assessment, 2023. Over the past century, New Zealand's average annual temperature has increased by 1.1°C, with 2022 being the warmest year on record. The sea level around New Zealand is 20 cm higher on average than a century ago, and the rate of sea-level rise is accelerating. Last year New Zealanders experienced and continue to deal with the devastating impacts of the flooding in the upper North Island and the effects of Cyclone Gabrielle.

The projected climate change impacts underline the importance to New Zealand of robustly addressing climate change issues, by adopting a planned approach involving both adaptation, mitigation, and improving certainty for business and community on the transition and shifts required. The impact of Cyclone Gabrielle in Tairawhiti on forestry highlights the importance of considering and testing policy measures over decades, to ensure parts of society are not overburdened with managing the unintended impact of policy choices.

[1] https://www.dpmc.govt.nz/sites/default/files/2024-04/factsheet-target-9-reduced-net-greenhouse-gas-emissions-8april24.pdf

The evidence based outlined by the IOCC has been fundamental to the direction and commitment made by government. The AR6 report does not suggest the need for a change in direction, but rather the importance of delivering pragmatic and workable solutions that will reduce emissions and position New Zealand to adapt to a changing climate.

Government is reviewing the latest science on biogenic methane and is tasking a panel to provide an up-to-date evidence base about methane's warming impact. The panel will also provide advice on what a biogenic methane target consistent with the principle of no additional warming would look like for New Zealand. The Commission should consider how the outcome of the analysis may be addressed in their target review.

New Zealand's economic or fiscal circumstances

The discussion document considered whether changes in economic circumstances warrant a review of the existing targets.

The Commission considers that since 2019, COVID-19 and inflation have caused significant economic disruption and increased the cost of living, but that while these changes have had a high degree of impact, the New Zealand's economy is still in a strong position over the long term.

The Commission's view is that:

- the economy has recovered from the disruption of Covid and the economic forecast has moved back in line with long-term trends.
- recent increases in inflation are unlikely to be persistent based on historical trends
- the current high debt-to-GDP ratio may limit the government's ability to allocate funds towards emissions reduction
- Crown debt-to-GDP ratio will decline in the short term, and then remain consistent through to 2030 before increasing again in the long term.

The discussion document states:

> Our analysis suggests the changes to GDP per capita since 2019, largely caused by the COVID-19 pandemic, were temporary and will not affect the long term, and are therefore not consequential for the 2050 target.
>
> Our analysis suggests the projected changes to fiscal circumstances are consequential, but were foreseen in 2019 and can be adapted to over time, and are therefore not notable for the purposes of this review.

On this basis, the Commission's initial advice is that it does not consider changes to the target are justified based on changes to economic circumstances.

In contrast to the Commission's analysis, Ngā Kōrero Āhuarangi Me Te Ōhanga Climate Economic and Fiscal Assessment 2023 (the CEFA report) states that both climate change itself, and how New Zealand responds to the risks and opportunities it presents will have material economic and fiscal implications.

The CEFA report cites Treasury modelling from 2021 suggesting that the New Zealand economy is relatively resilient to more frequent droughts or storms but that, the physical impacts of climate change

are expected to be greater than droughts or storms alone. New Zealand is likely to be exposed to climate impacts abroad, affecting trade, migration and financial flows, and global economic activity.

The combination of physical impacts and the low emissions transition will create cost pressures for the Crown and is likely to negatively affect its revenue base:

- due to increased storms and droughts, net core Crown debt could be higher by 3.77% of GDP in 2061.
- climate change could cause an increase in the annual growth of the Crown liability for natural hazards from 5.3% to 5.5%-5.7% through to 2050.
- and based on Commission modelling, the fiscal cost of direct support for additional investment in a range of key mitigation technologies through to 2050 could be around $4 to $12 billion, assuming the Crown contributes 10% to 30% of investment costs.

The CEFA report identifies areas where future work would be valuable to both deepen and broaden our understanding of the fiscal and economic impacts of climate change.

While the Commission's analysis suggests that changes in New Zealand economy and fiscal position do not warrant softening of the target, it is important that any proposals to strengthen the target consider New Zealand's current economic circumstances.

It would seem sensible that the further analysis outlined in CEFA be undertaken prior to any advice on increasing the ambition of the New Zealand target.

Technological developments

The discussion document reviews the technological developments that have taken place since 2019. The Commission's initial finding is that the major change has been the technological development relating to the availability of a methane inhibitors for ruminant animals, with no significant change in other technological developments.

In terms of methane inhibition, the discussion document identifies DSM's 3NOP as having moved from a promising technology, to one that is widely available for reducing methane emissions in over 40 countries where feed is supplied to housed ruminants daily. The report further notes that while methane inhibitors are not yet commercially available in New Zealand, the advances in this technology suggest some confidence that a variation in this technology can eventually be used domestically.

While the Environmental Protection Authority has approved this technology as a feed additive, to be used in New Zealand, DSM would also need to apply for registration under the Animal Compounds and Veterinary Medicines Act 1997. The necessary regulatory process for new inhibitor products to be accepted domestically and internationally takes considerable time and evidence. To date, no application for registration of a methane inhibitor has been made in New Zealand, possibly because the process for new products incurs considerable cost and commercial risk. Even if the product is registered in New Zealand, the product will only have application in limited circumstances because of our free grazing systems, so will be very unlikely to deliver the 30% reduction sought.

There are a range of agricultural mitigation technologies under development through investment by AgriZero such as methane vaccine and inhibitors, bolus products, probiotics and natural enzymes, low emissions pasture solutions etc. However, development in most of these is still at a relatively early stage. It is now widely accepted that the successful development of a methane vaccine will require substantial international cooperation and investment. While these initiatives are promising and

encouraging, caution should be adopted in considering whether they will create material emissions reductions by 2050.

Concluding remarks

There is insufficient change since the initial evaluation to signal an amendment to the 2050 emissions target. Regular review, as is currently being undertaken, is important element, but legislation deliberately sets a high bar for change. New Zealand needs to continue to focus on how it will achieve the current target. While recent analysis suggests that New Zealand is on track, there is a lot more to be done.

We welcome the opportunity to provide input and are happy to discuss any of the issues raised.

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