



NGĀ ARA WHETŪ
CENTRE FOR CLIMATE,
BIODIVERSITY & SOCIETY

Ngā Ara Whetū Submission to the Ministry for the Environment on te tātai utu o ngā tukunga ahuhenua

Pricing agricultural emissions consultation document

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About Ngā Ara Whetū

Ngā Ara Whetū is a Research Centre on Climate, Biodiversity and Society at the University of Auckland. Ngā Ara Whetū (Star Paths) highlights the ethos of our centre named for the journeys of our collective ancestors to the shores of Aotearoa, New Zealand. Ngā Ara Whetū enables and enhances collaborative research and training.

The Ngā Ara Whetū network draws on transdisciplinary scholarship at the University of Auckland in the fields of the natural sciences, social and health sciences, Māori studies, law, engineering, and economics. It strives to connect this work to policymakers and the public, engaging Aotearoa New Zealand in environmental action.

In response to the Ministry's questions

Question 1: Do you think modifications are required to the proposed farm-level levy system to ensure it delivers sufficient reductions in gross emissions from the agriculture sector? Please explain.

It is imperative that the agricultural sector, and biogenic methane emissions, be brought into the national accounting scheme. The proposed scheme seeks to correct its

previous omission, and consequently, the levy system represents an important positive step.

The approach to the formulation of the pricing should hold fast to the intended purpose of the scheme. Any modifications needed should seek to strengthen both the incentive and ability of the New Zealand system, including the agricultural sector, to meet the farm-level levy plan. Any modification should place emphasis on enhancement to Māori interests, development of regenerative and restorative practices, opportunities for innovation and value-enhancement in industry, and ensuring sustainable over exploitative utilization of the landscape as it pertains to methane emission, long-lived greenhouse gas emissions and other pollutants (including those which are nitrogen-bearing).

Question 2: Are tradeable methane quotas an option the Government should consider further in the future? Why?

Yes, it should not be ruled out. An advantage of a trading scheme is an opportunity for market pressures to incentivise action, which also ensures (by regulation) that the net effect on emission and other pollution reductions can be met. Such a scheme for methane can utilize knowledge gained from the existing ETS.

Question 3: Which option do you prefer for pricing agricultural emissions by 2025 and why?

- a) *A farm-level levy system including fertiliser?*
- b) *A farm-level levy system and fertiliser in the New Zealand Emissions Trading Scheme*

(NZ ETS)

- c) *A processor-level NZ ETS?*

We prefer a whole cycle of accounting to share the environmental outcomes, including nitrogen fertilisers, as methane is only one part of the wide need to align the agricultural sector with long-term prosperity with limited emissions.

Of these choices, we prefer a or b because c is potentially problematic with pollution tracking. A problem arises, for example in the possibility of miscounting between the count of new calves versus those that reach processing locations, that leads to a

considerable number of cows “missing” from the accounting and thus, similarly leading to a miscount of emission rates. We think the system needs some incentives and rebates, possibly for the loss of livestock, and/or incentivising animal health such that fewer animals reach productive age.

Further, adding nitrogen and the additives to any levy scheme is important to stave off further environmental degradation. Nitrogen, as the long-lived gas nitrogen dioxide, and other nitrogen species on the landscape and in waterways are destructive in many ways beyond climate. Making progress on this issue at this moment is already overdue, but also an opportune moment.

Question 4: Do you support the proposed approach for reporting of emissions? Why, and what improvements should be considered?

We support this approach in general. We strongly support an independent audit to confirm that the net emissions resulting from reporting are consistent and accurate. There needs to be an approach to reconcile differences arising between farm-level reporting and independent assessments.

Question 5: Do you support the proposed approach to setting levy prices? Why, and what

improvements should be considered?

We think reviewing annually offers the opportunity for incremental adjustments when needed. In contrast, a three-year review cycle may elicit financial shocks and that may encourage resistance to adjustment in either direction. An annual review of biogenic methane can offer regular checks and gradual adjustments.

Question 6: Do you support the proposed approach to revenue recycling? Why, and what

improvements should be considered?

As a consequence of the tragedy of the commons, the public and the environment has been carrying hidden costs of emissions from all sectors through externalities for a long time, especially related to biodiversity, ecological health and the climate. A case can be made to reinvest levied funds to restore the waterways and support regenerative

ecosystem growth. While we support incentives and transitions that promote the desired outcome, we would also support a payment scheme that disincentivises existing and future destructive activities to the environment across the entire chain. We emphasise the need for evaluations around industrial or other economic activities that consider the entire system holistically to avoid domino effects from unintended consequences (including within the portfolio of atmospheric or waterway pollutants, social structures and the economy).

Question 7: Do you support the proposed approach for incentive payments to encourage

additional emissions reductions? Why, and what improvements should be considered?

We acknowledge that methane is roughly half of New Zealand's emissions. We acknowledge the purpose of the policy. However, it is also clear that there are benefits to the environment for reducing the number of cows for dairy and beef, and that the scheme should be clear to avoid support that exacerbates the problem through engineered fixes that will continue to degrade the environment in other ways. For example, changes to livestock diets that can reduce methane emissions will likely exacerbate nitrogen output and are therefore not holistic solutions. We emphasise the need to address problems holistically.

We think the incentives should focus on finding economic activities that are less harmful. We encourage incentives to move to plant-based crops in which New Zealand can have a competitive edge. For example, California must abandon its almond, pistachio and related water-heavy crops. Given New Zealand's abundant water supply, these crops can give us a competitive edge while eliminating the destructive activities of animal-based agriculture. Similarly, practices that improve animal health limit the number of calves that perish before productive age and enact a net reduction in emissions.

Question 8: Do you support the proposed approach for recognising carbon sequestration from riparian plantings and management of indigenous vegetation, both in the short and long term? Why, and what improvements should be considered?

Generally, we support this sequestration. Using this approach to support the regeneration of native ecosystems, that are known to have a greater net capacity for total carbon storage (including within the soils) and greater capacity to deliver beneficial ecosystem services to, for instance, water systems. We endorse the idea that this

recognition is only for indigenous vegetation. This contrasts to introduced, monoculture forests. We note the substantive investment of many farmers to protect and enhance waterways by fencing, planting with appropriate native vegetation and then controlling introduced weeds and pests. Encouraging such initiatives in the agriculture sector provides many environmental benefits. Those who have already begun this process should also be rewarded.

Similarly, we note the opportunity to incentivise new ways to develop high-value horticultural crops that are less damaging to the environment and support societal wellbeing. We advocate for encouraging the development of high value markets where New Zealand can utilize its natural resource abundance to compete in key sectors. Pricing methane is often touted as a path to loss of dairy and meat production, despite the position also being given that those committees are ultimately priced based on international markets. We note that farmers quickly adjusted from sheep to dairy when the markets encourage change by greater potential profitability, demonstrating innovation and flexibility within the agricultural sector. We have great confidence in continued demonstration of these capabilities to shift to high value crops, such as almonds, as those types of opportunities continue to arise.

Question 9: Do you support the introduction of an interim processor-level levy in 2025 if the

farm-level system is not ready? If not, what alternative would you propose to ensure agricultural emissions pricing starts in 2025?

We strongly support an interim levy in order to act now – even in incremental shifts. Any delay in action makes it harder to accomplish goals. The process should start now.

Question 10: Do you think the proposed systems for pricing agricultural emissions is equitable, both within the agriculture sector, and across other sectors, and across New Zealand generally? Why and what changes to the system would be required to make it equitable?

Because of the narrow remit, the system as described appears to economically favour farmers and is thus can be viewed as not equitable given that society pays for the externalisation costs of health and the natural environment. New Zealand needs a system that stops emissions, and other agricultural pollutants that lead to the poisoning of many natural aquatic systems and communities. Further, the system does not take

into consideration the whole food production system. It is worth considering whether other actors who profit from food economies also have financial responsibilities regarding emissions and environmental degradation, e.g. food processors and retailers.

Finally, the consumer should know the true costs of the system. A means to help shape market demand is through the addition of carbon (including methane) and pollution labels to inform consumers of the added costs. Social values need to be translated to financial value through marketing with low carbon.

Question 11: In principle, do you think the agricultural sector should pay for any shortfall in its emissions reductions? If so, do you think using levy revenue would be an appropriate

mechanism for this?

Yes. Emissions represent part of the true cost of farming. It is important to acknowledge that climate changes will affect farming and challenge livelihoods by some of the same external factors that the current pricing scheme seeks to minimize. We see an opportunity to fill the glass more than halfway in this context, by formulating the pricing scheme in such a way as to help ease the burden on farmers of increasing climate-related pressures on farming. Forward-thinking on the likely stressors to agriculture, including rainfall shifts, increase in aridity, and loss of Alpine irrigation water storage, can be used to build into the levy scheme a path to support the vitality of rural communities and the farming industry. An issue of inequity arises with a lack of accountability for societal and environmental costs, and those who are creating these costs have obligations to cover them as part of their net financial accounting. However, there is no need to delay on activating the scheme, and such factors can be built into future amendments to the pricing scheme.

Question 12: What impacts or implications do you foresee as a result of each of the Government's proposals in the short and long term?

We reiterate that problems need holistic, evidence-based solutions that address long-term degradation and damage throughout the system: encompassing the natural environment, economic structures and our communities.

We note that the existing ETS that encouraged introduced monoculture forestry missed the opportunity to support the restoration of valuable ecosystem services, indigenous

habitat and biodiversity, and may have missed the opportunity to maximize long-term sequestration through use of slow growth. In the current level scheme, there is a similar potential to miss the opportunity (or, indeed exacerbate issues) of reduction of toxic pollution by fertilizer addition (with implied nitrogen levels).

Question 13: What steps should the Crown be taking to protect relevant iwi and Māori interests, in line with Te Tiriti o Waitangi? How should the Crown support Māori land owners, farmers and growers in a pricing system?

The Māori farming sector and related organisations are large and may already be doing more preventive work than most. An agriculture emissions pricing system will likely disproportionately disadvantage Māori landowners because they operate a relatively large proportion of New Zealand's sheep and beef farmland. There will likely be broader downstream impacts for Māori, such as for the almost 30% of the meat processing workforce that are Māori. A truly holistic approach is required to ensure that obligations under Te Tiriti o Waitangi are met, including acknowledging the kaitiakitanga role of manua whenua. Levied funds should be reinvested, particularly with Māori to restore waiora, the health of waterways, taiao, biodiversity, mitigation of further negative externalities, to support regenerative and value-add farming. We support the proposed advisory body (or bodies) consisting of Māori and sector representatives to be established to advise on the use of system revenue and funding to support Māori landowners and agribusiness. However, we note that Te Tiriti o Waitangi principles encapsulate the values Partnership, Protection and Participation with, for and by Māori, and recommend a better model of engagement with Māori be established that truly reflects these three principles. For example, the timing of the establishment of this board should enable Māori stakeholders to participate in policy development from the outset, and the processes are in place to ensure that their recommendations carry appropriate weight.

Question 14: Do you support the proposed approach for verification, compliance and enforcement? Why, and what improvements should be considered?

There is an inherent difficulty of measurement. As per our suggestion for an independent review of pricing and national emissions, the scheme as implemented needs to acknowledge that this process will likely provide many opportunities for

measuring and reporting discrepancies between different actors as the details of the scheme and its effects begin to emerge. It is important to be prepared for those disputes and build in responsive mechanisms that allow for quick and fair resolution.

Question 15: Do you have any other priority issues that you would like to share on the Government's proposals for addressing agricultural emissions.

Ngā Ara Whetū is strongly committed to underpinning action with science, specificity, and holistic thinking. The research centre strives to connect research in the fields of natural sciences, social and health sciences, Māori studies, law, engineering, and economics to policymakers and the public in order to help engage Aotearoa New Zealand in environmental action. We strongly support activity that focuses on equity and the importance of tangata whenua and kaitiakitanga. Prioritising equitable solutions leads to enduring policy and contributes to a more just future. Ngā Ara Whetū welcomes opportunities to work with the government in conducting research that informs and supports environmental policymaking in Aotearoa New Zealand.

In line with these values we support policy that:

- Is evidence-based, detailed, and holistic in order to achieve effective action that accounts for the potential consequences.
- Improves our relationships with the environment by reshaping incentives, structures, and activities around the concept of land stewardship rather than ownership.
- Reforms legal and political structures to enable long-term thinking and incentivises sustainability across all sectors.

It is important to bring emissions and pollution, linked to the agriculture that all New Zealanders rely upon, into view, and utilize the policy provided by the levy scheme to manage (reduce) them. The scheme is a proactive step in recognising the importance of the role in the economy and food production, and balances those with the need to allow the natural environment and other sectors of the economy to flourish. The appearance of the levy as financial penalty acknowledges the externalities and shifts costs usually burdening society back onto the polluter who is benefiting from those externalities.