Corner Ruakura
& Morrinsville Roads
Private Bag 3221
Hamilton 3240
New Zealand

Ph +64 7 858 3750
Fax +64 7 858 3751
www.dairynz.co.nz

Consultation: Draft advice on the second emissions reduction plan (2026-2030)
He Pou a Rangi – Climate Change Commission
PO Box 24448
Wellington 6143

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DairyNZ Submission: Draft advice on the second emissions reduction plan

DairyNZ welcomes the opportunity to provide input to the He Pou a Rangi Climate Change Commission (the Commission) preparation of advice to the Government on the direction of policy for the second Emissions Reduction Plan.

Executive Summary

DairyNZ is firmly committed to dairy farming playing its part in transitioning to a low emissions economy alongside the rest of New Zealand.

In the Commission's advice to Government, we call for:

- Acknowledgement that the Government's delay in progressing farm-level pricing will impact the sector's ability to meet any sub-target in the second emissions budget.
- Further detail on the assumptions underpinning the Commission's statement that the agriculture sector can achieve more than the 10% reduction required for the 2030 methane target.
- The setting of separate emissions budgets for long-lived and short-lived gases, in line with the split gas targets. DairyNZ also seeks that a more appropriate metric be used to account for the warming effect of methane emissions.
- The Commission to provide advice on the links between actions in the second emissions budget and delivery of New Zealand's Nationally Determined Contribution (NDC), particularly the opportunity to invest upfront in domestic mitigation rather than international offsetting.
- Enhanced advisory and extension services to farmers in the second emissions budget that are truly co-designed and implemented in partnership with the sector and Iwi/Māori.

- Emphasis on reducing carbon dioxide emissions in the pursuit of net zero for long-lived gases, recognising that there are currently no feasible means to fully avoid nitrous oxide emissions from food production. The ability to offset these emissions should be preserved.
- Adjusting the ETS settings to address the exotic afforestation incentives, including setting integrated objectives for the role of forests.
- Broadening the Equitable Transitions Strategy to address climate adaptation and the distributional impacts of climate policy on rural communities.
- Assurance that rural communities will be supported to transition to practical, affordable low-emissions transport.

We offer to work with the Commission to resolve these issues.

Introduction

DairyNZ is the industry-good organisation representing all 11,000 of New Zealand's dairy farmers. We seek to progress a positive future for New Zealand dairy farming through enhanced sustainability, profitability, and competitiveness. The dairy sector employs 50,000 people, generates $20b in export earnings, and comprises one third of all goods revenue.

DairyNZ is committed to dairy farming playing its part in transitioning to a low emissions economy alongside the rest of New Zealand. We have active programmes to support farmers as they transition to lower greenhouse gas emissions and build their resilience to a changing climate.

This document contains our response to the issues raised and questions asked in the Commission's *2023 Draft advice to inform the strategic direction of the Government's second Emissions Reduction Plan*. For ease of reference, we have used chapter numbering from the Commission's consultation document and question numbering from the Commission's online survey.

Chapter 2: The Task for the Second Emissions Budget

Q13. Do you agree with our findings regarding the Government's first emissions reduction plan policy impact assessment and its implications for meeting the second and third emissions budgets?

The Government's policy impact assessment for agriculture for the second and third emissions budgets was based on availability of new technologies to help farmers reduce their emissions. However, the Commission has found that the Government's assessment did not include the impact of the introduction of the farm-level pricing system from 2025 on emissions reductions. The Commission considers that the pricing system's implementation "will be key to closing the gap to meeting agriculture's sector sub-target".

We assume the Commission is basing this on the pricing system being in place from 2025. However, this is no longer feasible due to the Government's now 6-month delay in progressing the pricing system beyond the high-level announcements it made in December 2022[1].

The Government and the primary sector had agreed that a pricing system would best contribute to emissions reductions where it was (i) part of a broader framework to support on-farm behaviour change; and (ii) set to incentivise uptake of economically viable opportunities that contribute to lower emissions.

We are aware that, more recently, the Government has been considering alternatives to introducing farm-level pricing such as a fertiliser levy. This, and other options, such as a processor-level levy, were roundly rejected by farmers during both He Waka Eke Noa and Government consultations throughout 2022. Such alternatives would be a blunt and punitive cost on New Zealand food producers and would do little to reduce emissions. Their

[1] Pricing-agricultural-emissions-report-under-section-215-of-the-CCRA.pdf (environment.govt.nz)

implementation would also take valuable resources away from establishing the agreed farm-level pricing system.

We do not believe that the sector should be penalised simply because the Government failed to act in time. The moves by the Government to reconnect with the He Waka Eke Noa partnership, announced at Fieldays on 15 June, are welcomed. Sufficient time is required to ensure that a credible and robust pricing system can be developed; this will not be possible before 2025.

DairyNZ requests that the Commission's final advice recognise the impact of the Government's delay in implementing the farm-level levy on both the achievement of the 2030 biogenic methane target and the sector sub-target for agriculture for the second emissions budget. This acknowledgement is even more important if a sub-optimal interim pricing option is brought in at the processor level. This is because such a measure will not result in reduced emissions from agriculture.

We also note that the Commission expects the agriculture sector to deliver reductions in the second emissions budget of 7-8 $MtCO_2e$. In addition, the Commission believes that reductions beyond the "minimum" 10% level (of the 2030 methane target) were "feasible" and "should be pursued". The Commission's draft advice also lists a series of 'benchmarks for action' by the agriculture sector that are needed to deliver the second and third emissions budgets. These include:

- 11% reduction in emissions intensity for dairy and 7% for sheep and beef farming through improved farm management practices
- 10% adoption of low methane sheep through breeding
- 100% of urea fertiliser coated with urease inhibitors
- 14,000ha increase in horticulture production

We seek greater clarity from the Commission on its assumptions for agriculture and how they were arrived at. An 11% reduction in emissions intensity for the dairy sector is highly ambitious given how efficient our farmers already are. An AgResearch study commissioned by DairyNZ[2] found that New Zealand has a carbon footprint of 0.74 kg CO_2e per kg of fat-protein corrected milk (FPCM), compared to the global average of 1.37 kg CO_2e/kg FPCM. New technologies and practices are urgently needed if farmers are to make deeper reductions to emissions intensity or absolute emissions.

Q14. Have we missed any important information regarding the task for the second emissions budget?

We draw the Commission's attention to two key pieces of information regarding the task for the second emissions budget:

a) Bundling together the emissions budgets for short- and long-lived gases.
b) Meeting New Zealand's first Nationally Determined Contribution (NDC) under the Paris Agreement.

[2] Mazzetto et al, 2021. 'Mapping the carbon footprint of milk for dairy cows', report prepared for DairyNZ.

Bundling together short- and long-lived gases

The second emissions budget period is important as it encompasses both completion of the 2030 target for methane (10% below 2017 levels) and New Zealand's first Nationally Determined Contribution (NDC) under the Paris Agreement.

The dairy sector is committed to playing its fair share in contributing to these targets. However, we do not agree that long-lived and short-lived gases should be bundled together using the GWP100 metric. New Zealand has already legislated split gas targets. It follows that emissions budgets should also separate long-lived gases from short-lived gases. The Commission has missed critical scientific evidence in this regard, and we urge consideration of the findings of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report on this topic[3].

We support a delineation in the sector sub-target for agriculture (and correspondingly for waste) for the second and subsequent emissions budgets between methane and long-lived gases. This will enable clearer tracking towards the 2030 methane target.

NDC

We note the Government's statement in the first Emissions Reduction Plan that "achieving it will also require some offshore mitigation". In 2022, the Commission estimated that if the Government achieves its first and second domestic emissions budgets, 99 Mt CO_2e of offshore mitigation will still be needed to meet the NDC[4]. Treasury has estimated this as costing anywhere between $3,300,000,000 to $23,700,000,000[5], describing this as "a significant fiscal risk" (it works out to be roughly $4,700 per person in New Zealand). However, the Commission has stated that its advice to Government on the second emissions period will focus on New Zealand's domestic targets and actions to achieve them rather than its international commitments and how they might be met.

We disagree and urge the Commission to reconsider this position. Domestic policy decisions (and corresponding investment) will materially influence the amount of domestic mitigation New Zealand is able to achieve and at what cost. In turn, this influences the volume of offshore mitigation that New Zealand may need to purchase to meet the current NDC. An order of magnitude difference between the Government's expenditure to reduce domestic emissions and the direct and indirect cost to the economy of purchasing international offset units does not serve New Zealand taxpayers well. The Commission should provide clear advice to the Government in this regard (this could also be reiterated in its chapter in the final advice on Funding and Finance).

We also urge the Commission to pay attention to the impact of any increase in ambition of the current NDC or (subsequent NDCs). This could simply add to the size of offshore investment in mitigation rather than to an actual reduction of emissions in New Zealand.

[3] In particular, chapter 7 of *AR 6 Climate Change 2021: The Physical Science Basis* from the IPCC's Working Group I and chapter 2 of *AR6 Climate Change 2022: Mitigation of Climate Change* from the IPCC's Working Group III, plus supplementary material associated with the latter.
[4] NZ ETS settings for 2023-2027 (climatecommission.govt.nz)
[5] Ngā Kōrero Āhuarangi Me Te Ōhanga Climate Economic and Fiscal Assessment 2023

Chapter 3: A Path to Net Zero

Combined response to questions 15-18:

- *Q15. Do you agree that gross emissions reductions are required to achieve and sustain net zero emissions?*
- *Q16. Do you agree with our assessment of the risks and implications of carbon removals in meeting and maintaining net zero emissions?*
- *Q17-18. Do you agree with our proposed recommendation 1 and 2?*

DairyNZ notes that methane emissions do not need to achieve net zero by 2050, therefore our responses to these questions relate to nitrous oxide emissions from agriculture.

We agree with the Commission that gross emission reductions are required to achieve and sustain net zero emissions. Greater definition is needed from the Government on the roles of gross emissions reductions and carbon removals in meeting the 2050 net zero target for long-lived gases.

However, we consider a particular emphasis needs to be placed on reduction of carbon dioxide emissions. Carbon dioxide dominates not only the overall level of global warming, but also the speed of that warming. In 2021, it contributed 45% of New Zealand's emissions profile compared to 10% from nitrous oxide.

As acknowledged by the Commission on page 48 of its draft advice, the agriculture sector currently has no feasible means to fully avoid nitrous oxide emissions from food production. Although farmers are already achieving reductions[6], they will eventually reach a point with fertiliser use beyond which further reductions would compromise food production.

DairyNZ seeks that any Commission advice regarding specific level-setting for gross reductions of nitrous oxide in the second and third emissions budget should recognise this challenge. In this regard, we also agree with the Commission that forests will play an important role in offsetting nitrous oxide emissions. This should be progressed as part of the farm-level pricing system.

Chapter 4: Emissions Pricing

Q23-24. Do you agree with our proposed recommendation 3a and 3b?

DairyNZ agrees that the ETS has an important role to play in reducing carbon dioxide emissions. We also agree with the Commission's assessment that the current ETS structure creates a high risk that afforestation will continue to displace gross emissions reductions.

We support work to amend the ETS to drive gross reductions of carbon dioxide emissions and prevent mass exotic afforestation of productive land. The environmental, social, cultural, and economic impacts of such large-scale land use conversion are significant for rural

[6] As evidenced by the 9.5% drop in emissions associated with synthetic nitrogen fertiliser from 2020-2021. For more, see New Zealand's Greenhouse Gas Inventory 1990-2021

communities. We were pleased to see the Government acknowledge this in 2022[7] and more recently in its June 2023 announcements to reform the ETS and amend the National Environmental Standards for Plantation Forestry. More details on our concerns regarding these ETS settings can be found in our submission to MPI in April 2022[8].

We will also continue to seek assurance that rural voices are heard when redesigning the ETS incentive settings, in line with the principle of 'rural proofing'[9]. We welcome dialogue with both the Commission and MPI to facilitate conversations with dairy farmers and rural communities on these issues, including as part of the work to revise the permanent forestry category in the ETS.

We also note the need for close alignment of any redesign of ETS forestry settings with the anticipated work to develop the separate, farm-level pricing system (assuming the Government adheres to its agreement on this). Recognition of on-farm sequestration in that mechanism is of critical importance to farmers. The Government has committed to this, and work is underway to develop a sequestration strategy[10]. This is expected to see on-farm sequestration as a key component of the farm-level scheme in its early years (which fall in the second emissions budget), with eventual transition of scientifically robust categories of vegetation to the ETS.

Chapter 6: Maintaining and enhancing wellbeing through the transition

Q32. Do you support our proposed recommendations 6 and 7?

Like the Commission, we welcome the Government's development of an Equitable Transitions Strategy. Rural communities are already being impacted by an ever-growing number of environmental and climate policies at central, regional, and local government levels. We seek to ensure that the Equitable Transitions Strategy takes this into account, is rural-proofed and addresses the distributional impacts of climate policy on rural communities. As we have stated in previous submissions[11], we seek clarity on how the Government will determine what is 'fair' and 'equitable' and which metrics or criteria will be used to judge different policies against one another.

We agree with Recommendation 6 that the Equitable Transitions Strategy should be broadened to address the compounding impacts of a changing climate and the need for adaptation alongside mitigation.

Farming communities, farmer livelihoods and day-to-day farm management are regularly disrupted and directly affected by extreme weather events. We have already seen the scale of damage wrecked on rural communities, farms, and other businesses by cyclones earlier in 2023. We know that the severity, scale, and frequency of these types of events will only increase over time as the impacts of climate change become more pronounced. Proactive

[7] Next steps on the New Zealand Emissions Trading Scheme's permanent forest category – Cabinet paper (mpi.govt.nz)
[8] DairyNZ submission to MPI, 'Managing exotic afforestation incentives consultation', April 2022.
[9] Making policies that work for rural communities | NZ Government (mpi.govt.nz)
[10] See footnote 1.
[11] For example DairyNZ submission to MfE, November 2021, 'Emissions Reduction Plan consultation'

transition planning for a low-emissions, climate resilient future is therefore essential for the primary sector and for rural communities.

See also our comments against Chapters 4 (Emissions Pricing) and 11 (Transport) of the Commission's draft advice (pages 6-7 and 10-11 of this submission).

Chapter 7: Agriculture

Q36. Do you support the overall draft advice in this chapter?

DairyNZ broadly agrees with the Commission's draft advice on agriculture, although, as noted elsewhere in this submission and in previous submissions to both the Commission and the Government, we do not support the use of GWP100 in relation to the biogenic methane targets. We seek emissions budgets that separate long-lived gases from short-lived gases so that the warming impact of each can be more appropriately accounted for. We urge the Commission to respond to the growing body of evidence in support of GWP*[12] in its final advice to the Government on the second Emissions Reduction Plan and in its separate mandated review of the 2050 targets.

Q37. Do you support our proposed recommendations 8 and 9?

Recommendation 8
We agree with the Commission's recommendation that the second Emissions Reduction Plan should *"enhance advisory and extension services to farmers to enable them to respond to pricing and accelerate the adoption of emissions-efficient practices, appropriate land-use diversification, and emerging technologies to reduce gross emissions. These services should be co-designed and implemented in partnership with industry and Iwi/Māori."*

It is widely accepted that advisory and extension services have a critical role to play in supporting farmer readiness to participate in emissions pricing and take actions to manage emissions and build climate resilience. These services need to be grounded in strong farm systems knowledge and trusted relationships.

DairyNZ has provided extension services for many years. Over that time, we have built considerable infrastructure, experience, and expertise to provide farmers with the advice they need to continuously improve farm performance across economic, environmental, and social dimensions. This includes active programmes to support farmers as they transition to lower emissions, climate resilient dairy systems. Other sector organisations and extension providers are working equally as hard. However, more resourcing is needed along with greater pan-sector coordination to ensure that New Zealand's farmers can access high-quality advice and support that draws on the latest evidence and that is farmer-centred in its design and delivery.

Any action to enhance extension and advisory services as part of the second Emissions Reduction Plan must be co-designed and implemented in partnership with industry and iwi/Māori (Recommendation 8). It should also:

[12] See footnote 3.

- Build off the substantial effort already undertaken to coordinate greenhouse gas extension via the He Waka Eke Noa partnership. The positive impact of the partnership in supporting farmer readiness was recognised by the Department of Prime Minister and Cabinet in 2022[13].
- Include a focus on adaptation and climate resilience as well as greenhouse gas mitigation and readiness for farm-level pricing.
- Align with extension and advisory services addressing other environmental regulations, in particular freshwater, biodiversity, and resource management, so that farmers are receiving integrated advice.

Although we laud the Commission's intentions regarding extension and advisory services, we are yet to see significant action from the Government in this area. In the Government's first Emissions Reduction Plan, it committed to:

- Increase the reach of climate-focussed farm planning and extension services so that farmers know how to make changes; and
- Upskill and grow the pipeline of skilled advisors and rural professionals to work with farmers.

We have yet to see co-design and implementation of the above happen in partnership with industry and iwi/Māori. We look forward to this work getting underway urgently and to it providing the foundations for enduring partnerships in the second emissions budget.

Recommendation 9

The Commission's Recommendation 9 seeks to *"advance the agricultural pricing system to: (a) enable recognition of a broader range of emissions-reducing practices and technologies; and (b) incentivise gross emissions reductions in line with the 2050 target*".

This aligns with the He Waka Eke Noa recommendation to introduce a simplified version of a farm-level pricing system in 2025, transitioning to a full system in 2027. The timeframe for this recognised the challenges in establishing such a complex system by 2025, including regulatory development and approvals, IT system build, testing and deployment, and the challenges with onboarding around 23,000 farmers and growers.

However, as we note on pages 3-4, the Government has failed to progress the farm-level pricing system in sufficient time to have it in place by 2025. This puts the 2030 biogenic methane target at risk and fails to incentivise emissions reductions in line with the 2050 target.

Assuming the Government focuses on implementing a credible, robust farm-level system, then we support the Commission's recommendation that this be rapidly advanced to enable recognition of a broad range of mitigation practices and technologies.

We welcomed the establishment of the new Centre for Climate Action on Agricultural Emissions (CCAAE) Joint Venture as part of the first Emissions Reduction Plan, and the

[13] DPMC briefing to Hon Grant Robertson, November 2022, 'Rapid Assessment of Progress Towards He Waka Eke Noa Delivery Milestones'.

significant increase in Government and industry funding for R&D. Practical, cost-effective solutions are urgently needed for New Zealand's pastoral farming systems.

However, we encourage the Commission to strengthen its advice to Government regarding streamlining regulatory approval processes and ensuring the national emissions accounting framework is set up to recognise new technologies and practices. We draw attention to the recommendations of the Biological Emissions Reduction Science and Mātauranga Plan in that regard.

We also seek to ensure that the pricing system include adequate provisions for transitional assistance for farmers who do not have access to mitigation technologies or sequestration.

Chapter 10: Forests

Q53. Do you support our proposed recommendation 15?

DairyNZ agrees with Recommendation 15, that the second Emissions Reduction Plan should "s*et and implement integrated objectives for the role of forests with respect to emissions mitigation and adaptation, while giving effect to the principles of Te Tiriti o Waitangi/The Treaty of Waitangi."*

As stated in previous submissions[14], we support the principle of 'right tree, right place, for the right purpose'. We endorse an integrated landscape approach, where land use and land type are matched, and natural resources are utilised within environmental limits.

Forests have many co-benefits but can also bring negative outcomes and unintended consequences for rural communities, for example due to poorly designed policy settings, poor forest management etc. The role of forests, both indigenous and exotic, must be more clearly articulated and should consider other forest outcomes besides carbon removals. Any such articulation of the role of forests should also be informed by/align with the work on sequestration taking place as part of the farm-level pricing system.

We also note the important role that forests will have in offsetting nitrous oxide emissions from food production, given there are currently no feasible means to fully avoid them. For more on this, see page 6.

Chapter 11: Transport

Q57. Do you support our proposed recommendations 16 and 17?

DairyNZ agrees with the balance of advice in this chapter and with Recommendations 16-18, although we seek assurance that resulting policies will be rural-proofed[15].

Transport emissions must be reduced as quickly as possible and low emissions options developed for all New Zealanders. Rural communities face significant challenges in

[14] DairyNZ submission to MPI, 'Managing exotic afforestation incentives consultation', April 2022.
[15] See footnote 10.

decarbonising their transport systems in comparison to urban communities. They have a high dependence on vehicles for transport due to their low population density, remote locations and, for many, a lack of practical public transport/non-vehicle travel options. In addition, currently available EV options are not able to match the performance of internal combustion engine (ICE) vehicles for on-farm needs.

While we welcomed the Budget 2023 announcement of $30m to install 600-1,000 EV charging points in rural communities, we consider that the Government's first Emissions Reduction Plan does not go far enough in supporting rural communities to de-carbonise transport.

Innovative and creative solutions are needed to ensure that the distributional impacts are not unjust and rural communities are not left behind. Although the Commission's draft advice recognises the challenges facing rural communities, we urge greater specificity in its final advice to the Government on the actions that could be undertaken during 2026-2030 to support rural communities. We also encourage connection with dairy processors to understand their work to transition to lower-emissions heavy transport options and how that might be supported in the second Emissions Reduction Plan. Finally, we recommend that further research be done on the transport needs and patterns for rural communities so that all options are developed with a clear evidence base.

Chapter 13: Research, Science, Innovation, and Technology

Q67. Do you support the overall draft advice in this chapter?

As noted elsewhere in this submission, New Zealand farmers' abilities to significantly reduce their agricultural greenhouse gas emissions without impacting production is dependent on the availability of cost-effective, practical mitigation solutions. We were active contributors to the Fit for a Better World development of a 'Biological Emissions Reduction Science and Mātauranga Plan (BERSA) and look forward to the acceleration towards solutions that this will bring via the new CCAAE.

However, in addition to BERSA and the CCAAE, there are a plethora of other relevant funds, reviews, strategies and initiatives underway, for example Te Ara Paerangi – Future Pathways, MfE's Environment & Climate Research Strategy, MPI's Sustainable Food & Fibre Futures and MBIE's Strategic Science Investment Fund to name a few. Greater coordination across Government is required to ensure: (i) R&D investments are aligned and outcomes-focused; and (ii) the regulatory processes needed to bring new technologies to market are fit for purpose.

We encourage the Commission to strengthen its advice to Government in this regard.

Contact

Thank you for the opportunity to comment on the Commission's draft advice to the Government regarding the direction of policy for the second Emissions Reduction Plan. Please contact Laura.Kearney@dairynz.co.nz if you have any queries.

SUBMISSION ENDS.