DAIRY COMPANIES ASSOCIATION OF NEW ZEALAND (DCANZ)

SUBMISSION TO:

THE MINISTRY FOR THE ENVIRONMENT

AND

MINISTRY FOR PRIMARY FOR PRIMARY INDUSTRIES

ON:

TE TĀTAI UTU O NGĀ TUKUNGA AHUWHENUA

PRICING AGRICULTURAL EMISSIONS

18 November 2022

Executive Summary

- New Zealand dairy companies are committed to working with farmer suppliers to continue reducing the emissions footprint of New Zealand milk. Significant work is already underway to provide customers and consumers the lower emissions dairy products they are seeking.
- The Dairy Companies Association of New Zealand (DCANZ) has participated in the He Waka Eke Noa (HWEN) partnership in accordance with our 2019 commitment to work with Government to design a pricing mechanism where any emissions price is part of a broader framework to support on-farm practice change, set at the margin and only to the extent necessary to incentivise the uptake of economically viable opportunities that contribute to lower global emissions.
- We supported the 31 May 2022 HWEN recommendations as providing a credible and effective approach to pricing agricultural emissions which was consistent with the principles of the partnership we entered with Government.
- DCANZ welcomes the Government's proposal for a farm-level system for agricultural emissions. We are, however, concerned that other elements of the proposal constitute fundamental changes from the industry proposal. These changes have altered the balance of the proposed HWEN pricing system in ways that risk creating significant socio-economic costs in New Zealand for actions that may not count towards global emissions reduction.
- We are concerned Government's modelling suggests the proposed pricing system will be weighted towards achieving emissions reductions by cutting New Zealand agricultural production. A better approach would be to incentivise the uptake of new tools and practices that reduce emissions while maintaining the positive contribution of New Zealand dairy to global food systems.
- To ensure that the pricing system supports New Zealand to make a world leading contribution with respect to mitigation of agricultural emissions under the Paris Agreement, DCANZ requests changes to the Government proposal to:
    - **a.** Fully commit to a farm-level system from the outset through **the removal of the processor-level backstop;**
    - b. Manage the risk of perverse socio-economic and emissions leakage outcomes, by **embedding criteria that provide for a balanced approach to setting levies in legislation;**
    - c. Support an integrated whole-farm system approach to managing agricultural emissions by **pricing nitrous oxide from fertiliser at the farm level;**
    - d. Ensure the system is responsive to the mitigation opportunities and challenges for each greenhouse gas by having **unique levy prices for both methane and nitrous oxide,** which are completely decoupled from the NZ ETS unit price**;**
    - e. Give certainty to farmers as they transition into a pricing system by **capping levy prices for the first five years and ensuring they are set at the minimal level required to fund incentives, sequestration, research and development, and administration;**
    - f. Ensure industry confidence in the system through the **establishment of a System Oversight Group with industry expertise to give Ministers advice on levy price setting and levy revenue recycling;**
    - g. Ensure **that incentives are structured to contribute to both lower New Zealand emissions and lower product emissions footprints** by adopting criteria that provide this eligibility check and balance;
    - h. Support farmers' positive engagement in actively managing emissions and offsets within their farm systems by **recognising all scientifically valid sequestration** alongside pricing of emissions from the start, as proposed by HWEN; and
    - i. Support momentum in systems development by **setting a firm date for enabling farmers to use complex emissions calculations** that better recognise their individual farm factors of relevance.

- **DCANZ supports the levy relief proposal set out in the joint HWEN partner submission to provide levy relief to farmers on a case-by-case basis, as a transition measure, with strict eligibility criteria** that includes where:
  - access to sequestration (both NZ ETS and He Waka Eke Noa) is severely restricted by national and local body regulation;
  - effective mitigation technologies are not available or are impractical to implement in the specific case; and
  - emissions pricing is having a severe impact on the viability of otherwise viable farming operations as evaluated on a case-by-case basis.
- **DCANZ sees significant reputational and competitive risks in the introduction of broader support (subsidies) policies** designed to recognise other environmental or social outcomes (not related to emissions reductions) as this runs counter to decades-long subsidies policy settings which have served New Zealand agricultural interests well.
- **We strongly oppose any broader differentiation in emissions pricing based on farm systems type**. A unit of methane emissions has the same atmospheric impact regardless of the farm system from which it arises. Applying different levy costs to different farmers based solely on the agricultural product they produced would be an unpalatable step away from New Zealand's outcome-based policy approach. It would also be highly divisive at farm level.
- DCANZ notes the importance of timely availability of new mitigation tools on the New Zealand market to support a smooth transition for the agricultural sector into the emissions pricing system and the best possible progress towards targets. We **encourage Government prioritise efficient operation of the regulatory framework for registration of new environmental inhibitor products**. It is important that there be no unnecessary delay in farmers being able to access products that have been proven to be effective and suitable for use in dairy farming system. This requires various elements of the registration process to be as harmonized and streamlined as possible, and well-resourced to ensure new products can be registered as a matter of urgency.
- DCANZ looks forward to the opportunity to continue engaging with the Government on development of the agricultural emissions pricing framework as a HWEN partner organisation.

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1. Introduction

1.1 The Dairy Companies Association of New Zealand (DCANZ) welcomes the opportunity to submit on this important policy consultation.

1.2 The contact for this submission is:

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Who we are

1.3 DCANZ represents the common interests of New Zealand dairy manufacturing and exporting companies on matters of public policy. Our 13 member companies account for approximately 98% of the milk processed in New Zealand and a similarly high proportion of exports.

1.4 The dairy products manufactured and exported by DCANZ member dairy companies make a positive contribution to global food system sustainability and to the economic prosperity of New Zealanders

1.5 Within the global food system:

- Milk is an important contributor to 23 nutrients of importance for a food system that delivers nutritionally adequate diets[1] in an affordable way;
- New Zealand produces milk equivalent to New Zealand's recommended dietary intake for 90 million people and does so with a lower carbon footprint than alternative dairy suppliers, and
- Dairy is a food group in with continued strong demand growth, particularly from countries whose populations have not yet reached recommended dietary intakes of dairy.

1.6 For the domestic economy, New Zealand's dairy products:

- delivered $21.8 billion in export revenue earnings the year to June 2022. This accounted for 27% of total New Zealand earnings from all goods and services export. These export earnings flow through to significant contributions to regional GDP. This is greater than 10% in Waikato, Southland, West Coast, and Taranaki.
- enable direct dairy industry employment for 50,000 people in well-paying jobs. Dairy farm jobs outperform the salary levels of other alternative land-based industries, and the dairy manufacturing sector has a considerably higher wage rate than other food manufacturing sectors.
- contributed to jobs in a broad set of other New Zealand industries by being a top 10 purchaser of output from one third of all other industries in the New Zealand economy[2].

1.7 We advocate for New Zealand to implement its public policy objectives in a way that is consistent with the principles and approach that has underpinned the competitiveness and success of New Zealand's primary sectors over many decades. This includes being:

- Outcome-focused;

[1] As identified by the Delta Model (developed by Riddet Institute and put forward as a game changing solution by the New Zealand Government in the UN Sustainable Food Systems dialogue) and Sustainable Nutrition Initiative research
[2] How does the dairy sector share its growth? : An analysis of the flow-on benefits of dairy's revenue generation (nzier.org.nz)

- Science and evidence-based;
- No more onerous than necessary;
- Enabling of innovation; and
- Non-distortive with respect to agricultural production and maintaining of land use flexibility.

Our commitment to action that reduces global emissions

1.8 DCANZ agrees the importance of taking action to reduce global emissions. It is important that New Zealand and New Zealand businesses contribute positively to meeting the goals of the Paris Agreement.

1.9 The world leading carbon footprint of New Zealand milk is a point of pride for the New Zealand dairy industry and something that is recognised by customers when choosing to purchase New Zealand dairy products. It is also not something we take for granted and work is ongoing across the industry to continue lowering this even further. Doing so is how our industry best contributes to the goal of reducing global emissions and associated warming, while maintaining the food production necessary for a growing global population.

1.10 This is why:

a. dairy companies are investing across their supply chains to lower emissions. For example, in the recent years several New Zealand dairy processing sites have undergone conversions to renewable energy sources[3], adding to those that were built to be powered by renewables from the outset[4];

b. DCANZ became a party to the HWEN 2019 proposal to work with government to design a practical and cost-effective, farm level, system for reducing emissions;

c. dairy companies have worked with their farmer-suppliers over the last two years so that virtually all dairy farmers now hold greenhouse gas reports and a growing number already have plans to actively manage the emissions associated with their farming businesses;

d. individual dairy companies are pursuing commercial partnerships and investing it in research and development programmes to increase the tools available to reduce emissions in New Zealand dairy farming systems; and

e. DCANZ has advocated in support of the adjustment of regulatory frameworks and processes in New Zealand to support new environmental inhibitor products coming to market whilst effectively managing the risk of any unintended impacts on market access.

Our high-level perspective on pricing of agricultural greenhouse gas emissions

1.11 When working towards the establishment of the He Waka Eke Noa partnership, DCANZ recognised that:

a. the Government had made the decision to introduce a price on agricultural greenhouse gas emissions; and

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[3] Plant's biomass boiler beginning operation | Otago Daily Times Online News (odt.co.nz)
Fonterra announces another major step in low carbon transition
Open Country Dairy converting two coal boilers at Waikato site | EECA
Phase 1 of off-farm decarbonisation roadmap completed - Synlait Milk

[4] Media - The dairy company using geothermal steam instead of coal to dry milk (miraka.co.nz)

b. a well-designed system for pricing agricultural emissions could form part of an effective behaviour change framework to support agricultural greenhouse gas emissions reduction by providing tension to incentivise the uptake of available mitigation and offsetting opportunities.

1.12 DCANZ considers the critical outcomes of a well-designed farm emissions system to be:

a. farmers being effectively engaged to actively manage the emissions arising from their farming system;

b. the actions being taken by farmers to reduce and offset emissions on farm making a difference to global temperature and sustainable food system goals; and

c. the system being stable and enduring over time.

1.13 To achieve the level of farmer engagement that we believe is necessary for emissions pricing to be an effective part of a behaviour change framework to reduce on-farm emissions, any pricing system must:

a. recognise individual farmer actions to reduce or offset emissions and empower farmers to take responsibility for these actions. This means that pricing needs to be implemented at the individual farm level and fairly account for the uptake of tools or practices that reduce emissions and for the scientifically robust additive sequestration that is occurring on farm; and

b. engender farmer confidence that the system is no more onerous or costly to engage with than it needs to be. This will best occur where the system avoids any unjustifiable build-up of surplus funds and pursues synergies (rather than duplication) with other reporting and compliance systems that farmers are already subject to.

1.14 For a pricing system to be effective in contributing to achievement of global temperature goals, it needs to avoid the perverse outcome of emissions leakage. DCANZ holds significant concerns about the potential for a less well-designed pricing system to lean towards achieving emissions reductions in New Zealand through production cuts and for this gap in global supply to be filled by less efficient producers. This would nullify the benefits of New Zealand action for the global atmosphere and potentially even have the undesirable outcome of increasing global emissions. Price tension is healthy, but only to the extent that it contributes to the outcome being sought, which is a lower global temperature increase.

1.15 These fundamentals for a pricing system were reflected in DCANZ's 2019 commitment as a He Waka Eke Noa partner to work in good faith with Government to design a pricing mechanism where any price is part of a broader framework to support on-farm practice change, set at the margin and only to the extent necessary to incentivise the uptake of economically viable opportunities that contribute to lower global emissions[5].

1.16 Throughout the HWEN process we have sought a solution where the price provides critical tension for the uptake of opportunities that reduce or offset emissions while being mindful of leakage risks and a just transition for our rural communities.

1.17 DCANZ agreed the 31 May He Waka Eke Noa pricing system recommendations on the basis that they were consistent with achieving these outcomes. These recommendations reflected a careful balance and were the result of decision making based on consensus to come to an approach acceptable across the sector. We are concerned that the Government's proposals will not provide the same outcomes.

[5] www.dairynz.co.nz/media/5792241/primary-sector-climate-change-commitment-july-2019.pdf

2. Differences between the HWEN recommendations and government proposals:

2.1 DCANZ recognises and welcomes the Government having proposed a farm-level and split-gas approach to emissions pricing (as HWEN did). While in these important system features are consistent with the HWEN and make the two proposals appear similar, there are several other critical differences which lead to fundamental differences in the way the government proposal will function compared with the system HWEN recommended. DCANZ considers that these differences impair the ability of the pricing system proposed by Government to be an effective basis for pricing agricultural emissions in New Zealand.

A pricing mechanism that functions as a tax not a levy

2.2 HWEN recommended the establishment of genuine levies for methane and nitrous oxide, which would be set at a low-level and used to progress towards targets by investing in:

a. incentives for farmers to take up new tools and practices to reduce emissions (where there is potential to do so) in a way that is consistent with the global outcomes sought (i.e., reducing absolute emissions arising from the food we produce, rather than reducing absolute emissions by reducing the volume of food we produce);

b. recognition of offsets in the form of additional sequestration from a range of vegetation on farm; and

c. research and development to further expand the emissions mitigation options for farmers.

2.3 This approach:

a. reflected the current limitations that exist to mitigate emissions across all farm systems and so carefully structured the emissions price in a way that:

   i. maintained affordability across the farming community as a whole by keeping the levy price as low as possible; while also

   ii. created an effective marginal price signal via incentives to encourage uptake of new technologies and practices to improve the emissions-efficiency of food production where they exist

b. Was mindful of the socio-economic and environmental downsides of pricing in a way that results in a significant decrease in current production and risks emissions leakage, as HWEN modelling identified that attempting to use of flat levy to directly drive emissions reduction would quickly become unaffordable with significant production and economic costs.

2.4 Government's proposed 'levy' in effect works as a Pigouvian tax. The consultation documents describe a system where the levy price will be regularly reviewed and increased with the primary consideration for the price being achievement of targets. This is a fundamentally different approach to HWEN, which uses the levy to fund actions that reduce emissions rather than deliver a direct price signal. It creates a greater risk of the levy overreaching, compared with encouraging the uptake of cost-effective mitigations by farmers, without needing to cut production. Consequently, the proposed pricing system is less sensitive to socio economic impacts and emissions leakage risks.

2.5 Government modelling highlights that the proposed pricing mechanism does not discriminate between achieving emissions reduction from the uptake of new tools or practices, or by cutting production. For example, the modelling report highlights potential for a 5.4% reduction in dairy greenhouse gas emissions coming from a 5.6% reduction in production even under the tailwind

scenario [6]that suggests greater mitigation tool availability prior to 2030. This risks significant economic impacts with the potential for any environmental benefits to be nullified by emissions leakage.

Linking nitrous oxide pricing to the abatement cost of CO2

2.6 The HWEN recommendations were for the nitrous oxide levy to be set at a rate sufficient to fund incentives for the uptake of new mitigation tools and practices, sequestration offsets, and research and development programmes. This approach was consistent with the proposed HWEN methane levy pricing system.

2.7 The Government's proposal is for the nitrous oxide levy to be based on the ETS unit price. Given the key driver for the ETS unit price is C02 abatement costs, this effectively means the cost of nitrous oxide is based on the abatement cost of carbon dioxide and not related to the cost of incentives, sequestration, or research and development to drive reductions in nitrous oxide. This risks the price becoming punitive for farmers over time as the ETS costs continue to increase. It also risks a significant disconnect between the levy revenue being raised and the funding requirements for investment to drive progress in line with the reduction pathway for nitrous oxide (noting that the pathways set in by the emissions budgets differ significantly between nitrous oxide and C02).

2.8 The HWEN proposal was for the investment of recycled funds to do the heavy lifting on incentivising emissions reductions and offsets, not for this price signal to come from an of the levy price for nitrous oxide that will escalate with the CO2-abatement costs. The later would risk a disruption to renewable energy supply, that led to a spike in the ETS unit price, feeding through to higher costs for nitrous oxide, and then placing downwards pressure on food supply.

Limited recognition for sequestration

2.9 He Waka Eke Noa put forward proposals for there to be seven categories of farm vegetation that could be recognised for their sequestration benefits. The Government proposal has cut this to two categories being recognised in 2025 is to provide significantly less recognition to farmers for sequestration offsets in 2025 than was proposed by He Waka Eke Noa.

2.10 This will create a strong sense of unfairness amongst the farming community and lessen farmers support for the system. It is also a key driver of the significant levy surplus which government modelling predicts.

Separation of sequestration from nitrous oxide in the pricing system

2.11 The Government pricing system proposal is for all HWEN sequestration to be placed into the ETS longer-term.

2.12 We are concerned that the separation of on-farm sequestration into another pricing system could result in unintended complexities for agricultural exporters in undertaking lifecycle assessments (LCA) and progressing SCBTi targets across their supply chains. Where sequestration has entered the ETS it might not then be able to also be counted as part of a farm's own emissions balance for LCA reporting of net emissions, despite the on-farm sequestration being a more favourable 'inset' by global customers for New Zealand export products. This may constrain the ability of New Zealand exporters to pursue market premiums.

[6] Appendix 4 Modelling results – GHG results and Appendix 8 Modelling results – commodity outputs. Impacts of climate change mitigation policy scenarios on the primary sector. MPI technical Paper No: 2022/20. September 2022.

2.13 This is an area which we suggest needs further examination prior to the proposed transition of HWEN sequestration categories into the ETS.

Retention of a processor level backstop

2.14 He Waka Eke Noa recommended a farm-level levy from the outset. This reflected the necessity of a farm level approach if farmers are to receive the individual recognition (via the levy price and incentives) that is necessary for the scheme to be an effective part of a behaviour change framework.

2.15 The Government's proposal has retained a processor level backstop until 2023. We note that the 2023 decision will primarily consider factors that are within the Government control and suggest that this delay in governments' full commitment to a farm-level scheme from the outset is the greatest risk to being able to one in 2025.

Potential expansion of the scope for reinvestment of levy funds

2.16 It is notable that the Cabinet paper refers to two potential options for reinvestment of levy funds that have never previously been tabled by officials in their participation within the HWEN partnership.

2.17 The first is repayment of the budget 2022 funding for the Centre for Climate Action on Agricultural Emissions. This would in effect make the Centre 100% industry funded, but without industry having 100% of the investor rights in relation to governance or IP.

2.18 The second is potential for offshore investment in emissions reductions or offsets to make up target shortfalls. This would imply either:

a. the development of a methane emissions markets internationally; or

b. the possibility of offsetting methane emissions through sequestration elsewhere in the world when this type of offset has not been a feature of the domestic approach to methane pricing.

Limitations of flexibility for farmers to form collectives

2.19 The flexibility for farmers to form collectives to measure, report and reduce their emissions in a cost-effective way has been an important priority for DCANZ, and other industry participants in the He Waka Eke Noa partnership, from the first (2019) proposal to Government. This is because it allowed:

- farmer owners with multiple individual operating entities to take to take a holistic approach to emissions reduction and offsetting the full set of landscapes they manage;
- farmers to collaborate with each other to enable larger scale investments that support emissions to be minimised in a least cost way;
- near farm entities, including dairy processors, greater flexibility for how they work with farmers to support emissions reductions.

2.20 While the provision for Māori Agribusiness to form collectives is a welcome aspect of the Government proposal, not extending this provision to all farmers creates a missed opportunity to enhance the implementation of the farm-levy pricing system.

A shifting of the goal posts on methane reduction targets

2.21 DCANZ has noted commentary in the cabinet paper released with consultation documents that *"The high price farm-level levy scenario might also just achieve the agriculture sector's indicative sub-target of our provisional second emissions budget of 191 MT C02-e*". We have further noted that the high-price farm-level scenario is a modelled methane reduction of 15%, which significantly exceeds the overall 2030 methane target.

2.22 This raises questions about whether the aggregate agriculture sub-targets in the emissions budgets are not only shifting the goal posts for methane under the proposed pricing system, but also weakening the split gas approach between long-lived emissions and methane.

3. Concerns with analysis and modelling underpinning the Government proposals

3.1 DCANZ has several ongoing questions and concerns regarding the economic impact analysis that supports the Government's emissions pricing proposal. These include:

- The modelled impacts on global emissions set out in Table 9, and particularly the use of a Tier 1 dataset for comparison of emissions intensity of New Zealand milk with that of alternative suppliers, to arrive at emissions leakage numbers;
- Lack of regional or national impact analysis; and
- Analysis of an alternative farm-level levy with a land-based rebate but no analysis of a farm level levy with an output-based rebate, despite this approach being seen as more favourable by the Climate Change Commission.

Global Emissions impact modelling – inaccurate assessment of leakage risk

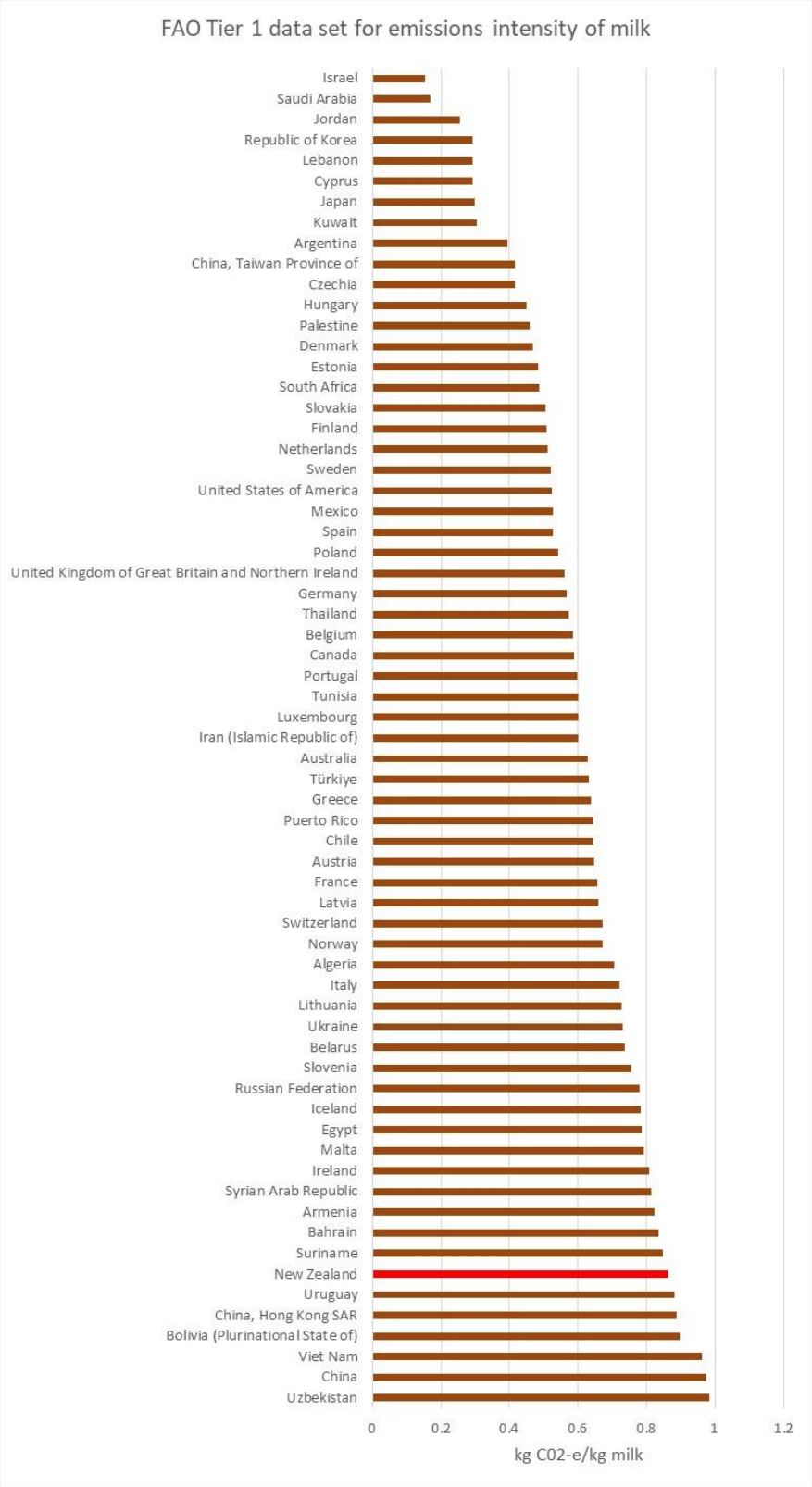
3.2 DCANZ is concerned that global emissions impact modelling presented in Table 9 in the consultation paper was based on the FAO Tier 1[7] dataset for the emissions intensity of milk. The FAO Tier 1 emissions data is not an appropriate basis for modelling potential emissions leakage risk. It is known to significantly overestimate the emissions intensity of New Zealand milk relative to alternative milk producers, due to its use of calculation defaults that are based on global proxies, and which do not accurately reflect New Zealand farming models.

3.3 This means the global impact modelling has resulted in emissions leakage numbers that very significantly underestimate the dairy emissions leakage that would arise from the Government's pricing proposal.

3.4 The inaccuracy of the FAO Tier 1 data is highlighted in Figure 1 below. The use of global proxies in Tier 1 emissions intensity calculations for milk results in New Zealand being ranked as the 59th lowest emissions intensity producer of milk. New Zealand's emissions intensity for milk is suggested to be four times higher than Israel's, behind Surinam and only slightly ahead of Uzbekistan. None of these numbers bear any resemblance to more robust LCA comparisons such as the one completed by Ag Research in 2021 which identified New Zealand as the lowest emissions producer of milk (as shown in Figure 2).

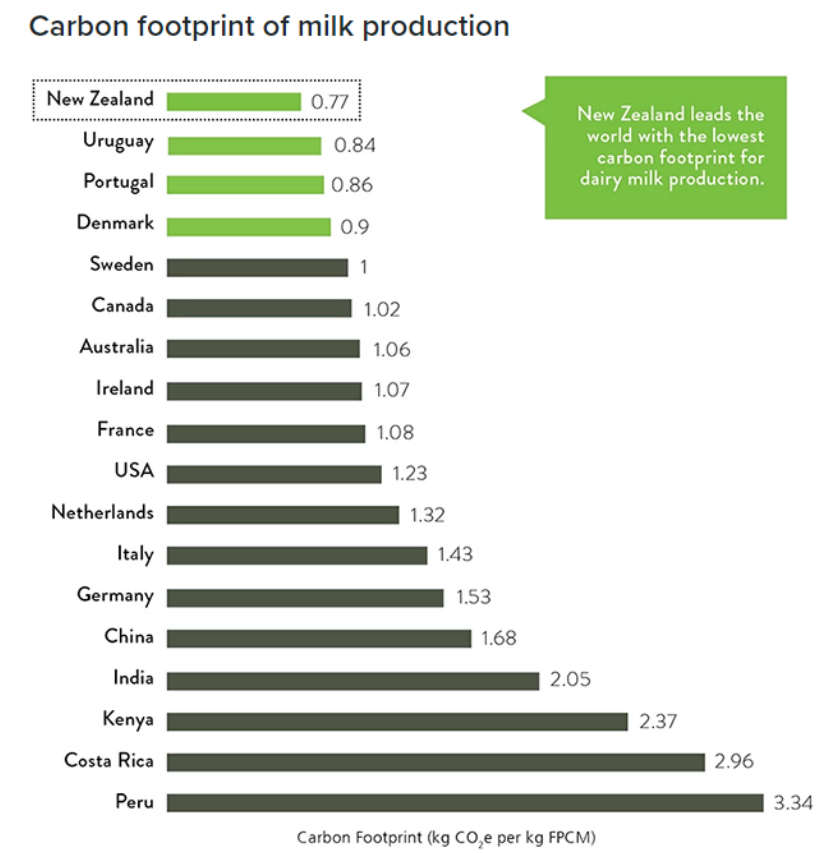
Figure 1: FAO Tier 1 data set for emissions intensity of milk (used in Government emissions leakage analysis)

[7] The government response to collated questions on modelling from HWEN industry partners states that: *The OECD/FAO model used to carry out the simulations, Aglink Cosimo, uses emissions data sourced from the FAOSTAT Emissions – Agriculture Database which uses emissions data based on Tier 1 of the IPCC guidelines for National Greenhouse Gas Inventories.*



Source: www.fao.org/faostat/en/#data/EI

Figure 2: Ag Research comparison of emissions intensity of milk (used in HWEN leakage analysis)



Source: AgResearch 2020: Mapping the carbon footprint of milk for dairy cows[8].

3.5 The use of Tier 1 emissions data is a major contributor to an inaccurately low dairy emissions leakage finding of 37%, compared with the HWEN emissions leakage report finding of 130% dairy emissions leakage. A 37% leakage rate leads to very different signals for policy development than a 130% leakage finding. More specifically:

a. the 37% emissions leakage finding included in the consultation document (based on Tier 1 data) suggests that emissions reductions achieved by cutting New Zealand production would still result in global emissions reductions; whereas

b. the 130% emissions leakage finding from the HWEN study indicated that for every tonne of emissions reduction achieved in New Zealand by reducing milk production, global emissions would increase by 1.3 tonnes.

3.6 The limitations of the FAO Tier 1 data sets for informing consideration of leakage risks were recognised in the independent leakage report commissioned by the HWEN steering group (which included MPI and MFE officials). This prompted the decision to pursue the more accurate basis for considering emissions leakage risk that was adopted in the HWEN emissions leakage report[9].

3.7 The HWEN leakage report finding, that decreasing production in New Zealand would increase greenhouse gas emissions globally, was a consideration in the recommendations put forward by the partnership for a pricing model focused on incentives to adopt emissions reducing tools and practices

[8] www.dairynz.co.nz/media/5794059/report_final.pdf
[9] Page 8: FINAL-Pricing-agricultural-GHG-emissions-impacts-on-emissions-leakage.pdf (hewakaekenoa.nz)

on farm. In contrast, the reductions in greenhouse gasses in the Government's proposal primarily come from reducing production.

3.8 The modelling report accompanying the Government consultation paper shows that the Government's proposed approach would reduce milk production by 5.6% to achieve a 5.4% reduction in the agricultural emissions from New Zealand dairy. Taking an approach that reduces New Zealand's but increases global emissions is counterproductive to the objective of reducing global emissions.

3.9 DCANZ is surprised that the government has used Tier 1 data as the basis for emissions comparison with other countries when the accuracy issues with Tier 1 data are well documented. For example:

- MPI technical paper: *Methodology for calculation of New Zealand's agricultural greenhouse gas emissions* (April 2022) sets out why New Zealand uses a country specific Tier 2 calculation method rather than the Tier 1. Reasons include ensuring emissions factors appropriately reflect our pasture-based farming systems, which underpins our world leading emissions footprint for milk; and
- the OECD study: *Global assessment of the carbon leakage implications of carbon taxes on agricultural emissions* (which is referenced in the consultation paper in relation to its findings that leakage risk decreases as mitigation technologies availability increases) also clearly states that the FAO data based on a Tier 1 calculation overestimates the New Zealand emissions intensity:

  "For New Zealand, emissions intensity figures calculated using emissions estimates from their GHG inventory (which is submitted to the UNFCCC) are more accurate than the aggregate figures used in this report and show a lower level of emissions intensity than in this study"[10].

3.10 Another shortcoming of the emissions leakage modelling, which has become apparent in discussions with officials, is that it assumes some substitution of New Zealand dairy products with vegetable oils but does not account for any emissions associated with vegetable oil production. The underestimate of leakage will be further extended by omitting to account for the emissions of these alternate products.

3.11 Emissions leakage risk has been an important aspect of the public debate and discussion during the consultation period. It also factored into in the development of the industry HWEN recommendations. This is because emissions leakage is a fundamental issue that must be appropriately addressed if we are to take action to reduce New Zealand greenhouse gas emissions in a way that positively contributes to global emissions reduction. Ensuring an accurate basis for public discussion of the global emissions impacts associated with Government's proposals is therefore critical.

3.12 Basing modelling on emissions calculations that, by using global default factors, overestimate the emissions intensity of New Zealand milk does not give fair recognition to New Zealand dairy farmers for their world leading emissions efficiency. It risks undermining the recognition of New Zealand milk's world leading carbon footprint internationally. Fundamentally, it also risks a policy direction being pursued that could cause significant costs to New Zealand rural communities and the wider economy for no global atmospheric gain.

3.13 During the consultation period on these government proposals, DCANZ wrote to Ministers requesting that this information be publicly retracted, with an accompanying explanation, to correct

[10] Page 12, OECD (27 October 2021). Global assessment of the carbon leakage implication of carbon taxes on agricultural emissions.

the public record on this matter. Pending a response to that letter, and for absolute clarity, we wish to restate our strong rejection of the leakage analysis underpinning the Government's proposal because:

a. It provides a flawed and false picture of emissions leakage issues with the government proposal. More specifically:

   i. it is based on FAO Tier 1 data whose methodology is widely acknowledged to underestimate the carbon footprint of New Zealand dairy; and

   ii. it does not include the emissions associated with vegetable oil production where vegetable oil fills some of the market gap created by reduced New Zealand's milk production.

b. It undermines confidence in the low carbon profile of New Zealand dairy production and the investment in foot printing, marketing and reputation made by New Zealand dairy companies on the back of their sustainability credentials; and

c. It does not provide for a well-informed public discussion and debate of the contribution the Government's proposals will have on the global fight against climate change as they seek to weigh up the benefits of the proposal against the significant economic and social costs for New Zealand.

Lack of analysis of an output-based rebate

3.14 DCANZ notes that Government modelling of options included a land-based rebate (which was considered at an earlier date by the He Waka Eke Noa partnership) but excluded any modelling of an output-based pricing variant.

3.15 As Government is aware, DCANZ was part of a minority of He Waka Eke Noa partners who advocated for further work to be done on an output-based rebate following independent economic advice that:

"The potential for emissions leakage to erode some of the global benefits of agricultural emissions pricing suggests the benefits of policy options that incentivise emission reductions via efficiency improvements and mitigation technologies, while disincentivising output reduction in New Zealand. This includes pricing options that use output-based rebates in the same way as output-based allocations of NZUs have been used for EITE industries in the ETS, or those that use revenue collected from an emissions charge to fund emission reductions limited to those not achieved by output reductions."[2]

3.16 We also note that an output rebate pricing variant was also supported in the in the May 2022 Climate Change Commission report: Advice on Agricultural Emissions. The Commission's report stated:

"Our analysis shows the most effective way to determine assistance is based on a farm's output.

Basing assistance on a farm's output means a farmer pays for all their emissions, but they get assistance with that cost based on their rate of production. This results in farmers being incentivised to reduce their emissions while maintaining or improving productivity."[3]

3.17 Notwithstanding, nether of the rebate options being the consensus recommendation of HWEN partners, it is unclear why:

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[2] https://hewakaekenoa.nz/wp-content/uploads/2022/06/FINAL-Pricing-agricultural-GHG-emissions-impacts-on-emissions-leakage.pdf, pp.19

[3] https://ccc-production-media.s3.ap-southeast-2.amazonaws.com/public/Advice-on-Agricultural-Assistance/CCC-4441-Agricultural-Assistance-Report_a4-WEB.pdf pp.11

a. the Commissions' recommendation of an output-based pricing approach to manage price exposure was not considered analysed government; when

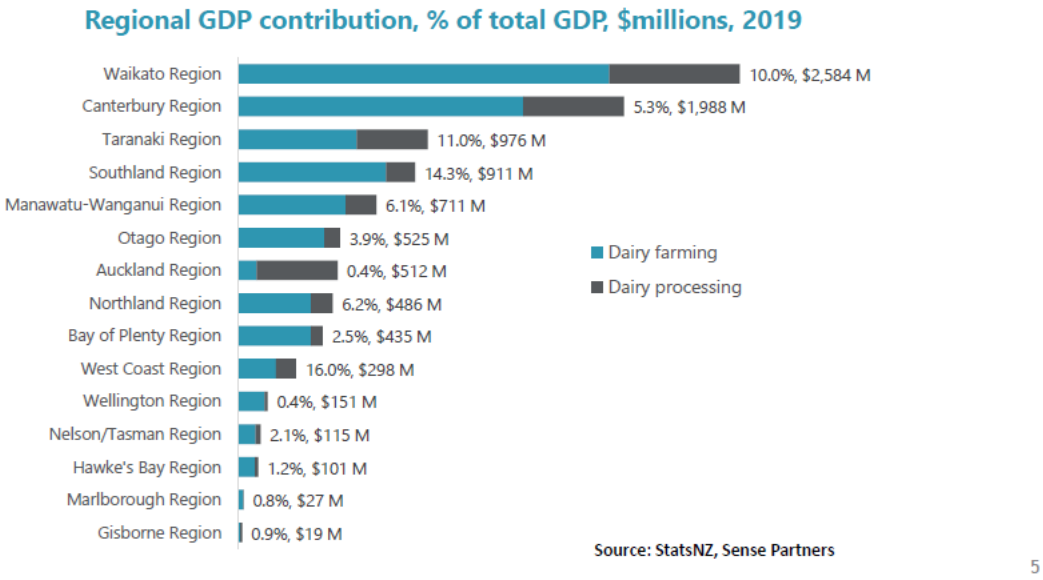
b. the land-based rebate that the Commission recommended against was considered.

Lack of robust economic impact analysis (regional, national, market)

3.18 The Government's impact analysis is notably absent of any modelled impacts on rural communities beyond reduction of net sector revenue, nor of the flow on effects for the national economy. It concerns us that agricultural emissions pricing policy direction is being set in the absence of a deep understanding of economic impact for New Zealand.

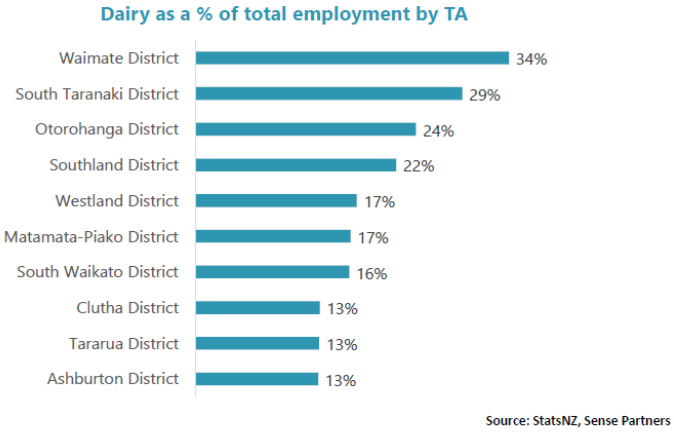
3.19 The modelled 5% loss in milk production would equate to over $1 billion less in export earnings from the dairy industry. It would also mean fewer dairy manufacturing jobs and less revenue flowing from the dairy sector to the thousands of other businesses that dairy supports. Addressing gaps in analysis in the Government's consultation document, Business New Zealand has identified areas within New Zealand where the current proposals will have a highly concentrated impact – based on sales data between upstream and downstream industries and on employment data by district. This analysis for the sheep, beef and dairy sectors suggests that rural communities such as those in Southland, Waimate, Clutha, Wairoa, South Taranaki particularly but also others will be vulnerable to the impact of these pricing proposals. Employment and population losses in these areas could have far reaching effects on the communities, considering the impact on the viability of social services such as schools and healthcare.

3.20 Analysis by economic consultancy Sense Partners[11] shows that Waikato, Taranaki, West Coast and Southland all receive more than 10% of their GDP from dairy farming and dairy processing combined.



3.21 Dairy farming is the top employer in nine districts and amongst the top 10 employers in 36, half of all districts across New Zealand. Dairy processing is amongst the top 10 employers in 10 districts. Dairy provides over one in three jobs in the Waimate District; one in four jobs in South Taranaki; one in five jobs Southland and Otorohanga; and one in six in Matamata-Piako and Westland. It provides over one in ten jobs in South Waikato, Clutha, Tararua, and Ashburton).

[11] Dairy's economic contribution 2020 update



3.22 Having a fuller understanding of the flow through impacts of estimated production losses on these areas would help in providing balanced consideration to the proposal.

3.23 In addition to the employment and general economic activity downsides of reduced dairy production, there would also be a lessening of economic resilience within the New Zealand economy. Dairy was a source of resilience for New Zealand during both the COVID-19 pandemic and the Global Financial Crisis.

3.24 The consultation document suggests that loss in export revenue from a decrease in agricultural production might be offset by increased demand for lower carbon products and potentially higher market returns. In particular the consultation document states that there is potential for producers of low carbon milk to achieve price premiums that result in a 20% increase in farm profit. We understand this figure is extrapolated from a niche market example and note that there are significant challenges in replicating niche market premiums at scale. More specifically, the markets identified where such premiums might be gained (North America and the EU) remain highly constrained for New Zealand dairy access. The preferences of policy makers and industry in these markets has been to protect their less efficient producers rather than enable consumers the option of purchasing low carbon New Zealand product – whatever price they had been willing to pay.

3.25 As noted earlier in this submission, the modelling report accompanying the consultation paper shows that the proposed pricing system delivers higher percentage cuts in dairy production than the corresponding decrease in greenhouse emissions, indicating an increase in the footprint of milk. This would diminish any market value from the pricing system. We therefore question the validity of the claim that costs for the sector from the Governments proposed approach to agricultural emissions pricing will be offset through value add to our exports.

4. Areas of support for the proposals and requests for modification:

4.1 The consultation document asks submitters whether modifications are required to the farm level system to ensure it delivers sufficient reductions in gross emissions from the agricultural sector. DCANZ submits that modifications are required to ensure that the system will:

a. endure over time;

b. gain the levels of farmer engagement necessary to support its success; and

c. deliver gross reductions to global emissions while contributing to sustainable food systems.

4.2 Our requested modifications are outlined below alongside the areas of the proposal that we support.

4.3 We acknowledge that Government's proposal did align with a number of the features of the pricing model recommended by HWEN. This is welcomed. However, in the absence of the changes we request below, and for the reasons we have outlined above, DCANZ is concerned that the pricing system will err towards:

- an unacceptable risk of diminished New Zealand (current and future) contribution to a sustainable global food system; that has
- a significant cost to New Zealanders and our global consumers; and
- no atmospheric gain.

4.4 This would be at odds with the Declaration on Transformative Solutions for Sustainable Agriculture and Food Systems which was adopted on 4 November 2022 by the OCED Agriculture Ministers, and which stated:

> ***"WE RECOGNISE** the urgent need for a transformation towards more sustainability and resilience to address the triple challenge facing agriculture and food systems of*
>
> - *ensuring food security and nutrition for a growing global population,*
> - *addressing environmental challenges, including climate change and biodiversity loss, and*
> - *providing opportunities for livelihoods for all farmers, including family farmers, and others employed along food supply chains."*[2]

A farm-level system from the outset

4.5 **DCANZ strongly supports the Governments proposal to introduce a farm-level system from day one**. As outlined earlier in this submission, we consider this is crucial for emissions pricing to be an effective in supporting agricultural emissions reduction in New Zealand that contributes to global emissions reduction.

4.6 **DCANZ also supports legal responsibility resting with the farm business owner.** This aligns with the HWEN recommendation that the farm business owner should hold ultimate legal responsibility for paying for emissions. As noted in the consultation paper, placing the legal responsibility with the farm business owner '*provides recognition of on-farm actions directly to the person making decisions about stock management and fertiliser applications'*. It is an approach consistent with incentivising those best placed to influence change, and therefore aligns with other regulatory approaches e.g., animal welfare and workplace safety

4.7 **DCANZ opposes the retention of a processor level backstop (or interim option) for another year.** This creates ongoing uncertainty regarding the model that will be in place for 2025. It also risks losing momentum in the progress being made for farmers to understand and actively manage their emissions. With over 94% of dairy farmers now receiving individual GHG reports prepared in accordance with calculation methods agreed by all 13 HWEN partners, including Government, farmers will be expecting to see any emissions levy they pay reflecting their own individual circumstances. This means a farm-level approach to pricing.

4.8 A farm-level system will start all farmers and growers on a journey and provide greater long-term benefits and opportunities such as capturing emissions efficiencies. It will also avoid the administrative costs associated with developing and implementing one system and transitioning this to another within a short timeframe. We should 'start the way we mean to carry on', rather than risk losing momentum through such a significant change early in the evolution of the pricing system.

4.9 DCANZ notes that three of the four factors that the consultation paper suggests would be considered as part of a decision to progress an interim processor level approach are within the Government's control, i.e.

- Establishment of governance arrangements and an implementation agency;
- Receiving funding for the system; and
- Getting the IT system and design and build underway.

4.10 A firm Government commitment for a farm-levy system in 2025 would provide healthy tension for these foundations of an on-farm system to be progressed in a timelier way than may be the case if there is an ongoing question about the starting point. DCANZ does not accept that delays in in delivery of factors within the Government's control should result in a processor-level levy being imposed upon dairy processors. This is especially the case when dairy processors have worked hard to ensure farmers are prepared for an on-farm system through the rollout of emissions reports and plans.

4.11 A processor-level levy will be seen as a blunt tax by farmers. Dairy companies consider that if it is imposed it will have a chilling effect on their ability to positively engage their farmers-suppliers in pursuing emissions reduction opportunities.

4.12 A processor level levy has been rejected by HWEN and is characterised in the Government's consultation document as a substandard approach. It therefore has no role, even as a fallback option.

4.13 DCANZ supports a limited delay to the commencement of pricing as resulting in a better outcome than losing momentum through a processor-level approach. DCANZ also suggests Government ensure officials have capability to deliver on final proposals instead of generating additional cost and business uncertainty by preserving a processor fallback option.

4.14 **DCANZ requests that Government give clarity to farmers that placing agriculture into the ETS is not a viable option**. The consultation paper highlights that the socio-economic impacts for New Zealand will be far more pronounced from placing agricultural emissions into the NZ ETS as currently legislated, compared to a farm level approach. This is a strong basis for removing this option from the current policy conversation and why we were confused to see the consultation questions continuing to seek feedback on it as an option for 2025. The modelling shows the ETS would result in a 10% reduction in dairy sector net revenue. Ten percent of dairy revenue is equal in size to the New Zealand's entire wine sector. This degree of impact on the economy cannot be justified when considering the significant overshoot of targets that model suggests occurs under the NZ ETS (e.g., an 18% reduction in methane compared to the 2030 10% target).

4.15 **DCANZ also submits that synthetic N-fertiliser should be priced at the farm level.** Farmers' use of synthetic-N fertiliser is an element of integrated farm systems management. Separation of nitrous oxide arising fertiliser use from other nitrous oxide emissions in the pricing system does not provide for an integrated, whole farm systems, approach to agricultural emissions management.

4.16 As set out in the joint HWEN partner submission, including synthetic-N fertiliser in the pricing calculation at the farm-level will:

a. Make it easier for farmers to understand their total agricultural greenhouse gas emissions and how synthetic N-fertiliser use can reduce these. For example, it also allows for the interactions between the different farm management areas (stocking policy, feed consumption and type, and fertiliser use) to be better explored and sustainable farm mitigation strategies developed that

reduce both methane and nitrous oxide emissions. This means farm-level pricing is more likely to result in enduring GHG reductions than pricing synthetic N-fertiliser through the NZ ETS;

b. Provide an opportunity to encourage and reward best practice fertiliser use. There are significant Government and privately funded research projects currently exploring how to minimise nitrous oxide emissions from synthetic N-fertiliser use. A farm-level pricing system would provide an opportunity to reflect this science and encourage best practice fertiliser use in the different NZ farming environments (landform, soil, and climate);

c. Provide for the range of current and future synthetic N-fertiliser mitigation technologies, for examples incorporation, field application of inhibitors and precision placement. The NZ ETS can only recognise a change in fertiliser type and total synthetic N-fertiliser use;

d. Better support and integrate with Government policies and sector initiatives around freshwater ecosystem health improvements, including the setting and achievement of catchment limits and targets required under the National Policy Statement for Freshwater Management, and the Freshwater Farm Plan regulations;

e. Allow for the pricing of agricultural nitrous oxide emissions to be delinked from the, primarily carbon dioxide abatement cost driven, ETS pricing; and

f. Ensure that the revenue raised from synthetic N-fertiliser emissions pricing can be directed back into incentives and research and development for nitrous oxide. Commentary on the cabinet paper released alongside the consultation document suggests that this same recycling of revenues back to the sector may not be possible if the emissions are priced via the ETS.

4.17 We understand that one of the considerations for looking to include synthetic nitrogen fertiliser in the ETS was the potential to simplify the HWEN pricing system through a reduced number of participants (e.g., removing growers or producers whose only source of agricultural emissions is from synthetic fertiliser use). DCANZ suggests that similar efficiencies could be gained by enabling these growers or producers to form collectives or work through agents to report and pay for their emissions (see DCANZ recommendation on collectives, below).

A price setting mechanism that supports our contribution to global emissions reduction

4.18 DCANZ requests that adjustments are made to the price setting model to better focus it on incentivising the uptake of emissions reductions within a sector that is already emissions efficient compared to alternative global sources of supply while guarding against unintended outcomes.

4.19 DCANZ submits that both methane and nitrous oxide levies should be set as unique prices, and opposes nitrous oxide levies being linked to the ETS price

4.20 We appreciate the Government's proposal to maintain the split gas approach to treatment of long-lived gases and methane into the pricing model for agricultural greenhouse gases. It is appropriate to align all levels of the New Zealand legislative framework for greenhouse gas emissions with the scientific understanding that methane has a different atmospheric impact to long-lived gases and therefore has a lower level of emission reductions required to achieve no additional warming. A unique levy price for methane will ensure the pricing system can be responsive to the opportunities and costs associated with mitigation of methane emissions.

4.21 Having a pricing system that is responsive to the opportunities and costs of nitrous oxide abatement is also appropriate. Linking the price of nitrous oxide to the NZ ETS unit price means that the levy for nitrous oxide will be most informed by the abatement costs of carbon dioxide. The significantly

different circumstance that exists between the abatement opportunities and costs for fossil fuel related carbon dioxide emissions, and those for agricultural emissions make this inappropriate. It would risk significant escalation in nitrous oxide levy rates that are not necessary to achieve change under the proposed levy-incentive model to support agricultural nitrous oxide reduction and could prove to be punitive for farmers. It also brings introduces an additional complexity in the form of reviews of the ETS unit price discount for nitrous oxide despite this type of allocation not otherwise being a feature of the levy-incentive model that is being pursued for agricultural emissions. We disagree therefore with the proposal by government to linking pricing of nitrous oxide with the ETS unit price.

4.22 HWEN recommended setting a unique price for agricultural long lived gas emissions[12] at a level required to fund the total amount of sequestration recognised in the system, fund incentive discounts for approved actions for nitrous oxide reduction, fund research and development for nitrous oxide reduction and cover a share of administrative costs.

4.23 This reflected that current and future eligible sequestration under HWEN, plus uptake of available technologies to reduce nitrous oxide emissions, represents a credible plan for primary sector long-lived gas emissions in the early years of the agricultural emissions pricing scheme. We consider it appropriate that over the longer-term a primary sector strategy be developed to determine the pathway for nitrous oxide to reach the net-zero in 2050.

4.24 **In alignment with the joint HWEN submission, DCANZ recommends that levy prices are:**

- **a. set for methane and nitrous oxide (individually) at the minimum level required to:**
  - **i. Fund incentive discounts for approved actions for reductions in either methane or nitrous oxide;**
  - **ii. Fund additional research and development for either methane or nitrous oxide;**
  - **iii. In the case of nitrous oxide, fund the total amount of sequestration recognised in the system; and**
  - **iv. Cover a share of administration costs.**
- **b. for the first five years:**
  - **i. Capped at no more than 8 cents per kg of methane in 2030, with a starting level of no more than 5 cents in 2025 (noting that there is expected to be fewer mitigations and therefore less funding required for incentives at the outset);**
  - **ii. Capped for nitrous oxide at no more than the NZ ETS unit price with a discount that starts at 95% in 2025 and which reduces by 1 percent each year (e.g., capped at the rate that farmers would have paid for nitrous oxide in the ETS).**

4.25 The primary purpose of the levy is to create a fund that supports collective investment (via incentives, R&D, and sequestration credits) in activities that support farmers to reduce emissions and do so in an affordable way for the sector as a whole. The levy rates should be set at a level that delivers this outcome without building surpluses.

4.26 The $100-140 million surplus identified in the consultation document is excessive and risks being a negative point for farmer engagement in the system.

[12] Agricultural long-lived gases are predominantly nitrous oxide from livestock and a small amount of CO2 from urea.

4.27 Capping the initial levy prices for a 5-year period will provide certainty and stability for farmers as they engage with this new system. This will support farmer confidence in the scheme and better support a positive and proactive focus on active management of the emissions within their farming systems. A similarly cautious approach, which aimed to provide stability and certainty for participants, was followed in the early years of the ETS when there was a price cap.

4.28 For methane, the consultation paper modelling suggests at a levy price of 8 cents per kilogram will overshoot the 10% emissions target. Considering the excessive level of levy surpluses generated and the overshoot of the target, we submit that a lower level starting methane levy price will:

a. be sufficient to fund incentives, research and development, and administration;

b. provide a smoother transition pathway for the sector into this new system; and

c. by ensuring the levy is no more costly than necessary, better manage any emissions leakage risk.

4.29 DCANZ is a party to the joint HWEN submission with other partners which recommends the levy be capped at no more than 8 cents per kilogram of methane in 2030, with an initial rate of 5 cents per kilogram of methane in 2025 (noting that mitigation technology and therefore funding requirements for incentives is expected to be lower in the early years).

4.30 Having a methane starting levy of no more than 5 cents per kilogramme of methane and a cap of no more than 8 cents per kilogram of methane will ensure farmers have beneficial certainty in the early years of the scheme and avoid the build-up of excessive levy surpluses, while also enabling flexibility for adjustments as the incentives funding requirements become clearer.

4.31 To fully maintain a split-gas approach to emissions pricing it is important that:

a. the methane levy be set and used to fund methane mitigation related activities and an appropriate share of system administration costs; and

b. the long-lived gas (nitrous oxide) levy be set and used to fund long-lived gas mitigation and offsetting related activities, along with an appropriate share of the system administration costs.

4.32 Beyond the initial 5-year period, we support levies being reviewed every three years.

4.33 **DCANZ submits that the following factors should be clearly embedded in legislation to guide the review and adjustment of levy prices over time:**

a. Trajectory of emissions reductions towards emissions targets

b. Availability and cost of (current and future) on-farm mitigations

c. Social, cultural, and economic impacts on farmers, regional communities, and Māori agribusiness

d. Best available scientific, mātauranga Māori, and economic information

e. Emissions leakage from production moving offshore, and impact on food security.

4.34 These factors were proposed by HWEN to provide balance to a pricing approach that is not governed by either absolute market forces (as a trading system would do) or by being set against an arbitrary target driven price. They provide clear guidance to the authority making recommendations on the pricing parameters in a way that will better ensure broad agricultural emissions pricing objectives are met. Together these factors will provide for a levy price, over the long-term, that:

a. signals to farmers the benefits of emissions reductions, while remaining affordable and pricing emissions with equal environmental impacts equally;

b. enables collective investment in the emissions reductions via funding for incentives and research;

c. ensures the emissions reduction efforts of New Zealand farmers translate into global emissions reductions.

4.35 DCANZ submits that a Systems Oversight Board should be established to make formal recommendations to Ministers regarding price system adjustments, and that this board should include a mix of both climate change and agricultural sector expertise.

4.36 This Systems Oversight Board members should be appointed:

a. in accordance with a skills matrix agreed by industry and Government; and

b. by an Appointments' Committee whose members are jointly agreed by industry and Government.

4.37 For avoidance of doubt this is not a request for industry to set its own levy prices. It is however aimed at ensuring:

a. that decision makers receive advice informed by subject matter experts, as well as those most affected;

b. the advice is formulated based on high quality evidence considered, noting the considerable expertise, technical knowledge and real-world data that sits within industry; and

c. industry participants having confidence in the decisions made and, by doing so, the stability of the system over time.

4.38 The System Oversight Board would work closely with the Independent Māori Board and sector bodies to recommend to Ministers – appropriate levy rates, the price of sequestration, and the value of incentive discounts used to incentivise the adoption of mitigation technologies based on technical input from Implementation Agency and other stakeholders. This breath of advice recognises that the levy, incentive payments, and sequestration payments work together and interact with one another as core parts of the pricing system.

4.39 The Government could still receive advice on pricing from the Climate Change Commission and Ministers would still be the ultimate decision makers, but we think it is important that the sector has a stronger voice in the process and that this be a formal role that goes beyond simple consultation.

4.40 **DCANZ submits that the incentives system should be focused on uptake of emissions reducing tools and practices that contribute to both lower absolute emissions and lower product emissions footprints**.

4.41 This is necessary to ensure our emissions reductions contribute to lower emissions from the global food systems. Not all practices that lower the emissions from a farm system do so in a way that maintains, or further lessens, the emissions footprint of the milk or meat produced from that farm. For example, once a day milking (which is included in the consultation modelling) lowers a farms' emissions if stocking rates are held constant, but achieves this by reducing per cow milk production, and by doing so increases the emissions footprint ('intensity') for that milk. A pricing and incentive system which encourages farm practice changes that increase milk (or meat) emissions intensity will have a negative outcome in terms of responding to global customer requirements.

4.42 DCANZ also submits that New Zealand should assess progress towards emissions targets on a net basis taking into account emissions leakage.

4.43 As the first country to price agricultural emissions, it is important that New Zealand monitors and assesses the effectiveness of its approach. This should be done in a way that has a clear line of sight

to the ultimate goal of reducing global emissions from food systems and therefore should account for emissions leakage.

4.44 Accounting for emissions leakage arising from the pricing system when assessing progress in reducing emissions would be consistent with the advice that Ministry for the Environment provides to businesses for reporting on mitigation. For example, the *interim guidance for voluntary climate change mitigation* states that for mitigation to be considered credible in reducing or removing emissions it must avoid leakage, and if leakage does occur the project should be measuring and deducting any leakage related emissions from the total climate change mitigation claimed[13].

4.45 Earlier in this submission we highlight the flaws in the emissions leakage that was modelled for this consultation paper. This was due to inaccuracies in the base data set for comparing emissions intensity of production between countries. We support the work being undertaken by New Zealand officials to improve the robustness of this type of global data to allow such assessment to occur more robustly. In the interim, we support the use of published footprint comparison studies such as those completed by Ag Research to support leakage assessments.

4.46 Some government representatives have indicated a degree of scepticism as to the degree to which emissions leakage should be into consideration given the range of other factors that may influence production in New Zealand and abroad. We suggest that there is useful policy and methodological precedent in the field of agricultural trade policy (e.g., trade distorting subsidies) that may be useful to assess whether leakage is occurring or may occur. This established agri-economic approach is used to identify where a country's subsidy policies have altered the competitiveness of producers in a production and trade distorting way. It considers the many other factors that regularly result in variation of production, which have been suggested as barriers to being able to monitor leakage.

4.47 DCANZ would welcome further engagement with Government to co-design solutions in this area.

Emissions calculations and reporting evidence: not overly onerous and providing for mitigations to evolve

4.48 DCANZ welcomes the proposal for initial emissions calculation methods that are largely aligned with the HWEN recommendations. We support starting with a simple calculation method and having this updated annually to incorporate new science and proven technologies.

4.49 **DCANZ submits that there should be a firm date for commencement of more complex calculation methods**. The ability to have emissions calculated with a more specific set of individual farm systems parameters such as pasture and forage type is an important aspect of incentivising farmers to manage their farming systems in a way that avoids any excess emissions for their production. The consultation document highlights the additional points of information that could be included in more detailed farm emissions calculations. It is notable that these additional information points for a more complex calculation:

a. relate to factors that are within farm management decision making influence; and

b. if included in a detailed calculation would allow for a greater range of farm efficiencies to be recognised.

4.50 Farmers will be most motivated by a system that recognises their individual decision making. In turn, this motivation through recognition of individual decision making will help maintain momentum for New Zealand agricultural emissions reductions as new tools are developed.

[13] www.environment.govt.nz/assets/publications/interim-guidance-voluntary-climate-change-mitigation.pdf

4.51 For a system to maintain momentum in farm level action, momentum needs to be maintained in its own design evolution. To this end, a commencement date for farmers to be able to engage with more complex calculations should be set. We recommend this be from 2027.

4.52 DCANZ is comfortable with the proposals for data and corresponding evidence requirements for 2025 and strongly supports the intent for Government to seek to align these requirements with data requirements for other purposes wherever possible.

Full revenue recycling to advance least cost emissions reduction

4.53 DCANZ submits in support of the proposal to recycle levies. We recommend that legislation sets out that revenue will only be used for driving emissions reductions in the agricultural sector and support for farmers to reduce their emissions.

4.54 DCANZ welcomes the Government proposal (aligned to HWEN recommendations) that revenue raised from the levy would be used to drive emissions reductions, and to support farmers and growers to reduce their emissions. We also appreciate the adoption of the principles that revenue recycling decisions must be:

- justifiable and effective;
- transparent and accountable;
- equitable;
- integrated and adding value to existing funding;
- enabling and user friendly; and
- credible.

4.55 DCANZ has noted that the Cabinet paper released alongside consultation document included commentary about the potential for emissions revenue to also be used to 'pay back' government commitments to co-funding of agricultural emissions research and to contribute to fund purchases of emissions units for any shortfall against New Zealand's nationally determined contribution under the Paris Agreement.

4.56 We do not consider that use of levy revenue to 'pay back' existing Government funding commitments for research would be consistent with the principle that revenue recycling would be 'adding value to existing funding'.

4.57 Neither do we consider that levy money should be used for purchasing international credits to make up any shortfall against New Zealand's Nationally Determined Contribution. We also note that the Climate Change Commission has forecast potential costs of making up shortfall in New Zealand's Nationally Determined Contribution through international purchasing as being up to $30 billion. Our understanding is that Nationally Determined Contributions were intended to reflect the reductions that countries identified they could achieve domestically. This level of purchasing from international markets seems out of step with the intent for Nationally Determined Contributions.

4.58 DCANZ recommends that the strategy for recycling of revenues be set by the Systems Oversight Board, with input from industry technical advisory groups.

Fair recognition for sequestration alongside pricing of emissions

4.59 DCANZ submits that it is important that if emissions are priced, all credible forms of sequestration are also recognised and rewarded.

4.60 DCANZ is a party to the joint submission by HWEN partners, which includes a range of recommendations to improve the sequestration recognition within the pricing system, including:

- the sequestrations categories that were put forward in the He Waka Eke Noa Recommendations Report being eligible for payment from 2025;
- the emissions factors used in the case study modelling in the He Waka Eke Noa Recommendations Report, noting these are informed by published NZ reports, being used as the starting point for the emissions factor determination process;
- a discounted price being paid for sequestration based on the current day NZU price;
- post-1989 (2008) permanent vegetation being transitioned, once the NZ ETS can more readily accommodate sequestration from genuine permanent vegetation; and
- a co-investment approach being enabled to fast-track new categories to enter the NZ ETS, but that this should only be for the research to establish the credibility of the category.

4.61 The Government proposal excludes many of these forms of sequestration from the pricing incentives. This would be a failed opportunity to recognise activities that reduce New Zealand's emissions footprint. We note that the ineligibility of certain sequestration types would severely limit the opportunity for farmers to offset their emissions through prescribed actions they can take on farm. Not providing the potential to recognise all categories of farm sequestration will have a significant negative impact on farmer's attitudes to the system and risk broader disengagement with respect to proactively managing the emissions on their properties. That would risk the effectiveness of emissions pricing as part of a broader behaviour change framework.

4.62 DCANZ submits that further consideration is needed prior to transitioning HWEN sequestration into the ETS.

4.63 As noted earlier in this submission DCANZ is concerned that a separation of farm-sequestration from farm emissions in the pricing systems could result in unintended consequences for farmers sequestration being counted towards SBTi targets or lifecycle assessments. These targets and assessments are increasingly important in commercial markets. It is important that they way farmers are priced for emission and recognised for sequestration within the New Zealand emissions pricing frameworks does not create unintended barriers to them also receiving commercial market recognition for the net emissions balance on their farms.

Ability to form collectives

4.64 DCANZ submits that all farmers should be able to form collectives to measure, manage and report their emissions from the outset.

4.65 There should be broad flexibility for farming membership of collectives, for example catchment groups, multiple farms with common ownership, or farmers who are working with a common-near farm commercial entity to support their emissions reduction efforts. The ability to form collectives was a central part of the 'balance' in the HWEN proposal (as it provided additional flexibility on how obligations would be met without compromising pricing system target reductions) but has been removed for all but Māori entities in the government proposal.

4.66 Where near-farm commercial entities (e.g., dairy processors, meat processors, rural service suppliers, or other farmer co-operatives) participate in a collective, it must be at their own commercial discretion. There should be no regulatory compulsion to do, so as this would lessen farmer ownership of their emissions responsibilities.

4.67 Under collectives the legal compliance obligations for emissions pricing must continue to sit with the individual farmer.

4.68 Flexibility for near farm entities to support farmers who are working in a collective will enhance the options available to dairy processors to support farmers successfully transitioning into the emissions pricing framework.

Systems establishment funding that is equitable with other sectors

4.69 DCANZ submits that Government should provide funding for the establishment of the system on an equitable basis with the funding provided for the forestry ETS system.

4.70 DCANZ understands from its participation in MPI's industry cost recovery reference group that cost recovery is only now being implemented for administrative funding of the forestry ETS system. It is therefore our understanding that Government funded the build and early implementation of this system. In contrast Government is proposing that the system for agricultural emissions pricing be self-funded. It is understood that this means that establishment and operation of the regulatory pricing system is intended to be solely covered by farmer participants in the system.

4.71 Equity is a key principle set in Treasury guidelines for cost recovery by government agencies, and one of the principles for the MPI cost recovery system. We understand that consideration of equity extends to whether costs are recovered for similar activities undertaken by the same agency or another agency. It appears inequitable for farmers to fully fund the establishment of the regulatory pricing system for agricultural emissions when foresters did not fund the regulatory system for managing sequestration in the ETS.

5. Transitional assistance

5.1 DCANZ submits in support of a mechanism for farmers to apply for levy relief on a case-by-case basis under specific criteria, that includes where:

- access to sequestration (both NZ ETS and He Waka Eke Noa) is severely restricted by national and local body regulation; and
- no access to effective mitigation technologies exists; and
- emissions pricing has had a severe impact on financial viability.

5.2 It is important that businesses that receive transitional support in the form of levy relief will be capable of being viable over the long term with emissions pricing and that the relief be for a defined period of time to allow for transition.

5.3 DCANZ opposes transitionary support which would have the effect of:

a. providing sector specific subsidies, distorting land use flexibility, or shielding otherwise unprofitable businesses from market forces. This would constitute a step back towards the type of market and production distortive agriculture policy which New Zealand moved away from in the 1980s.

b. varying the price of a unit of the same greenhouse gas based on the production system from which it arises. This is inconsistent with the effects-based principle underpinning New Zealand's broader environmental policy framework and a clear move away from outcomes based agricultural policy regulation.

c. using emissions levy funds to provide incentives for activities with an alternative purpose that do not result in emissions reduction (e.g., funding other environmental outcomes). This would be

inconsistent with the principle for levy revenue recycling decisions to be justifiable and effective for the purposes of reducing agricultural emissions.

5.4 As the first country to introduce agricultural emissions pricing it is important that New Zealand does not create precedents that would be unhelpful to New Zealand as it seeks to prevent and resolve instances of distortive agricultural policy and environmentally harmful subsidies globally.

5.5 Were Government to consider it needed to evolve its agricultural emissions pricing policies in a way that better guarded farm profitability and recognised differences in emissions availability between sectors, DCANZ would suggest that a farm-level levy with an output-based rebate be revisited. Notwithstanding our full and ongoing support for Government to adopt the May 2022 HWEN recommendations in their entirety, we observe that a farm-level levy with an output-based rebate could also address many of the arguments that may be put forward as justification for broader transitional measures. Specifically, an output-based rebate set at the subsector level could recognise differences in mitigation availability and minimise impacts on production and profitability whist maintaining an incentive for uptake of a full range of mitigation options. It is also more likely to support New Zealand agricultural production achieving the emissions intensity improvements that are valued by markets, than approaches that shield farmers from efficiency drivers.

6. Efficiency of the regulatory model to approve new mitigation tools

6.1 The modelling that has accompanied the Government pricing system proposal, and the modelling undertaken by HWEN, both highlight the important role of new mitigation technologies in allowing for a smooth transition to low emissions farming systems, while minimising risks to farm production and profitability. The ability to achieve to achieve emissions reductions targets in a way that is good for New Zealand and good for the global atmosphere relies upon the availability and use of products such as environmental inhibitors.

6.2 As noted in the introductory section to this submission, dairy companies are investing to support farmers having a greater range of new tools. Achieving timely delivery of these products into farmers hands will require timely regulatory approval processes.

6.3 DCANZ has also supported the establishment of an improved regulatory framework to ensure appropriate efficacy for environmental inhibitor products that are being placed on the New Zealand market for use in farming systems. We welcomed the recent completion of regulatory changes in this regard. It is now critical that the updated regulatory framework operates efficiently, and with good harmonisation between the separate Environmental Protection Agency and Agricultural Compounds and Veterinary Medicines Act processes, to allow new products to progress through the registration process as quickly as possible.

6.4 We advocate for this to be an area of priority for government agency resourcing. We also suggest that options could be considered to provide fast track regulations for products that have progressed through robust third country registration processes and where their application within New Zealand farming systems will be similar.

6.5 It is important that New Zealand does not lag behind as new environmental inhibitor products are being rapidly brought to market in multiple other global geographies.

7. Consideration of tradable methane quotas

7.1 DCANZ considers a tradeable methane quota to be an option that should be given future consideration. To remain effective the system would need to evolve over time, particularly as the range of mitigation options available to farmers increases.

7.2 A levy-incentive system offers an effective and affordable approach to supporting emissions reductions at the current time when mitigations are limited. However, a wide availability of mitigation options that are taken up by greater number of farmers may challenge the financial balance of the system.

7.3 DCANZ has a longstanding preference for market-based systems because of their ability to provide the necessary flexibility for lowest cost solutions to be achieved, and to promote efficient use of available resources (which in an emissions context includes the emissions budget for that greenhouse gas). Market based mechanisms also provide for more effective and efficient approach to price discovery.

7.4 DCANZ was a supporter of considering market-based approaches during the HWEN process of considering pricing options, but also valued an outcome where there was broad consensus across all primary sector organisations on the pricing model. This is needed to support the successful implementation of the system.

7.5 A review of the system in 2030 would be the appropriate point to further consider an evolution towards more market-based settings. We support the immediate focus for 2025 being on establishment of the farm-based system.

Appendix: DCANZ members

Dairy Goat Co-operative

Danone Nutricia

Fonterra Co-operative Group

Goodman Fielder

Mataura Valley Milk

Miraka

NIG Nutritionals

Oceania Dairy

Open County Dairy

Synlait Milk

Tatua Co-operative Dairy Company

Westland Milk Products

Yashil