CLASSIFICATION

Office of the Minister of Agriculture

Office of the Minister of Climate Change

Cabinet

Final policy decisions on agricultural greenhouse gas emissions reporting and levy system

Proposal

1. This paper seeks Cabinet's agreement on final policy decisions to draft primary legislation to establish an agricultural greenhouse gas emissions reporting and levy system.

Relation to government priorities

2. On 2 December 2020 the Government declared a climate emergency that, "demands a sufficiently ambitious, urgent, and coordinated response across government to meet the scale and complexity of the challenge" [CBC-20-MIN-0097 refers]. Pricing agricultural emissions is a necessary part of this response, which is why it is a key action in the Government's emissions reduction plan.

Executive Summary

3. On 14 August 2023, Cabinet agreed to:

    3.1. Develop a standardised farm-level emissions calculation methodology by April 2024 at the latest;

    3.2. Seek final policy decisions, before the 2023 General Election, on the establishment and implementation of a farm-level, split-gas levy system for agricultural emissions to enable mandatory reporting from Q4 2024 and pricing from Q4 2025 [CAB-23-MIN-0370 refers].

4. Cabinet also invited the Minister of Agriculture and the Minister of Climate Change to provide a detailed Cabinet paper before the 2023 General Election on a farm level system, as described in the December 2022 section 215 report [CAB-23-MIN-0370 refers].

5. This paper fulfils that request. It seeks policy decisions on a farm-level levy system for agricultural emissions, in particular decisions related to:

    5.1. The purpose of the levy

    5.2. Who participates in the mandatory reporting and levy system

    5.3. Setting levy prices

5.4. Recognising and rewarding incentives and sequestration

5.5. Responsibilities for the levy; and

5.6. Operational requirements.

6. Making these decisions now is critical to meeting our committed timeframes of having mandatory reporting in place from Q4 2024, and pricing in place from Q4 2025. These timeframes are what the sector, the New Zealand public, and our international partners are now expecting.

Background

7. On 14 August, Cabinet decisions were sought on progressing an agricultural emissions pricing system. Cabinet:

7.1. Noted that work is underway to develop a standardised farm-level emissions calculation methodology, to be finalised by April 2024 at the latest;

7.2. Agreed to enable mandatory reporting of farm-level agricultural emissions from Q4 2024;

7.3. Agreed to seek final policy decisions, before the election, on the establishment and implementation of a farm-level, split-gas levy system for agricultural emissions to enable mandatory reporting from Q4 2024 and pricing from Q4 2025 [CAB-23-MIN-0370 refers].

8. Cabinet also invited the Minister of Agriculture and Minister of Climate Change to provide a detailed Cabinet paper before the 2023 General Election on a farm-level system, described in the December 2022 Section 215 report, that includes the following features:

8.1. price emissions from biogenic methane and long-lived gases (nitrous oxide and carbon dioxide) separately, set at low levels initially;

8.2. levy prices, to be set in 2024, with the primary consideration being to achieve emissions reductions in line with legislated targets and emissions budgets, taking into account additional factors such as availability and cost of on-farm mitigations, and social, cultural and economic impacts on farmers, growers and communities;

8.3. revenue raised from the levy would be recycled back in the system, in line with a strategy outlining spending priorities to mitigate agricultural emissions and operate the system. Levy revenue may also need to be used for sequestration payments if an interim mechanism to the New Zealand Emissions Trading Scheme (NZ ETS) or other mechanism is required;

8.4. incentive payments will be available to recognise the uptake of mitigation technologies that reduce emissions;

8.5. the Ministry for Primary Industries (MPI), the Ministry for the Environment (MfE) and Inland Revenue (IR) will be responsible for implementing the system;

8.6. the costs associated with the establishment of the levy system and the first year of mandatory reporting will be paid for by the Crown from within the $149.8 million tagged operating contingency. From Q4 2025, the levy would be fiscally sustainable and meet all ongoing administration and levy offset expenses.

9. The policy decisions sought in this paper give effect to Cabinet's decisions above, through enabling the drafting of legislation for introduction post-election.

Section 1: Purpose of the levy

10. The overall purpose of the proposed levy is, as part of a wider programme, to achieve emissions reductions in line with New Zealand's domestic and international climate change targets and emissions budgets.[1]

11. The levy will achieve this in two ways:

11.1. By raising funds that, after paying for administrative costs, will be used to support the uptake of mitigation technologies as they become available, and build the capacity and capability of the sector to further encourage emissions reductions in the agricultural sector; and

11.2. By imposing a price on agricultural emissions that creates an incentive for farmers and growers to change practices and adopt new technologies to reduce emissions.

12. Modelling suggests that through the combination of the price signal and use of levy revenue, when combined with other policies, even relatively low emissions prices (compared to the price faced by other emitting sectors through the NZ ETS) might be sufficient to achieve emissions reductions in line with New Zealand's 2030 domestic biogenic methane target. It would also contribute towards achievement of the emissions budgets and current Nationally Determined Contribution (NDC) when combined with other environmental and agricultural policies, such as the Essential Freshwater Programme.

13. We propose that levy revenue will be used:

13.1. to fund administration costs;

13.2. for incentive payments for adopting emissions-reducing technologies and on-farm practices, which are important to help reduce emissions to meet

[1] Note that this does not imply that this pricing system itself needs to have an international component, only that domestic reductions are an important part of meeting our international obligations under the Convention, Protocol and Paris Agreement. This aligns with the purpose of the NZ ETS and the synthetic greenhouse gas levy (see s3 of the CCRA).

our domestic and NDC targets, and to encourage farmers and growers to reduce emissions through the uptake of technologies and practices2;

13.3. for building sector capacity and capability to comply and/or reduce biological emissions, such as via education and support services for farmers and growers, technology investment, and research.

13.4. to provide funding to support Māori participants (the Māori low-emissions transition fund) as the levy is expected to have disproportionate impacts on the development of Māori land. The purpose of this fund would be to assist Māori to reduce on-farm emissions and meet the requirements of the pricing system;

13.5. for recognition of on-farm sequestration that is not eligible for reward under the NZ ETS, but only if the innovation pathway is not in place when the levy system comes into effect.

14. This spend will be guided by a revenue recycling strategy[3], which once developed will set out how to best achieve the Government's objectives for emission reductions with the available investment. Prioritising revenue spending in this way will help ensure the levy remains fiscally sustainable and achieves its purpose.

15. We propose that the Minister of Agriculture and the Minister of Climate Change (the Ministers) are responsible for producing and updating the revenue recycling strategy. This strategy would need to be approved by Cabinet, as it will guide significant spending decisions and may relate to a wider range of other policy areas. Also relevant is that system fiscal sustainability will require trade-offs between levy prices, the amount and price paid for sequestration, and amount and price paid for mitigation incentives[4].

16. We propose that this strategy be updated every three years, aligning with when levy prices are reviewed (see paragraph 53). This means that the Ministers could make decisions on levy prices and the spending strategy around the same time, following public consultation.

17. Access to the Māori low-emissions transition fund[5], the quantum of which is still to be determined by the Ministers, would be restricted to Māori levy payers. Representatives of Māori interests would decide how this fund is used.

[2] Incentive payments will also provide an opportunity for participants to offset their pricing system liabilities, reducing the net impact on farmers while maintaining incentives to reduce net and gross emissions.
[3] For the avoidance of doubt, no revenue recycling function will be available within the mandatory reporting period and will start from Q4 2025 when pricing starts.
[4] Levy spending settings would need to be carefully set to ensure expenditure does not exceed levy revenue. Given levy expenses are uncertain and levy prices would generally be fixed for a number of years, it may be necessary for an amount of levy revenue to be set aside as a reserve in case expenses are higher than expected.
[5] Which would be available once pricing starts in Q4 2025

Administrative costs

18. Funding is required to administer and run the emissions pricing system – estimated to be around $19.0-$24.7 million per year. Cabinet has already agreed that establishment and administration costs during the first year of mandatory reporting, without pricing (Q4 2024 – Q4 2025), will be met by the Crown[6].

19. In subsequent years (Q4 2025 onwards), we propose that the on-going costs of the system (including system upgrades) be self-funded, consistent with the principle that those who generate the need for a system (that is, system participants) should pay for its operation. Specifically, we propose that all costs relating to the on-going operation of the system would be met by system participants[7].

20. We expect that a small number of participants will generate particularly high costs for administrative services and functions. We propose that cost-recovery from such participants is likely to be appropriate in situations where:

    20.1. Non-trivial administration costs are generated; or

    20.2. A benefit is being provided.

21. We also propose to enable the making of regulations that could prescribe fees or charges to be payable for administrative services and functions.

Section 2: Who participates

Point of obligation

22. We propose that the point of obligation (that is, the entity responsible for reporting and paying for emissions) for the emissions pricing scheme would be the IR-registered businesses that are above the thresholds in paragraph 26. This is irrespective of whether the business owns the land[8]. This arrangement would incentivise emissions reductions within the farming business operation, while providing recognition for on-farm actions directly to the person making decisions about stock management and fertiliser application.

23. When a participant falls below the thresholds to participate in the system, there will be a mechanism to deregister these participants.

24. We propose that lessees that participate in the system could access eligible sequestration on their leased land, subject to landowner permission.

---

[6] Cabinet agreed that establishment costs and the operating costs up until Q4 2025 will be met through the $149.8 million tagged contingency funding envelope established at Budget 2023 [CAB-23-MIN-0370 refers]. A Cabinet decision would be required to access the tagged contingency to fund the full implementation costs.

[7] For the avoidance of doubt, this includes costs for administration; overheads; collection and disbursement costs; operational policy; and compliance, monitoring and enforcement. It also includes any Crown operating costs relating to the System Oversight Board (see Section 5), such as secretariat support and convening external expertise when needed.

[8] This means landowners who do not meet one or more of the thresholds would not be levy system participants

25. We propose that legislation would empower Ministers to recommend the making of regulations, with provisions outlining bespoke reporting arrangements for complex business structures. Regulations would set out the detail to address complex contractual arrangements to ensure equitable outcomes. Early decisions on this will help the reporting phase incorporate this complexity.

Thresholds

26. We propose that IR-registered businesses that meet one or more of the following thresholds would be required to report and pay for the levy, as these thresholds are estimated to capture approximately 96 percent of the agriculture sector's emissions:

    26.1. Have 550 stock units (inclusive of sheep, cattle and deer, calculated on a weighted annual average basis); or

    26.2. 50 dairy cattle; or

    26.3. apply more than 40 tonnes of nitrogen through fertiliser annually.

27. If a business does not meet at least one of the thresholds, it could not opt-in to the levy.

28. We propose to include a schedule in the Act of emissions categories and activities that will be included and excluded from the monitoring and levy system, and that the Ministers are able to recommend updates to this provided Ministers are satisfied it will not undermine the purpose of the levy.

29. Initially, we propose to exclude the following emissions categories and activities from the reporting and pricing system:

    29.1. organic nitrogen fertilisers, in the interest of implementing a simple farm-level reporting system in 2024 and pricing system in 2025. Note that application of dairy effluent would still be included.

    29.2. minor-emitting sectors, including swine, poultry, goats, horses, alpacas, llamas, buffalo, mules and asses. Collectively they currently make up less than 0.5 percent of agricultural emissions and their inclusion would create significant administrative complexity.

    29.3. Lime and dolomite.

30. We propose the Ministers are able to recommend updates to the list of emissions categories and activities included and excluded from the reporting and levy system, if the Ministers are satisfied it will not undermine the purpose of the levy.

Exemptions

31. We propose that the Ministers would have the power to exempt any participant or class of participants from being a participant in the reporting and pricing system by Order in Council, or to grant extensions or zero-rate penalties related to missing deadlines via a notice in the New Zealand Gazette. This gives us

flexibility to consider circumstances arising from instances such as adverse events. As an appropriate check and balance, however, before making recommendations, we propose that the Ministers must consider whether the order granting temporary exemptions would materially undermine the purpose of the levy.

Delegation

32. Some farming businesses have complex operating arrangements – such as some sharemilking operations. To reflect the complexities of farming operational arrangements, we propose to allow a participant to delegate reporting and payment functions to an agent (for example, a farm advisor or chartered accountant) to act as an agent on their behalf. The farm business(es) would still hold ultimate legal responsibility for meeting levy obligations.

33. This increases assurance about accuracy of information. Farmers and growers are likely to already have a relationship with these agents for other aspects of the business, which ensure that they already have the data necessary for reporting.

Collectives

34. Collective reporting and payment were identified by the sector and some Māori submitters as an important element of the pricing system to ease administrative costs and provide the opportunity to collaborate amongst participants.

35. Accordingly, we propose that two or more levy participants, who would individually meet one or more of the thresholds in the pricing system, will be able to form and be treated as a collective for the purpose of emission reporting and payment in the scheme[9].

36. We propose that collective registration and reporting would be enabled for all participants starting in Q4 2024, with levy payments starting in Q4 2025. The administration system capacity of IR will determine the maximum number of participants in a collective group. Guidance will be developed to outline requirements for collective participation.

37. Levy participants with multiple farming operations registered under two or more IR numbers, would need to join a collective if they intend to register, report and pay as a single entity.

38. If two or more levy participants elect to form and be treated as a collective, they would be required to give notice to the implementation agency of their intent to register, including:

    38.1. the names of each of the entities that are to be members of the collective; and,

[9] Existing legal entities, such as trusts and incorporations, as well as partnership entities would not need to join the scheme as a collective as they would be considered a singular business for IR purposes (one IR number, one tax report, etc.). They could, however, opt to join a collective with other levy participants in the system.

38.2. the activities in respect of which the members elect to be treated as a collective.

39. Participants who choose to collectively report and pay would be jointly and severally liable with the other members of the collective for any obligations under the scheme participant provisions in respect of emissions and removals resulting from, or allocations, penalties, or interest relating to, the activities specified in the notice.

Mandatory reporting year

40. We propose a year of emissions reporting prior to the commencement of the levy scheme. This will serve to familiarise farmers, farmers' advisors and agents, and the implementation agencies with emissions reporting and help reduce errors and misunderstandings from all parties when the scheme begins.

41. Mandatory reporting will begin in Q4 2024. Participation in this mandatory reporting will be on the same basis as is proposed for the levy itself. The scope of emissions reported will be the same as that of the levy system.

Introduction to mandatory reporting and pricing

42. Further work is needed to set the specific start date in Q4 2024 for farmers to report their emissions in a mandatory reporting system, and the specific start date in Q4 2025 for when farmers must pay for their emissions in a levy system.

43. We propose to delegate authority to the Ministers to decide the date:

43.1. for mandatory emissions reporting obligations to begin within the time period of 1 October 2024 and 31 December 2024

43.2. for pricing obligations to begin within the time period of 1 October 2025 and 31 December 2025

44. We propose the Ministers report back to Cabinet Legislative Committee (LEG) on these specific start dates when LEG decisions are sought on the levy system.

Section 3: Levy settings

Emissions in scope of the levy

45. We propose to price biogenic methane emissions from livestock, nitrous oxide emissions from synthetic fertiliser use and livestock (urine and dung) and carbon dioxide emissions from fertiliser use at the farm-level. Carbon dioxide emissions from agriculture currently priced through the NZ ETS (for example, transport emissions from on-farm vehicles) would remain in that system.

46. We propose to set, following the principles and processes set out below, separate and unique prices for:

46.1. biogenic methane emissions – to recognise that biogenic methane is a short-lived greenhouse gas and has a separate, gross emissions reduction

target to reduce biogenic methane by 24 - 47 percent by 2050, including 10 percent below 2017 biogenic methane emissions by 2030;

46.2. long-lived gases – nitrous oxide and carbon dioxide (from fertiliser use) are long-lived greenhouse gases covered by the 2050 net zero target.

Principles for setting the methane and long-lived gas levy prices

47. The overall purpose of the proposed levy system would be, as part of a wider programme, to achieve emissions reductions in line with New Zealand's domestic and international climate change targets and emissions budgets. As such we propose that when setting the levy prices, the primary consideration would be the price level at which participants would be incentivised, both directly and through mitigation incentives, to reduce emissions, consistent with emissions reduction targets and emissions budgets.[10]

48. We are mindful, as informed by consultation, that many other factors to price setting are also important. I therefore propose that, when setting levy prices, Ministers also would have regard to these factors:

48.1. availability and cost of (current and future) on-farm mitigations;

48.2. social, cultural, and economic impacts on farmers and growers, regional communities, households and Māori agribusiness;

48.3. best available scientific, mātauranga Māori, and economic information; and

48.4. emissions leakage.

Setting initial levy prices for methane and long-lived gases

49. We have received considerable feedback on setting initial levy prices, and having considered this, propose initially setting levy prices as low as possible to achieve the emissions reductions required to meet our targets and be sufficient to support the uptake of mitigation technologies. This is consistent with Cabinet having agreed that initial levy prices will be set at low levels [CAB-23-MIN-0370 refers].

50. We propose that initial levy prices be set for 2025, 2026, and 2027 in 2024, following independent advice from the Climate Change Commission (the Commission)[11] who would be required to consult with the Partnership (until a System Oversight Board is established). Initial prices would be agreed by Cabinet in mid-2024.

51. While the primary consideration would be setting a price on agricultural emissions as low as practicable while still meeting emissions reduction targets, we expect

[10] Emissions budgets also express the domestic reductions expected as part of New Zealand's approach to meeting its NDC. Greater abatement than proposed through domestic emissions targets and budgets may be needed to meet our NDC including through purchasing offshore mitigation.
[11] This would be given effect to via a request from the Minister of Climate Change for advice from the Commission, under section 5K of the CCRA.

that the determination of levy prices would still be based on the factors set out in paragraphs 47 and 48.

Process for updating the methane and long-lived gas levy prices

52. We propose that the Ministers would be responsible for setting and updating the levy through an Order in Council:

    52.1. based on advice from the Commission, who would be required to seek and consider advice from the System Oversight Board and affected parties, and consider the factors set out in paragraphs 47 and 48; and

    52.2. feedback from consultation with the agriculture sector, Māori, and the wider public considering the above factors.

Reviewing the levy prices for methane and long-lived gases

53. Following prices from Q4 2025 through 2027 being fixed at a low rate, we consider it appropriate for a price pathway for both biogenic methane and nitrous oxide to be set for five years with a review after three years – as this is consistent with the section 215 report, and desire for sector certainty. This means that updated levy prices would be set early in 2027 with the new levy rates applying from 2028 (see Figure 2 below).

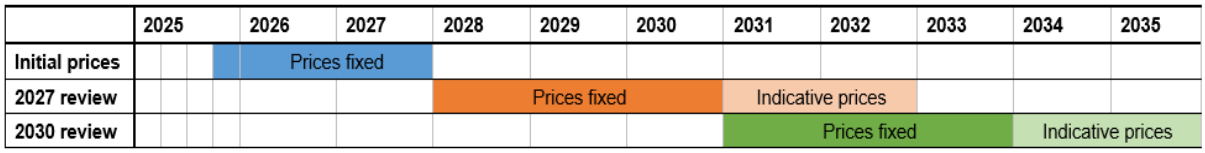


Figure 1: Proposed price pathway for biogenic methane and nitrous oxide from agriculture from 2025

54. To support certainty for farmers, we propose that the Ministers would be restricted in their ability to update prices outside of this review cycle by Order in Council. However, as the pricing system would need to be able to respond to special circumstances that may impact the integrity of the pricing system, we propose the ability for the Ministers to update the levy price outside the three-yearly review cycle[12] if the Ministers consider, or the Commission advises, that one of the following special circumstances applies:

    54.1. Expected agricultural emissions reductions are not in line with the Climate Change Response Act (CCRA) targets and current emissions budget;13

    54.2. If the scheme's surplus or deficit exceeds or is expected to exceed a certain percentage of its revenue.

[12] Powers under section 48 of the Legislation Act
[13] This includes both over and under-achievement.

Section 4: Support to recognise emissions reductions technologies and practices, sequestration, and transitional assistance

Incentives

55. A low, flat levy rate applied across a range of different farming systems can only go so far in achieving emissions reductions. Therefore, we propose to include incentive payments as part of the levy system as a deduction off a participant's emissions bill to make uptake of mitigations more cost effective.

56. We propose incentive payments would be available as a direct discount from participants' emissions bill when the levy price is implemented in Q4 2025. This was supported by submitters who were concerned about the cost and complexity of administering incentive payments. It is also consistent with the Partnership's proposal that the incentive be a direct discount to the emissions bill, rather than a separate rebate system.

57. We propose that incentive payments should be made for approved technologies or farm practices that reduce biogenic methane, nitrous oxide, and carbon dioxide emissions.

58. We propose that, in Q4 2025, a fixed incentive rate would be prescribed per tonne of carbon dioxide equivalent mitigated, and that there would be provisions to vary incentive rates in the future, if required. This would be the basis for calculating payments for approved technologies and farm practices.

59. Further, to ensure a simple process for onboarding new mitigations, we propose a schedule (with necessary formula and cost information) of approved technologies and farm practices which would be updated with new, approved technologies and practices as required. This schedule would be updated by the Ministers once the current revenue recycling strategy and advice from science expertise is considered to ensure:

    59.1. the practice is verifiable; and

    59.2. the emissions reductions can be sufficiently measured or estimated when implemented.

60. It will be important to ensure that on-farm activities rewarded are additional, that is, the emission reductions resulting from these activities would not have happened anyway, under business as usual. This additionality principle is important to underpin a credible reward scheme, maintain the system sustainability, and to help meet our emission reduction targets.

61. We propose that the Ministers would be responsible for reviewing, and updating as required, the incentive rate(s) for approved technologies and practices annually by giving notice of the new rate(s) in the New Zealand Gazette[14].

[14] There is potential that participants could receive a larger incentive payment than their levy bill. However, it is currently expected that incentive payments are likely to be less than, or equal to, the full cost of the mitigation.

Public consultation will not be required if the updated rates are consistent with the Revenue Recycling Strategy.

62. We propose that the fixed incentive rate per tonne of carbon dioxide equivalent mitigated must be updated at least once every three years (in line with the levy price reviews). However, to ensure that fiscal sustainability of the scheme, we recommend the payment rate would also be reviewed if:

    62.1. The scheme's accumulated deficit or surplus becomes, or is expected to become, excessive; or,

    62.2. Changes are made to the efficacy of current mitigation technologies or new mitigation technologies are included in the scheme.

Sequestration

63. We understand that sequestration occurring on-farm is widely considered to be a critical component of the pricing system, as it provides a way for farmers and growers to offset some of their emissions cost.

64. Thus, to enable inclusion of on-farm vegetation in the NZ ETS or another appropriate mechanism, on August 14 Cabinet agreed to develop and implement an innovation pathway, which includes [CAB-23-MIN-0370]:

    64.1. drafting legislation to enable new removals activities to be included in the NZ ETS or other appropriate mechanism;

    64.2. developing the criteria and expectations for the research and evidence required for market entry, to provide certainty for investors; and

    64.3. establishing the process and operational system to test and verify this evidence.

65. Initial decisions on the NZ ETS Review need to occur prior to policy decisions regarding any NZ ETS legislative changes. Therefore, if the innovation pathway is not in place by 2025, as agreed by Cabinet we propose to reward certain categories of on-farm sequestration, in an interim system, as set out below.

Interim sequestration system

66. An interim sequestration system would recognise on-farm sequestration from Q4 2025 if there is not adequate provision for the recognition of on-farm sequestration via the innovation pathway when pricing comes into effect. It would be funded by levy revenue.

67. The interim system would recognise the following categories from Q4 2025:

    67.1. annual sequestration from the active management of indigenous vegetation (additional carbon sequestered from stock exclusion); and

    67.2. riparian planting (planted post 2008).

68. Further detail on the interim system, including requirements to give notice for particular details in the New Zealand Gazette, is set out in **Appendix 1**.

69. We wish to highlight that from Q4 2025, the combined payment for sequestration and mitigation incentives may be larger than the participant's levy emissions bill (while remaining within the scheme's aggregate fiscal constraints). This is to ensure incentives can be attractive enough to encourage participants to adopt mitigation technologies. Overall, the scheme would be fiscally sustainable.

Transitional assistance

70. Cabinet invited us to report back on a prioritised sector emission pricing transition support package in February 2023 [ENV-22-MIN-0054]. While our proposed pricing system is currently designed to reduce significant impacts on the sector already, we recognise that even with these design features, some farmers may still face difficulty in responding to an emissions price.

71. Transitional assistance may be needed to support farmers that, in the short term, are significantly negatively affected by a levy system. Further detail on whether transitional assistance is required and the details for determining transitional assistance will be clarified when initial levy rates are considered. We therefore propose the Ministers report back in mid-2024 when setting initial levy prices on the need and extent of transitional assistance required. Settings in primary legislation may be required to empower the making of secondary legislation to give effect to this. These could be drafted in a Supplementary Order Paper.

Legislative and governance framework

72. Primary legislation is required to: enable implementation of the pricing system, give power to implementation agencies, and provide information sharing and data access between agencies. As part of the drafting process, PCO will advise the best legislative vehicle (that is, amendment to the CCRA or a stand-alone Bill). Informing this, we propose that the Ministers hold joint responsibility for the pricing system.

73. We propose that the functions for MPI, MfE, and IR, would be set as outlined in in **Appendix 2** also outlines this, and provides further detail of system role, responsibilities, and governance.

74. MPI, MfE, and IR must progress work required to implement the system. We note that MPI is already progressing implementation, including by identifying what functionality would be necessary for enterprise information and communication technology (ICT) within MPI and IR. This work will inform a future Cabinet paper to agree the preferred detailed approach to implementation and to draw down contingency funding.

System Oversight Board

75. Sector submitters noted the importance of having a group that is independent from government with agricultural sector representatives contributing to or

setting levy prices, as they were concerned pricing impacts agricultural sector viability. Non-sector submitters supported the Commission playing a larger role in levy rates, as the Commission is independent from sector.

76. We have considered this feedback; we propose that the Ministers establish a non-statutory advisory body (the System Oversight Board) that would provide advice[15] to the Commission on levy settings, and prepare a revenue recycling strategy for the Ministers' consideration. Appointments would be skill-based, with agricultural and technical expertise, and include Māori representation. As referred to in paragraph 50, we note that in developing levy price advice to the Ministers, the Commission would consult affected parties, which in practice would include the System Oversight Board. See **Appendix 2** for an overview of the proposed governance for the system.

Section 6: Operational requirements

77. We propose that participants in the reporting and levy system must meet the following core obligations:

77.1. Self-assessment of eligibility and registration;

77.2. Monitoring activities by collecting specified data, evidence and information;

77.3. Calculating emissions and submitting emissions reports;

77.4. Payment of levy liabilities from Q4 2025; and

77.5. Keeping records for seven years. Note that for collectives, this will include a signed agreement by each entity listed in the notice as a member of the collective.

Registration and reporting requirements

78. Farmers/growers participating in the pricing system will be required to register into the system and provide core information during registration[16]. This will allow for reporting and payment of their farm's emissions on an annual basis.

Data interoperability

79. To ensure data interoperability, where possible, data requirements would be aligned with other regulatory systems such as the tax system and freshwater farm plans. This would allow the system data to be standardised, so all participants are using and comparing like for like data.

[15] The System Oversight Board would be an advisory body and act as an avenue for sector and Māori input. Final decisions on levy settings and the revenue recycling strategy would be made by the Ministers, following advice from officials. Externally to the Board, farmers, growers and Māori will still have a say via the standard public consultation process that underpins regulatory changes.

[16] The key details required from participants when registering could include, but may not be limited to:

1.1. IR number
1.2. New Zealand Business Number (NZBN)
1.3. Official business name
1.4. Type of business entity/structure

Reporting and levy timelines

80. Cabinet has agreed to pricing agricultural emissions in Q4 2025 [CAB-23-MIN-0370 refers]. On-farm emissions occurring from that date would be liable for payment at the participant's next balance date (see paragraph 81). We note that part-year mandatory reporting will be required to support the transition into the pricing levied reporting year, as well as for participants who may enter or exit the pricing system at any given time (for example, for participants in the levy that join or leave part way through a tax year by buying a farm).

81. We propose aligning reporting and payment timings to participants' tax year. This is the recommended option since it was strongly supported in consultation and by the Partnership, and is available in the IR reporting system. As a result of many business' tax and emissions reporting periods not aligning with the start date, it is proposed that a short reporting period is adopted for participants for their first emissions report[17] .

82. We propose emissions reports would need to be filed within two months of the end of the participant's tax year. This balances providing sufficient time to complete emissions reports with having the events of the previous year still remaining fresh in participants' minds.

Compliance, monitoring and enforcement

83. It is critical to the operation of the levy that participants comply with their obligations. To ensure a high level of compliance, we propose to establish a cost-effective compliance and enforcement regime that is modelled off the NZ ETS, the Synthetic Greenhouse Gas levy (SGG levy) and the tax system. Assuming agreement to agency responsibilities (see Section 5), this will enable the respective capabilities of MPI and IR in administering the NZ ETS Forestry and tax system to be leveraged.

84. We propose that MPI be responsible for ensuring levy payers comply with their obligations and take any appropriate enforcement action. IR would have a supporting role and perform specified functions (for example, collecting penalties). These roles would be specified in legislation. This would require establishing inquiry and verification powers, powers to take enforcement action, and proportionate and robust offences and penalties.

85. The key components and detail of the compliance and enforcement regime proposed are outlined in **Appendix 3**.

Future system review

[17] For example, with a 1 December 2024 reporting commencement date, a farm business that has a tax balance date of 31 March the following timings would apply for reporting and payment:

- 31 March 2025: Farm reports on 4 months of emissions (this would be due 2 months after 31 March 2025)
- 31 March 2026: Farm reports on 12 months of emissions and pays for 4 month
- 31 March 2027: Farm reports on 12 months and pays for 12 months

86. We propose a 2030 system review to ensure the pricing system is fit for purpose, sustainable and appropriate to assist New Zealand in the transition to a low-emissions future. This would provide an opportunity to consider:

    86.1. the extent to which agricultural emissions have reduced;

    86.2. the sustainability of the pricing system, which could include financial sustainability, social or economic impacts, or any other implications; and

    86.3. opportunities to enhance or improve the pricing system.

87. We propose the following process for the 2030 review:

    87.1. The Ministers must, no later than 1 July 2030, commission the implementation agencies to carry out a review that considers:

        87.1.1. whether the agricultural emissions levy is meeting its stated purpose;

        87.1.2. whether any amendments to the relevant sections of the CCRA, or any other relevant legislation, are necessary;

        87.1.3. in reviewing the pricing system, Government must seek advice from the sector, Māori, and the Commission.

88. When the review is completed, its recommendations would be tabled at Cabinet.

Treaty analysis

89. As Treaty Partners, the Crown has specific obligations to Māori. These include that the Government should support an equitable transition for Māori and ensure that levy system requirements protect the right for Māori to make decisions on their whenua, and manage their resources and taonga. The Government should also ensure that where and if decisions provide disproportionate pressures on Māori, remedies and alleviations are sought. This includes the burden of costs associated with participating in the system as well as any indirect costs.

90. Government should also ensure that the levy system does not disproportionately impact Māori business owners as a result of, for example, ownership structures, governance models, or farming models.

91. There are three key themes that Māori submitters, during relevant consultation on the proposals in this paper, reflected as pivotal in terms of just and equitable participation in a pricing system; these are set out below, alongside how these have been, or will be, addressed.

Sequestration

92. Sequestration plays a key role in helping Māori reduce their emissions levy and is important for equity reasons. Māori submitters emphasised the importance of recognising a wide range of categories of vegetation for sequestration but

raised concerns over the challenges of recognising and transitioning all categories into the NZ ETS due to ownership arrangements and long-term liabilities.

93. The current design of the NZ ETS means that it may not be suitable for all categories of on-farm vegetation due, for example, to the costs and administration requirements compare to the potential returns from small areas of vegetation. Officials will work with the Partnership and other stakeholders including Māori as part of the innovation pathway to identify viable options.

Governance and revenue recycling

94. Māori submitters expressed a desire for true partnership with government, and for Māori to make decisions for Māori in a levy system.

95. Government will work with Māori to ensure the structure of advisory roles is developed in a way that is fit for purpose and future-proofed, including how Māori representation is included within the System Oversight Board.

96. Additional targeted support for Māori participants in the levy system would be through the Māori low-emissions transition fund. We expect representatives of Māori interests will decide how the Māori low-emissions transition fund is used. This would give Māori greater influence over funding dedicated to supporting the transition to a low emissions economy. This fund, alongside initially as low as practicable levy prices, could help mitigate concerns raised around the lack of assistance to support Māori.

Collectives and point of obligation

97. As discussed in paragraph 34, some Māori ownership structures require collective reporting. Of relevance is the proposal for Government to enable all levy payers to collectively report on their emissions from Q4 2024, and pay from Q4 2025.

98. We understand that some Māori submitters preferred a landowner point of obligation, as they considered that recognising only the business owner for sequestration will significantly disadvantage Māori and has potential to denigrate the mana of whenua Māori. This is an area that we expect officials will continue to take into consideration as the innovation pathway is developed.

Other mitigations

99. In addition to specific policy development to support equitable participation, there are two key pillars that will assist in alleviating the impacts of the overall pricing system. These pillars include:

    99.1. Participation – Māori have clearly articulated through the consultation process how they wish to participate in the pricing system. This includes conversations at both the policy and implementation levels with the Crown. Officials will work to engage with Māori throughout the policy and implementation phases.

99.2. Recognition of mātauranga Māori – Māori submitters consider that climate change policies were developed based on a Western view of the world. Engaging and working with Māori on policy and implementation phases could ensure that mātauranga Māori is appropriately considered and included. Also relevant is the proposal that factors including the social, cultural and economic impacts as well as mātauranga Māori, and the availability and cost of on-farm.

Cost-of-living Implications

100. Officials expect a low price on agricultural emissions will have no or minimal impacts on food prices. New Zealand dairy and red meat producers face prices determined by international markets; levy payers will likely absorb costs, rather than these being passed on to consumers. While prices for fruit and vegetables are not determined by international markets, the levy is expected to have only a low impact on the horticulture and arable sub-sectors.

101. Without reductions in agricultural emissions, New Zealand will need to reduce emissions elsewhere in the economy, generate more removals, or purchase more overseas emissions in order to achieve our first NDC. This may impact household costs for energy and fuel, depending on how the shortfall is met.

Financial Implications

Current implementation funding

102. Agencies were provided $15.4 million funding through Budget 2023. This funding will enable MPI, MfE and IR to continue to fund current implementation work. All establishment costs and the operating costs up until Q4 2025 will be met through the $149.8 million the tagged contingency funding envelope established at Budget 2023. A Cabinet decision would be needed to access the tagged contingency to fund the full implementation costs, depending on the settings for the scheme.

Fiscal sustainability of the pricing system

103. In general, to be considered fiscally neutral (noting the proposal for the levy scheme to be self-funding from Q4 202), from Q4 2025 the levy would need to align to two key principles, as follows:

103.1. For operating expenditure (for example, ongoing administration, any payments for incentives or sequestration), there should be no fiscal impact to operating balance before gains and losses or net debt over the forecast period of 5 years (inclusive of the current fiscal year).

103.2. For capital expenditure (for example, capitalised establishment costs), there should be no fiscal impact to net debt over a 10-year time horizon.

104. Uncertainty over the balance of revenue and costs[18] means there are risks around the fiscal sustainability of this levy. However, we note that there are several approaches to manage the expenditure and revenue of the scheme, including:

    104.1. If the fiscal sustainability of the pricing system is at risk, there is the ability for the Ministers to carry out an out of cycle review of levy prices, and to alter the rates of reward for sequestration (if included in the system) and mitigation incentives; and

    104.2. The fact that we propose a memorandum account mechanism be used, meaning one year's deficit or surplus can be carried over into subsequent years. This means it is not necessary for the revenue and expenses of the scheme to precisely balance each year.

105. Officials will provide further advice to the Ministers of Finance, Agriculture, and Climate Change on mechanisms for managing fiscal sustainability.

Tax treatment of the levy

106. The levy will be subject to GST, meaning the levy will be plus 15 percent GST. Businesses who are registered for GST will be able to claim a deduction for the GST paid on the levy. The tax treatment of the levy will follow the overall framework of the tax system[19].

107. It is not possible to forecast the overall fiscal impact to Crown revenue until a levy price is set. This is due to the reduced net taxable income tax collected, because of the deductibility of the levy. Therefore, the fiscal impact will be determined when setting the levy prices.

Legislative Implications

108. The proposals in this paper will be given effect through an Agricultural Emissions Pricing Bill (the Bill). To support the timeframes for mandatory reporting in Q4 2024, the Bill will need to be prioritised as a part of the 2024 Legislation Programme. We expect the Bill should be introduced in February or March 2024 and will need to progress through all stages by around October 2024. This will require an accelerated legislative process. We note that Cabinet has also agreed to the innovation pathway, with the aim of having this in place by 2025 [CAB-23-MIN-0370 refers]. Legislative changes will also be required to implement the innovation pathway and to enable new sequestration activities into the NZ ETS or other appropriate mechanism.

[18] There are significant uncertainties within the levy that need to be managed. On the revenue side of the scheme there is uncertainty around the amount of revenue the pricing system will generate due to: the expected level of compliance; the impact of climate events; and, the impact of commodity prices on agricultural emissions. On the expenditure side of the scheme, officials' analysis suggests the most material are: uncertainty around the uptake of sequestration and mitigation incentives; scientific uncertainty around the carbon yield of the different categories of vegetation included; and the timing and availability of new mitigation technologies.

[19] Thus, where the levy is a cost incurred in carrying out a business activity, businesses will be able to deduct the cost of the levy when calculating their net taxable income.

109. We will instruct PCO to begin drafting following Cabinet decisions on the proposals outlined in this paper. Officials will work with Legislative Design and Advisory Committee during drafting to support compliance with guidelines.

110. The policy proposals in this paper could amend the CCRA to sit alongside other emissions pricing mechanisms (the NZ ETS and Synthetic Greenhouse Gas Levy) or form a stand-alone bill. Officials and PCO will work together to advise on the most appropriate legislative vehicle.

111. To support the administration of the proposals, new sections and consequential amendments to other legislation will be required, including the Tax Administration Act 1994 (in relation to Inland Revenue functions).

112. Regulations will be required to support the primary legislation. These will be developed during 2024. These will also need to be developed rapidly, as regulations will need to be in place before mandatory reporting begins.

Repealing the NZ ETS backstop

113. The NZ ETS backstop provisions exist in the contingency that Cabinet had decided in favour of the backstop option of bringing agriculture into the NZ ETS, rather than an alternative system.

114. Under current provisions of the CCRA, agricultural emissions pricing via the NZ ETS will take effect from 1 January 2025. To implement the levy system, we propose to amend the CCRA to remove all NZ ETS obligations for agriculture activities (being those in Part 5 of Schedule 3 of the CCRA), including associated sector specific ETS provisions in the CCRA, when we introduce legislation for the levy system.

115. Should it not be possible to launch farm-level pricing in 2025, the NZ ETS backstop will remain in place.

Risks

Policy and implementation

116. The phased approach proposing mandatory emissions reporting in Q4 2024, and pricing in Q4 2025 has high implementation risks. The biggest challenges to legislative change and implementation are specificity and timing of the policy decisions, developing supporting regulations, and ensuring the overall financial viability of the pricing system.

117. PCO has previously noted that the timeframe for developing the Bill, iterative drafting, resolving detailed policy and legal questions, setting and consulting on this Bill is very tight. The timeframe will only be achievable if complete instructions are received on time and no unexpected complexities arise in the course of the drafting process. Timeframes are tight as:

    117.1. policy decisions are required before the General Election 2023 to issue drafting instructions and introduce legislation in early 2024;

117.2. supporting regulations for mandatory reporting need to be developed and enacted before mandatory reporting starts in Q4 2024. Regulations and implementation will need to be developed at a similar time as the draft Bill.

118. The parallel policy and implementation process means that the implementation team will need to operate on 'working assumptions' to underpin system design and implementation decisions, including investment decisions. Should any assumptions change, this could result in programme delays and increased cost.

119. There is a risk of significant non-compliance with the reporting and pricing system. While the "know your numbers" approach has had a reasonable response (80 percent), this system does not have a reporting component and is run by the sector not Government. Other similar systems have had low compliance in the past, for example, National Animal Identification and Tracing.

120. To ensure a reasonable level of compliance, there will need to be significant effort put on compliance, monitoring and enforcement (CME). It is envisaged that the "voluntary, assisted, directed, enforced" model would be followed for CME. This approach should help reduce this risk.

Sequestration

121. There is a risk that, following outcomes of the NZ ETS review and the nature of potential changes, the innovation pathway may not be in place by 2025 and the NZ ETS could result in being unsuitable for rewarding on-farm sequestration. This is of particular concern as the agricultural sector has emphasised the recognition of a broad range of on-farm sequestration categories as critical if pricing is to be supported. Considering other mechanisms such as Voluntary Carbon Markets and Biodiversity Credits could help to mitigate this risk.

Impact Analysis

Regulatory Impact Statement

122. A Regulatory Impact Statement (RIS) has been prepared for the proposed pricing system (see **Appendix 4**), and the Quality Assurance Panel has provided a statement indicating that this RIS 'partially meets' the Treasury standards for regulatory impact assessment.

123. The Quality Assurance Panels' statement is as follows:

> "*A quality assurance panel with members from the Treasury, the Ministry for Primary Industries and the Ministry for the Environment have reviewed the Supplementary Analysis Report (SAR). The panel considers that the SAR partially meets the quality assurance criteria.*
>
> *The SAR provides mostly convincing and complete analysis of the different high-level options for pricing agricultural emissions. As noted in the limitation section, the SAR does not include analysis on the specific impacts of the different pricing options on Māori and rural communities beyond qualitative factors.*

The SAR could have been strengthened by analysing in more detail the various system elements within the Government's preferred farm-based levy system, including what alternatives there are, and the trade-offs between decisions on system elements.

As noted in the limitations section, the emissions price set will have a significant impact on the ability of the system (under any option) to achieve its objectives."

Climate Implications of Policy Assessment

124. The Climate Implications of Policy Assessment (CIPA) requirement applies to this proposal as it is expected to have a significant emissions impact.

125. The farm-level levy is modelled as able to meet the 2030 biogenic methane emissions reduction target. This is due to the land-use change that occurs at even a moderate price on agricultural emissions and, in the farm-level levy, uptake of mitigation technologies and practices, in combination with existing incentives for forestry through the NZ ETS.

126. The CIPA team has reviewed the results and analysis at a high-level and considers them to be reasonable for providing indicative relative emissions impacts between the different options and scenarios modelled. For more detail on the modelling refer to **Appendix 5**.

Population Implications

127. The proposed emissions pricing framework in this paper is expected to impact on the population groups outlined in Table 1. Significant impacts are summarised below.

Table 1: The potential impact of the proposed emissions pricing framework on population groups

Population group	**How the proposal may affect this group**
Farmers and growers	Compared to the NZ ETS backstop where approximately 80 processors will be required to pay for emissions (and pass costs back through to farmers and growers), 23,000 farmers and growers will be required to pay for their emissions under the proposed pricing system. A range of modelling exercises have been carried out, which demonstrate a range of impacts on the sector. A common conclusion of these exercises has been that pricing agricultural emissions, even at very low prices, is likely to reduce output from the drystock and dairy sectors, though the scale of this reduction varies across different modelling.
Rural communities	Potential impacts could include a change in spending across rural communities and of quality of life, while opportunities could include new jobs and retraining opportunities arising from alternative land uses. The Government and sector partners are promoting programmes to maximise these opportunities by helping

	farmers, growers, and other rural people to manage pressure. These measures focus on reducing risk of widespread financial hardship, improving farm systems, and creating other opportunities for land use.
Māori	Discussed in the Treaty Analysis.
Households, and wider population	The effectiveness of the agricultural emissions pricing system has flow on effects for the wider population of New Zealand. Agriculture is a large proportion of New Zealand's emissions and decisions on agricultural pricing have flow-on considerations regarding impacts on the level of effort required elsewhere and equity. That is, the level of effort undertaken by the agricultural sector will have a material impact on the level of effort needed from other sectors and the Government to meet CCRA targets and New Zealand's NDCs. What the agricultural sector does/does not deliver will impact on what is required from other sectors and/or the quantum of offshore emissions reductions needed decisions about pricing agricultural emissions will impact optionality regarding 'who pays' for offshore mitigation.

Human Rights

128. The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.[20]

Use of External Resources

129. External resources were used for the following activities:

129.1. Economic modelling – Manaaki Whenua were used to model the economic impacts of different agricultural emissions policy scenarios

129.2. Peer review of economic modelling – independent assessment to ensure the Manaaki Whenua modelling was robust

129.3. Regulatory Impact Analysis – contractors supported development of the RIA, including providing expertise for the Cost-Benefit Analysis

129.4. Financial implications and implementation – contractors supported assessment of the financial costs for implementing a levy system

129.5. Submissions analysis – Contractors analysed and coded submissions to ensure that key themes were reflected in the s215 report.

9(2)(h)

[20] 9(2)(h)

9(2)(h)

Ring-fencing of revenue for Māori low-emissions transition fund

131. New Zealand has national treatment (NT) obligations in our Free Trade Agreements (FTAs) that prevent us from offering more favourable treatment to domestic investors than foreign investors. New Zealand also has an obligation to provide fair and equitable treatment to foreign investors.

132. The Māori low-emissions transition fund is likely to engage these obligations if it provides a benefit to Māori that is not accessible to foreign investors that also face the levy.

133. Whilst understandable from a policy perspective, low levels of foreign investment in the agricultural sector in New Zealand means the proposal may carry some risk of challenge. Any risk of inconsistency could be mitigated by broadening the eligibility for such support, but this may impact the ability to achieve the policy intent of the fund.

134. MFAT understands from MPI that the amount of investors subject to the levy but ineligible to access the Māori low-emissions transition fund is likely to be low. MPI has also advised that the amount of funding available from the Māori low-emissions transition fund is expected to be of a residual nature (thereby reducing the benefit that is not available to foreign investors).

135. On the basis of these understandings, the likelihood of the fund being challenged as inconsistent with New Zealand's NT obligations to investors is likely to be low.

136. Depending on the facts of the situation, there could be an available exception that New Zealand could rely on in the event of any challenge.

137. The provision of financial support to Māori could also engage New Zealand's subsidy obligations, which are discussed below in paragraphs 138 – 139. Further assessment of this risk would depend on the final design of the levy and the Māori low-emissions transition fund and the rates involved. However, based on MFAT's understanding of the amount of funding available from the fund, any risk of successful challenge against New Zealand's subsidy obligations is likely to be low.

Incentive payments

138. New Zealand has obligations under the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures (ASCM) and Agreement on Agriculture (AoA) regarding the provision of financial support. In order for the incentive payments to be consistent with these obligations, they must offset only the costs faced by farmers, and not have trade or production distorting effects.

139. Based on MFAT's understanding of the proposed incentives and their underpinning intentions, MFAT consider any risk of successful challenge against New Zealand's subsidy obligations is likely to be low. However, MFAT notes the levy and incentives rates and approved technologies and farm practices are not yet known and will be set by the Ministers in regulation.

Consultation

140. The Ministry for the Environment and Ministry for Primary Industries published a discussion document for public consultation on pricing agricultural emissions in October and November 2022. Over 21,000 submissions were received, and 28 events held during this period. Submitters views are summarised in **Appendix 6.**

141. He Waka Eke Noa Partners were also consulted on the content of the report required under section 215 of the CCRA at the end of 2022.

Departmental consultation

142. The Department of the Prime Minister and Cabinet (PAG), Inland Revenue, Te Arawhiti, Te Puni Kōkiri, and Treasury were consulted on this paper.

Communications

143. The decisions will be announced via press release, email communications to agricultural emissions pricing stakeholders and publication on the implementation agencies' websites.

144. This will be supported by a detailed communications plan that will be developed jointly by our offices.

Proactive Release

145. Following Cabinet consideration, the Ministers will consider the release of this paper and attachments on the Ministry for Environment website in whole or in part, subject to appropriate redactions.

Recommendations

The Minister of Agriculture and Minister of Climate Change recommend that Cabinet:

Background

1. **Note** that on 14 August 2023, Cabinet invited the Ministers of Agriculture and Climate Change to provide a detailed Cabinet paper before the 2023 general election on a farm level system, described in the December 2022 section 215 report, that includes the following features:

    1.1. price emissions from biogenic methane and long-lived gases (nitrous oxide and carbon dioxide) separately, set at low levels initially;

    1.2. levy prices, to be set in 2024, with the primary consideration being to achieve emissions reductions in line with legislated targets and emissions budgets, taking into account additional factors such as availability and cost of on-farm mitigations, and social, cultural and economic impacts on farmers, growers and communities;

    1.3. revenue raised from the levy would be recycled back in the system, in line with a strategy outlining spending priorities to mitigate agricultural emissions and operate the system. Levy revenue may also need to be used for sequestration payments if an interim mechanism to the New Zealand Emissions Trading Scheme (NZ ETS) is required;

    1.4. incentive payments will be available to recognise the uptake of mitigation technologies that reduce emissions;

    1.5. the Ministry for Primary Industries (MPI), the Ministry for the Environment (MfE) and Inland Revenue (IR) will be responsible for implementing the system;

    1.6. the costs associated with the establishment of the levy system and the first year of mandatory reporting will be paid for by the Crown from within the $149.8 million tagged operating contingency. From Q4 2025, the levy would be fiscally sustainable and meet all ongoing administration and levy offset expenses.

Purpose of levy

2. **Agree** to the establishment and implementation of a farm-level, split-gas levy system for agricultural emissions with a phased approach, such that:

    2.1. In Q4 2024 participants will report on their emissions;

    2.2. In Q4 2025 participants will face a price for their emissions and be eligible for approved mitigation technologies and some on-farm sequestration.

3. **Agree** that the primary purpose of the levy is, as part of a wider programme, to achieve emissions reductions in line with New Zealand’s domestic and international climate change targets and emissions budgets.

4. **Agree** that the following activities will contribute to achieving this purpose:

    4.1. fund all ongoing administration operating and capital costs of the levy system;

    4.2. provide funding to support Māori participants;

    4.3. incentive payments for adopting emissions-reducing technologies and, in the future, on-farm practice;

    4.4. reward on-farm sequestration, if a system is not in place to enable on-farm sequestration to be rewarded through the ETS (or other mechanism) when pricing begins; and,

    4.5. funding for building sector capacity and capability to comply and/or to reduce biological emissions, such as via education and support services for farmers and growers, technology investment, and research

Administrative costs

5. **Note** current estimates of on-going costs of administering and running this pricing system range from $19.0 million - $24.7 million per annum.

6. **Note** on 14 August 2023, Cabinet agreed that the costs associated with the first year of mandatory reporting will be paid for by the Crown from within the approved $149.8 million tagged contingency [CAB-23-MIN-0370 refers].

7. **Note** the intent is that, once pricing begins, administration costs will be fiscally neutral to the Crown, with levy revenue covering administration costs.

8. **Agree** that any costs met by the Crown relating to the System Oversight Board (see recommendations 65 - 67) will also be funded out of levy revenue, as part of administration costs.

9. **Agree** that regulations can be made that prescribe fees or charges to be payable for administrative services and functions.

Revenue recycling

10. **Agree** that all spending of levy funds must be consistent with the purpose of the levy.

11. **Agree** that the spending of levy funds be governed by a Revenue Recycling Strategy which will:

    11.1. be produced by the Ministers, and approved by Cabinet, following public consultation; and

    11.2. set out the priorities for how to best achieve the Government's objectives for emissions reductions including how Ministers intend to balance incentive and sequestration payments, education and support services for farmers and growers, and technology investment and research

12. **Agree** that an initial Revenue Recycling Strategy will be set in 2025 and then will be updated every three years beginning in 2028, to align with the timing of levy price reviews.

Who participates

Thresholds and exclusions

13. **Agree** that IR-registered businesses that meet one or more of the following thresholds will be participants in the reporting and levy system:

    13.1. having 550 stock units (inclusive of sheep, cattle and deer, calculated on a weighted annual average basis); or

    13.2. having 50 dairy cattle; or

    13.3. applying more than 40 tonnes of nitrogen through fertiliser annually.

14. **Agree** when a participant falls below the thresholds above, there will be a mechanism to deregister these participants.

15. **Agree** that a schedule to the Act will specify emissions activities and categories that are included and excluded from a pricing system.

16. **Agree** that the following emissions activities and categories are initially excluded from the reporting and levy system:

    16.1. Minor-emitting sectors; swine, poultry, goats, horses, alpacas, llamas, buffalo, mules and asses.

    16.2. Organic nitrogen fertiliser.

    16.3. Lime and dolomite.

17. **Agree** that Ministers have regulation-making powers to make changes to the list of emissions activities and categories included and excluded in a pricing system if Ministers are satisfied it will not undermine the purpose of the levy.

Exemptions

18. **Agree** that the Ministers can grant deadline extensions, deferrals or zero-rate penalties from some or all obligations in the pricing system if Ministers are satisfied the exemption will not undermine the purpose of the levy.

Participant registration and collectives

19. **Agree** that participants will be required to register into the reporting and levy system.

20. **Agree** that participants can nominate an agent to act on their behalf.

21. **Agree** that collective reporting should be enabled for all participants as soon as practical.

22. **Agree** that collectives can only include participants who would individually meet the threshold to be liable for the levy.

23. **Agree** that for collective reporting and payment, a collective will need to nominate an IR-registered entity for reporting and payment purposes.

24. **Agree** that participants who join a collective will be jointly and severally liable with other members of the collective.

25. **Agree** that Ministers can make regulations regarding procedural requirements and consequential provisions (such as how registration occurs), including for complex business structures such as those under the Sharemilking Agreement Act 1937.

Introduction to pricing and reporting requirements

26. **Agree** to delegate authority to the Ministers to decide on the exact date, with this to be reported to Cabinet Legislative Committee, for:

    26.1. mandatory emissions reporting obligations to begin within the time period of 1 October 2024 and 31 December 2024; and

    26.2. pricing obligations to begin within the time period of 1 October 2025 and 31 December 2025.

Levy settings

27. **Agree** that the levy will be imposed on agricultural greenhouse gases, including:

    27.1. biogenic methane from livestock;

    27.2. nitrous oxide from livestock (urine and dung) and fertiliser; and

    27.3. carbon dioxide from fertiliser.

28. **Note** that all emissions currently subject to surrender obligations in the New Zealand Emissions Trading Scheme (NZ ETS) will remain in that system, unless otherwise stated.

29. **Agree** the levy prices for agricultural biogenic methane and long-lived gas emissions (nitrous oxide and carbon dioxide) will be unique.

30. **Agree** that methane and the long-lived gas prices (nitrous oxide and carbon dioxide) levy prices will be updated through Order in Council, on the recommendation of the Ministers:

    30.1. based on advice from the Climate Change Commission (the Commission); and

    30.2. taking into account feedback from consultation with the agriculture sector, Māori and the wider public considering the factors outlined in recommendation 32.

31. **Agree** that, in forming their advice, the Commission:

    31.1. must use the factors set out in recommendation 32; and

    31.2. should seek and consider advice from the System Oversight Board, if one exists, and affected parties.

32. **Agree** that, when setting prices for methane and long-lived gases:

    32.1. the primary consideration is contributing to emissions reductions in line with legislated targets and current national-level emissions budget; and

    32.2. that Ministers must also have regard to:

        32.2.1. availability and cost of current and future on-farm mitigations;

        32.2.2. social, cultural and economic impacts on farmers and growers, regions, communities, households and Māori agribusiness

        32.2.3. best available scientific, mātauranga Māori and economic information; and,

        32.2.4. emissions leakage.

33. **Agree,** with the exception of the levy rates set for 2025, 2026 and 2027 (referred to as initial levy rates; recommendations 36 – 38 refer), that that the prices for biogenic methane and long-lived gases are set for five years, with a review every three years.

34. **Agree** that each three-yearly levy price review will:

    34.1. review and, if necessary, update the remaining two years' prices set out in the price pathway; and,

    34.2. specify prices for three additional years.

35. **Agree** that levy prices can be updated, by Order in Council, outside of this three-year cycle if the Commission advises, or the Ministers consider one of the following special circumstances applies:

    35.1. expected emissions reductions are not consistent with Climate Change Response Act 2002 (CCRA) targets and emissions budgets (i.e., both over- and under-achievement)

    35.2. the scheme's surplus or deficit exceeds or is expected to exceed a certain percentage.

Setting initial levy prices for methane and long-lived gases for 2025, 2026 and 2027

36. **Agree** the primary consideration for setting initial levy prices would be setting a price on agricultural emissions as low as practicable while still meeting emissions reduction targets, consistent with the direction in CAB-23-MIN-0370.

37. **Invite** Ministers to report back to Cabinet in mid-2024 to confirm initial levy prices for 2025, 2026 and 2027, with these prices to be informed by advice from the Commission, who would be required to consult the He Waka Eke Noa Climate Action Partnership, other affected stakeholders, and Māori.

38. **Agree** that these initial levy rates would be fixed, and that the first update of levy prices following the procedure in the section above would be for levy prices for 2028 to 2032.

39. **Invite** the Minister of Climate Change to request the required advice on setting the initial levy rates from the Commission, per section 5K of the CCRA.

Support to participate in the pricing system

Incentives

40. **Agree** that the Ministers would be responsible for setting the incentive rate or rates of approved technologies and practices in the New Zealand Gazette and updating the rate or rates at least every three years (in line with the timing of levy price reviews), after consideration of the revenue recycling strategy, the fiscal sustainability of the levy, scientific information, and ensure that decisions are consistent with the purpose of the levy.

41. **Agree** that Ministers must review the incentive rate or rates if the scheme's accumulated deficit or surplus becomes, or is expected to become, excessive, and if changes are made to the mitigation technologies included in the scheme.

42. **Agree** that Ministers would be required to give notice of the new incentive rate or rates in the New Zealand Gazette.

43. **Agree** that public consultation is not required when updating incentives rates provided the updated rate is not inconsistent with the revenue recycling strategy.

44. **Agree** that the incentive payment can be deducted from the emissions bill from Q4 2025 to offset the liability for the levy.

45. **Agree** that recognised mitigation technologies and practices, and their estimated emissions reductions, can be updated following recommendations by the Ministers.

Sequestration

46. **Note** on 14 August Cabinet agreed to develop and implement an innovation pathway, with the aim of having this in place by 2025, which includes

    46.1. drafting legislation to enable new removals activities to be included in the ETS or other appropriate mechanism;

    46.2. developing the criteria and expectations for the research and evidence required for market entry, to provide certainty for investors; and

    46.3. establishing the process and operational system to test and verify this evidence.

47. **Agree** that if there is not adequate provision for the recognition of on-farm sequestration through the innovation pathway when the pricing system comes into effect, an interim sequestration system will be in place when the levy begins in Q4 2025 to recognise additional sequestration from riparian margins and management of indigenous vegetation within the pricing system by using a declaration-based approach, and the value of the amount will be deducted from a participant's emissions bill.

48. **Agree** that once a system is in place to reward scientifically robust forms of on-farm sequestration through the NZ ETS or other appropriate mechanism, the interim system would be phased out, partially or in whole, by Order in Council.

49. **Agree** that the price paid for a tonne of carbon for sequestration payments will be set at least every three years (in line with the timing of the levy price reviews) by the Ministers, after consideration of the revenue recycling strategy and fiscal sustainability of the levy, and to ensure decisions are consistent with the purpose of the levy.

50. **Agree** that Ministers must review the sequestration payment rate if the scheme's accumulated deficit or surplus exceeds, or is expected to exceed, a certain percentage of the scheme's revenue, and if the changes are made to the sequestration categories recognised in the scheme.

51. **Agree** that Ministers will be required to give notice of the new sequestration payment rate in the New Zealand Gazette.

52. **Agree** that public consultation is not required when updating sequestration rates provided the updated rate is consistent with the revenue recycling strategy.

53. **Agree** that vegetation categories, their definitions, and the rates of carbon sequestered by each category, recognised in the interim system can be updated following recommendations by Ministers.

54. **Agree** that if participant in the pricing system is not the landowner, they can access sequestration on that land, subject to landowner permission.

Offsetting levy payments

55. **Agree** that from Q4 2025, the combined payment for sequestration and incentives may be larger than an individual's levy emissions bill.

Transitional assistance

56. **Note** that any further transitional assistance required for farmer and grower participants cannot be determined until initial levy prices are set.

57. **Invite** Ministers to report back to Cabinet, when setting initial levy prices in mid-2024, to confirm whether transitional assistance is required and the required settings in primary and secondary legislation to give effect to this.

Māori low-emissions transition fund

58. **Agree** that a Māori low-emissions transition fund, the spending of which is intended to be determined by Māori, be established to support Māori participants to reduce on-farm emissions and meet the requirements of the levy system.

59. **Agree** that the amount allocated to the Māori low-emissions transition fund, which is still to be determined by Ministers, would be established in regulations.

Responsibilities

Legislative framework

60. **Note** as part of the drafting process, Parliamentary Council Office (PCO) will advise on the best legislative vehicle for the pricing system (that is, amendment to the CCRA or a stand-alone bill).

61. **Agree** that functions are assigned to Ministry for Primary Industries, Ministry for the Environment, and Inland Revenue (IR), without the need for an oversight role of the EPA, consistent with the responsibilities set out in **Appendix Seven.**

62. **Agree** that any requirements or consequential provisions to provide for IR's specific functions outlined in **Appendix Seven**, including information sharing and adverse event response, will be specified in legislation.

63. **Authorise** the Ministers of Agriculture, Climate Change, and Revenue to further develop and clarify policy matters relating to IR’s administration of the reporting and levy system, and make minor and technical changes to the policy in a way not inconsistent with Cabinet’s decisions.

64. **Agree** that there is joint Ministerial responsibility for the pricing system across the Ministers.

Governance

65. **Agree** a non-statutory advisory body (System Oversight Board) will provide advice to the Commission on levy settings and prepare a revenue recycling strategy.

66. **Agree** the System Oversight Board will have skill-based appointments and Māori representation.

67. **Agree** the Commission will seek advice from the System Oversight Board, if in existence, and other affected parties when preparing advice for Government on levy prices.

Operational requirements

68. **Note** part-year reporting provisions is needed as there is potential for farmers to become liable for the levy part way through a reporting year due to mandatory reporting beginning in Q4 2024 and the levy beginning in Q4 2025.

69. **Agree** that the obligation for reporting will commence in Q4 2024 for emissions produced from this time.

70. **Agree** that all IR-registered businesses carrying out the specified activities that meet one of the thresholds in recommendation 13 will be required to register in the mandatory reporting system and levy system.

71. **Agree** that participants must hold and provide data as part of the reporting and payment process, and to support audit and verification requirements, for seven years.

72. **Agree** that the specific data, evidence and information requirements, and a full methodology for calculating emissions would be set by Order in Council.

73. **Agree** that data requirements will be identified and standardised to enable interoperability, as soon as practical.

74. **Agree** to require reporting and payment obligations to IR-registered businesses who meet the set thresholds for the levy.

75. **Agree** that the implementation agencies have the power to register a non-registered participant.

76. **Agree** that the participant could appoint a delegate to act on their behalf, including for collective reporting and payment.

77. **Agree** to align participants' reporting and levy payment periods with their tax year including part year period where required.

78. **Agree** to give participants within two months after their tax year end to file their returns and pay the levy.

Compliance and enforcement

79. **Agree** that implementation agencies will have the following powers and functions:

    79.1. Appointing enforcement officers;

    79.2. Recognising verifiers;

    79.3. Approving amendments or default assessments in relation to an emissions report;

    79.4. Appointing independent person(s) in relation to a review; and

    79.5. Making other operational decisions required to implement compliance monitoring and enforcement provisions.

80. **Agree** that the following powers and functions in relation to inquiries by enforcement officers are created:

    80.1. Power to request any information from a person to assess compliance;

80.2. Powers to require a person to appear before the enforcement officer or other specified person and provide information;

80.3. Power of a District Court Judge to hold an inquiry on request by an enforcement officer;

80.4. Powers of entry to land or premises (excluding a dwellinghouse or marae) to investigate whether a person is complying with requirements under this legislation;

80.5. Power of a District Court Judge, Justice of the Peace, Community Magistrate, or Registrar of any Court to issue a warrant authorising entry and search of any land, premises, dwellinghouse or marae to an authorised enforcement officer.

81. **Agree** that procedural requirements or consequential provisions to provide for the powers and functions in recommendations 79 to 80 will be specified in legislation.

82. **Agree** that there will be an obligation on person's exercising powers and functions to keep information confidential, and details of this obligation will be specified in legislation.

83. **Agree** that in relation to recommendation 82, a criminal offence will be created where a person knowingly breaches confidentiality requirements.

84. **Agree** that a person convicted of an offence outlined in recommendation 83 will be liable to:

84.1. An imprisonment term not exceeding 6 months; or

84.2. A fine not exceeding $15,000; or

84.3. Both.

85. **Agree** that third-party verification can be enabled by Order in Council and may specify:

85.1. The data, information or calculations that must be verified;

85.2. The timing of verification; and

85.3. Any procedural requirements relating to the verification process or outcome.

86. **Agree** that legislation will provide for:

86.1. Emissions reports to be amended if incorrect, or a default assessment of a person's emissions made;

86.2. Decisions affecting a person to be independently reviewed;

86.3. A subsequent right of appeal to the District Court in relation to the outcome of a review under recommendation 86.2; and

86.4. A right of appeal to the High Court on questions of law.

87. **Agree** that the following criminal offences will be created where a person, without reasonable excuse:

87.1. Fails to provide information to an enforcement officer when required to do so; and

87.2. Fails to appear before an enforcement officer, or produce any documents, when required to do so.

88. **Agree** that the liability on conviction for a person convicted of an offence under recommendation 87 will be:

88.1. In the case of an individual, a fine not exceeding $12,000; or

88.2. In any other case, a fine not exceeding $24,000.

89. **Agree** that the following criminal offences will be created where a person:

89.1. Refuses to answer any question, when required to do so by an enforcement officer during an inquiry;

89.2. Knowingly fails to submit an emissions report;

89.3. Knowingly fails to maintain registration;

89.4. Knowingly fails to collect data and information, calculate emissions, or keep records as required;

89.5. Knowingly provides altered, false, incomplete, or misleading information;

89.6. Wilfully obstructs, hinders, or deceives a person exercising a power conferred on that person; and

89.7. Refuses to provide information that an enforcement officer has demanded from that person during an investigation.

90. **Agree** that the liability on conviction for a person convicted of an offence under recommendation 89 will be:

90.1. In the case of an individual, a fine not exceeding $25,000; or

90.2. In any other case, a fine not exceeding $50,000.

91. **Agree** that the following criminal offences will be created where a person, with intent to deceive and for the purpose of either obtaining any material benefit or avoiding any material detriment:

91.1. Fails to collect data and information, calculate emissions, or keep records as required;

91.2. Fails to submit an emissions report;

91.3. Fails to provide information to an enforcement officer when required to do so; or

91.4. Provides altered, false, incomplete, or misleading information.

92. **Agree** that a person convicted of an offence outlined in recommendation 91 will be liable on conviction to:

92.1. An imprisonment term not exceeding 5 years; or

92.2. A fine not exceeding $50,000; or

92.3. Both.

93. **Agree** that any procedural requirements or consequential provisions to provide for the criminal offences regime will be specified in legislation.

Infringement notices

94. **Agree** that regulations can be made, through Order in Council, to prescribe a failure or contravention of any duty, restriction, or prohibition for conduct as an infringement offence.

95. **Agree** that regulations can prescribe maximum fees for an infringement offence of:

95.1. $1,000 in the case of an individual; or

95.2. $2,000 in any other case.

96. **Agree** that regulations can prescribe maximum fines for an infringement offence of:

96.1. $3,000 in the case of an individual; or

96.2. $6,000 in any other case.

97. **Agree** that enforcement officers can exercise any powers and functions in relation to infringement offences.

98. **Agree** to create reporting penalties, which cover situations where a person does not report or submits a report with errors.

99. **Agree** that in relation to a reporting penalty:

99.1. The base penalty will be calculated using the lesser of: i) the person's methane, nitrous oxide and carbon dioxide emissions, and ii) the difference between the person's methane, nitrous oxide and carbon dioxide emissions before and after amendment;

99.2. The person's emissions are multiplied by the current prices of methane, and nitrous oxide and carbon dioxide;

99.3. If the effect of the amendment is that the person's emissions are lesser, the maximum penalty is $1,000;

99.4. The penalty can be reduced by 50 percent unless the person was grossly careless; and

99.5. A formula for calculating the penalty will be set out in legislation.

100. **Agree** that a penalty will be created for non-payment of levies by the due date.

101. **Agree** that in relation to a non-payment penalty:

101.1. The base penalty will be 1 percent of the levy unpaid by the due date; and

101.2. The penalty will increase by an additional 4 percent after six days; and

101.3. The penalty will increase an additional 1 percent after each subsequent month.

102. **Agree** that reporting and non-payment penalties will be disapplied for the first reporting and payment period.

103. **Agree** that any procedural requirements or consequential provisions to provide for the penalties regime outlined in recommendations 99 to 102 will be specified in legislation.

Legislative Implications

104. **Note** the mandatory reporting and levy system will be progressed through an Agricultural Emissions Pricing Bill.

105. **Agree** that all secondary legislation will require consultation unless stated otherwise.

Repealing the NZ ETS backstop

106. **Agree** to amend the CCRA to remove all NZ ETS obligations for agriculture activities, including associated sector specific ETS provisions in the CCRA, when legislation for a levy system is introduced.

Implementation

107. **[Legally privileged:] Note** that New Zealand's international trade obligations are likely to be engaged by the proposed pricing system (in particular the Māori low-emissions transition fund and the proposed incentive payments to farmers), and that officials will liaise with MFAT to ensure these obligations are taken into account in the regulatory design, implementation, and communication of the system.

108. **Note** that sector readiness will be key to ensure the farm-level levy can be implemented with mandatory reporting in Q4 2024, and the levy in Q4 2025.

2030 review

109. **Agree** to require a review of the agricultural emissions levy beginning no later than 1 July 2030, to be conducted by the implementation agencies.

110. **Agree** that the review will consider:

    110.1. Whether the agricultural emissions levy is meeting its stated purpose;

    110.2. Whether any changes are needed to ensure the levy remains sustainable in the long term; and

    110.3. Whether any amendments to legislation are necessary.

111. **Agree** to include an explicit legislative requirement to consult, and duly consider feedback from, the affected sectors, iwi/Māori and the Commission

112. **Agree** that the implementation agencies will be required to provide advice to Cabinet on the review by 1 July 2031.

Financial

113. **Note** on 14 August Cabinet:

    113.1. agreed that the costs associated with the first year of mandatory reporting will be paid for by the Crown from within the approved $149.8 million tagged operating contingency;

    113.2. noted that Cabinet will need to consider how to fund mandatory reporting in the longer term if decisions on pricing are delayed.

114. **Agree** that for the one-year mandatory reporting only period, all establishment and operating costs will not be recovered from levy revenue.

115. **Agree** the ongoing operation of the levy system is funded by levy revenue and ongoing Crown funding is not required once pricing begins in Q4 2025.

116. **Invite** the Minister of Agriculture, Minister of Climate Change and Minister of Revenue to report back to Cabinet for approval to release the tagged contingency funding in early 2024 to fund the full implementation costs of the levy system.

117. **Agree** a memorandum account should be implemented to allow the system to under or overspend in a given year but balance out in the short- to medium-term.

118. **Note** the rate of reward for sequestration and incentive payments will be updated to align expenditure on these items with the Revenue Recycling Strategy and ultimately levy revenues.

Next steps

119. **Agree** that all secondary legislation will require consultation unless stated otherwise.

120. **Invite** the Minister of Agriculture, Minister of Climate Change and Minister of Revenue (in respect of changes to tax legislation), to issue drafting instructions to PCO to give effect to decisions on the proposals in this paper.

121. **Authorise** the Ministers to further clarify and develop policy matters relating to the proposals in this paper, in a way not inconsistent with Cabinet's decisions.

Authorised for lodgement

Hon Damien O'Connor

Minister of Agriculture

Hon James Shaw

Minister of Climate Change

Appendix 1. Overview of interim sequestration system

1. An interim sequestration system would recognise on-farm sequestration from Q4 2025 if there is not adequate provision for the recognition of on-farm sequestration in the NZ ETS or other mechanism when pricing comes into effect. It would be funded by levy revenue, and would recognise the following categories from Q4 2025:

   1.1. annual sequestration from the active management of indigenous vegetation (additional carbon sequestered from stock exclusion); and

   1.2. riparian planting (planted post 2008).

2. Once the innovation pathway is in place to reward scientifically robust forms of on-farm sequestration through the NZ ETS or other appropriate mechanism, the interim system would be phased out via Order in Council.

3. In the interim system, sequestration payments would be determined by the category or categories of vegetation reported, the reported area in hectares of each category or categories, and the regulated price per tonne of carbon sequestered.

4. Farmers and growers would make a declaration agreeing to terms and conditions for sequestration payments when inputting their emissions and sequestration data. The sequestration payment would be deducted from their emissions bill in the same year as it is claimed. A participant or collective would be required to provide or maintain data and information as prescribed by regulations to support their sequestration claim.

5. We propose that the vegetation categories, their definitions, and the rates of carbon sequestered by each category recognised in the interim system can be updated by giving notice in the New Zealand Gazette, on the recommendation of the Ministers. If an adverse event occurs to vegetation that has been recognised, we propose there would be no liability placed on the participant (previous payments would not need to be repaid).

6. We propose that the Ministers would be responsible for setting the sequestration payment rate by giving notice of the (new) rate in the New Zealand Gazette. Public consultation will not be required if the updated rates are consistent with the Revenue Recycling Strategy. We propose that the sequestration payment rate be updated in the same manner as the incentive payment rate – reviewed at least every three years, but with triggers for earlier reviews if the scheme's accumulated deficit or surplus becomes, or is expected to become, excessive, or sequestration categories that are recognised change.

7. The sequestration payment rate ($ paid per t CO2e sequestered) will be low to reflect the declaration-based system which has low certainty of the amount and permanence of carbon sequestered. From Q4 2025, the combined payment for sequestration and mitigation incentives may be larger than the participant's levy emissions bill (while remaining within the scheme's aggregate fiscal constraints).

This is to ensure incentives can be attractive enough to encourage participants to adopt mitigation technologies. Overall, the scheme will be fiscally sustainable.

Appendix 2. Overview of agency functions, responsibilities, and governance model

Functions of the pricing system

1. To support implementation agencies to plan and prepare for their roles and functions in the immediate future, it is proposed that Cabinet agrees to nominating the agencies who will carry out particular functions. This is considered necessary in order to support delivery of the pricing system by 2025.

2. The proposed responsibilities for the different function across the three agencies are outlined below:

2.1. MfE and MPI are jointly responsible for:

2.1.1. governance and system stewardship (including system monitoring, review, and evaluation against emission targets and budgets and wider socio-economic considerations);

2.1.2. system policy settings including setting and updating levy prices, categories of sequestration and mitigations incentive and rates for reward, and the revenue recycling strategy);

2.1.3. emissions calculation methodology, data interoperability considerations, and standards, and;

2.1.4. system reporting and publishing.

2.2. MPI would be also responsible for:

2.2.1. administration of the operational functions of the system;

2.2.2. implementing and then updating and managing the emissions and levy calculation service, and support administrative ICT system capabilities;

2.2.3. supporting participant emissions calculation;

2.2.4. administration of revenue recycling funding;

2.2.5. operational policy settings; and

2.2.6. extension and education services.

2.3. MPI and IR will be jointly responsible for:

2.3.1. participant registration and relationship management respectively for the emissions calculation and levy payment systems;

2.3.2. data interoperability for levy assessment, payment invoicing and compliance; and

2.3.3. compliance, monitoring and enforcement, including auditing functions.

2.4. IR would be also responsible for:

2.4.1. the levy assessment and collection functions.

2.4.2. delegated authority to undertake appropriate compliance actions which would identify anomalies in participants' emissions reports and registration information.

2.4.3. collect penalties identified by MPI enforcement processes.

3. The proposed approaches recognise that the existing accountabilities and core capabilities required to implement the pricing system sits across these three government agencies. In particular:

3.1. MfE administers the legislated climate change framework within the CCRA (including the 2050 target, emissions budgets, and the emissions reduction plan) as well as managing emissions pricing across the economy and policy settings for other emissions pricing mechanisms (the NZ ETS and Synthetic Greenhouse Gas Levy).

3.2. MPI develops and operates regulatory systems across the agriculture sector, implement and facilitate extension services within the primary sector and operate effective compliance, monitoring and enforcement systems. MPI has received funding in Budget 2022 to investigate the implementation, including building a detailed business case, and developing a prototype system, MPI has also been delegated key responsibilities for the NZ ETS forestry system.

3.3. IR-specific functions would leverage off current capabilities and processes as much as possible, which have high levels of compliance by participants. In particular management of large numbers of participants, undertaking assessment, payment and rebate functions and desktop risk assessments.

Responsibilities for governance of a pricing system

4. We propose a governance approach for the pricing system whereby roles and responsibilities would be shared between Ministers, the Commission, a System Oversight Board, Māori, and implementation agencies (see Table 1).

Table 1: Proposed governance and decision-making model

Pricing system functions	Who	Roles and responsibilities
Setting levy prices	The Ministers	Set final levy prices via Order in Council. Seek advice from the Climate Change Commission on setting levy prices.
	Climate Change Commission	Seek advice from the System Oversight Board and other affected parties on setting levy prices. Provides advice to the Ministers on setting the levy prices
	System Oversight Board (this will include Māori representation)	Provides advice to the Climate Change Commission on levy prices.
Regulatory and operational functions	Implementation agencies	Implement the pricing system, including day-to-day management of registration, reporting, payment verification and auditing. Implement the process for updating the centralised calculator methods, and inclusion of new mitigations and approved actions for incentives. This would include seeking external technical and scientific expertise as needed. Implement strategies for use of pricing system revenue and sequestration. Maintain compliance and enforcement. Monitor and evaluate the pricing system. Provide advice to the Ministers. Provide secretariat support to the System Oversight Board
Technical, scientific, and mātauranga Māori expertise	Implementation agencies	Implementation agency to convene external technical, scientific, and mātauranga Māori expertise when needed to support its work.
Revenue recycling	The Ministers	Provide direction to the System Oversight Board and agree and seek Cabinet approval of the final revenue recycling strategy. Maintain oversight and accountability for use of levy revenue
	System Oversight Board (this will include Māori representation)	Provides advice to Ministers on the recommended strategy for the use of pricing system revenue.

Subfunctions

5. A number of sub-functions are required to implement the reporting and payment components of the scheme:

    5.1. A process is required to establish and manage the regulations and data input standards for emissions calculations including enhancements over time to emissions reporting requirements, approved mitigations and sequestration, and emissions factors. This will function in a similar way to the NZ ETS process for updates to these regulations and data input standards. However, there will be additional complexity for farm level reporting that will come from a much greater number of participants and reporting based on farm level inputs. Participants that meet one or more of the thresholds will need to register for the system. It is proposed that this will occur in the IR system.

    5.2. Participants (or their delegated authority) will use an emissions calculator to determine their reporting and levy obligations which will calculate gross emissions and payment obligation, as well as deductions for mitigations and sequestration. It is proposed that MPI will initially provide this user interface but optionality for future enhancements will be proposed in the business case.

6. When the levy is in place in Q4 2025, participants will then be required to file a levy return and make payment (or receive a payment) through the IR system.

7. MPI, with support from IR, will provide compliance, monitoring and enforcement in line with provisions for other emissions pricing systems.

Appendix 3: compliance, monitoring and enforcement

This appendix provides detail on compliance, monitoring and enforcement proposals.

Verification, inquiry and auditing processes are needed

1 It is important to ensure information collected and reported on by levy participants is accurate. This will require participant information to be verifiable. We propose that auditing and verification is undertaken similarly to the NZ ETS and SGG levy, which provides the administrating agency with powers to inquire and verify information from participants and to recognise third-party verifiers.

2 We propose that the implementation agencies have powers to appoint enforcement officers, who will be responsible for inquiring with participants and verifying compliance with participant obligations.

3 The following powers and functions will be created to enable compliance inquiries by enforcement officers:

a. Powers to request any information to assess compliance;

b. Powers to require a person to appear before the enforcement officer or other person and provide information;

c. Power of a District Court Judge to hold an inquiry on request by an enforcement officer;

d. Powers of entry to land or premises (excluding a dwellinghouse or marae) for monitoring whether a person is complying with obligations;

e. Powers of entry to land or premises (excluding a dwellinghouse or marae) for investigation when there is belief on reasonable grounds that an offence has been committed; and

f. Power of a District Court Judge, Justice of the Peace, Community Magistrate, or Registrar of any Court to issue warrants authorising entry and search of any land, premises, dwellinghouse or marae to an authorised enforcement officer.

4 There will be an obligation on person's exercising powers and functions under this legislation to keep information that comes into the person's knowledge confidential, with some exceptions.

5 Due to the large number of participants, they cannot all be audited in detail by enforcement officers. This creates a risk of non-compliance going undetected. To address this risk, we propose to enable third-party verification processes to be set through regulations. The regulations would specify:

a. The data, information or calculations that must be verified;

b. The timing of verification; and

c. Any procedural requirements relating to the verification process and outcome.

6 The implementation agencies would have the power to recognise verifiers that may undertake any verification required by regulations. This approach retains flexibility for future decisions to be made on what should be verified, who would do the verification, and how often it should occur.

7 This approach provides opportunities to align verification with other regulatory systems in the future (e.g., freshwater farm plans).[1]

A robust offences and penalties regime will incentivise compliance

8 We propose to establish an offences and penalties regime that is similar to the existing NZ ETS and SGG levy systems and consists of the following components:

a. A series of criminal offences for failing to comply with certain obligations;

b. Infringement offences for minor non-compliance; and

c. Administrative penalties for non-reporting, incorrect reporting and levy non-payment.

<u>Criminal offences</u>

9 We propose to create a set of criminal offences for significant non-compliance with obligations. Criminal offences will be used for serious offending only and will generally require establishing the intent behind the offending.

10 We propose aligning criminal offences to those set out under the NZ ETS, Synthetic Greenhouse Gas Levy and tax system, for consistency.

11 Table 3 below contains a list of the proposed criminal offences and liabilities on conviction.

Table 1: Proposed criminal offences and liabilities

Offence(s)	Liability on conviction
Where a person, without reasonable excuse: • Fails to provide information to an enforcement officer; • Fails to appear before an enforcement officer for an inquiry, or fails to produce documents or information when required.	A maximum fine of $12,000 (in the case of an individual) and $24,000 (in any other case). *Note: These liabilities are aligned to those in sections 131 and 260 of the CCRA.*
Where a person:	A maximum fine of $25,000 (in the case of an individual) and $50,000 (in any other case).

[1] For example, freshwater farm plan certifiers or auditors could be recognised as verifiers and verify information at the same as completing a freshwater farm plan certification or audit.

• Refuses to answer any question, when required to do so by an enforcement officer during an inquiry; • Knowingly fails to submit an emissions report ; • Knowingly fails to maintain registration, in any given year that they are a levy participant; • Knowingly fails to collect data and information, calculate emissions, or keep records as required; • Knowingly provides altered, false, incomplete, or misleading information; • Wilfully obstructs, hinders, or deceives a person exercising a power conferred on that person; • Refuses to provide information that an enforcement officer has demanded from that person when using powers of entry.	*Note: These liabilities are aligned to sections 132 and 261 of the CCRA.*
Where a person, with intent to deceive and for the purpose of either obtaining any material benefit or avoiding any material detriment: • Fails to collect data and information, calculate emissions, or keep records as required; • Fails to submit an emissions report; • Fails to provide information to an enforcement officer when required to do so; • Provides altered, false, incomplete, or misleading information.	An imprisonment term not exceeding 5 years, or a maximum fine of $50,000, or both. *Note: These liabilities are aligned to sections 133 and 263 of the CCRA, and section 143B (evasion) of the Tax Administration Act.*
Where persons exercising powers and functions: • Knowingly fail to maintain confidentiality requirements.	An imprisonment term not exceeding 6 months, or a maximum fine of $15,000, or both. *Note: These liabilities are aligned to sections 130 and 262 of the CCRA.*

12 We consider that these sanctions will be a sufficient deterrent to significant non-compliance by participants. It will also ensure the integrity of those administrating the levy scheme.

13 In addition, we propose to explicitly clarify that any offence committed by an employee or agent shall be deemed to have been also committed by their employer (the point of legal responsibility).

14 Ensuring levy participants have a clear understanding of their obligations and consequences of non-compliance will be critical to operationalise the scheme.

Infringement offences

15 In addition to criminal offences for significant non-compliance, we propose enabling regulations to be made that can prescribe a failure or contravention of any duty, restriction, or prohibition for conduct (in both legislation and in regulations made under legislative provisions) as an infringement offence.

16 Infringement offences are an efficient mechanism to deal with minor non-compliance that does not justify a full imposition of criminal law.

17 Enforcement officers would be appointed by the implementation agencies, and be responsible for issuing, serving and revoking infringement notices. Procedural requirements will be needed for these matters.

18 When making regulations for infringement offences, the Ministers of Agriculture and Climate Change will need to be satisfied, after consulting with the Minister of Justice, that the offence(s) are sufficiently minor to be appropriate as an infringement offence. However, the conduct could be similar to criminal offences without mens rea (the intent behind the offending).

19 We propose the maximum fee that could be imposed by an enforcement officer would be $1,000 in the case of an individual, or $2,000 in any other case.

20 The maximum fine that could be imposed by a Court would be $3,000 in the case of an individual, and $6,000 in any other case.

Administrative penalties

21 We propose to create administrative penalties that will be imposed where a participant fails to comply with core obligations to report emissions and pay levies.

Reporting penalties

22 We propose that reporting penalties will cover situations where MPI are required to assess a person's emissions, either because reporting is not completed or contains errors.

23 The implementation agencies will be provided with the appropriate powers to amend emissions reports if satisfied that information contained in a return is incorrect or make a default assessment in cases of late/non-reporting. We propose this will be done using similar processes to the NZ ETS.[2]

24 Penalties will attach to the lesser of the size of the error, or the total emissions that should have been stated. The respective current prices of methane, nitrous oxide, and carbon dioxide, as set out in regulations, will be multiplied by the respective emissions.

25 Formulae for the penalties will be set out in legislation.

26 If the result of an assessment if that emissions are lesser than an original return, the maximum penalty will be $1,000.

[2] See sections 120-128 of the CCRA.

27 We propose that a reporting penalty can be reduced by 50 percent unless the error was grossly careless. Operational guidance can clarify what constitutes grossly careless behaviour to ensure clarity and predictability for participants.

28 Reporting penalties will be imposed in addition to making good any levy payment owed. For example, in cases of non-reporting, an assessment to determine a person's levy liability would occur alongside imposing a penalty.

Penalty for levy non-payment

29 We also propose establishing a penalty for non-payment. This will apply when levy payments are owed after the due date.

30 The penalty will be:

a. An additional 1 percent of the levy unpaid by the due date; and

b. An additional 4 percent of the levy unpaid, including penalties, after six days; and

c. An additional 1 percent of the levy unpaid, including penalties, after each subsequent month.

31 This penalty is aligned to late payment penalties used in the tax system.[3]

32 Inland Revenue, who will be responsible for collecting levy payments, will also be responsible for imposing and collecting penalties for non-payment.

33 We propose that both reporting and payment penalties are disapplied for the first reporting and payment cycle, to assist participants with the transition.

Review and appeal rights

34 We propose that legislation will provide for decisions made by the implementation agencies, including in relation to amending returns and imposing reporting penalties, to be reviewed on request. The implementation agencies will be empowered to appoint independent person(s) to review the decision and make a final decision.

35 We also propose that a subsequent appeal right to the District Court will be provided for. Appeals to the High Court will be provided for questions of law only.

Delivery

36 With the implementation of mandatory reporting in Q4 2024, followed by pricing from Q4 2025, different elements of the pricing and reporting system may have differing timelines for compliance, monitoring and enforcement delivery. This should not affect the overall design requirements of the system.

[3] See section 139B of the Tax Administration Act.

Supplementary Analysis Report: Agricultural Emissions Pricing

Coversheet

Purpose of Document	
Decision sought:	Agreement to legislate for an emissions pricing system on agricultural greenhouse gases as an alternative to the New Zealand Emissions Trading Scheme
Advising agencies:	Ministry for the Environment Ministry for Primary Industries
Proposing Ministers:	Minister of Climate Change Minister of Agriculture
Date finalised:	21/08/2023

Problem Definition

Aotearoa New Zealand needs to reduce its agricultural greenhouse gas emissions in order to meet our legislated targets, emissions budgets, and Nationally Determined Contribution, as well as to remain internationally competitive and environmentally sustainable producers of food and fibre.

The majority of our agricultural greenhouse gas emissions, including most of our national biogenic methane emissions, come from farmers of livestock, in particular sheep, beef, and dairy. However, the absence of a price for agricultural emissions means that pastoral farmers have limited financial incentives to reduce their emissions. They are likely to be producing more food and fibre, or to be producing with lower emissions efficiency, than would be the case if they faced the true cost of emissions. Pastoral farmers are also not incentivised to adopt practices and technologies that could reduce emissions.

Other producers of food products in Aotearoa New Zealand also contribute to our total greenhouse gas emissions, including methane emissions from minor animal and animal product sectors (deer, pigs, poultry, and eggs, etc.) as well as emissions associated with fertiliser used by growers (fruit, vegetables, crops), and likewise face limited financial incentives to reduce emissions.

Executive Summary

The agriculture sector plays an important part in Aotearoa New Zealand's transition to a low-emissions, climate-resilient, high-wage future. Agricultural greenhouse gas emissions contribute to around 50 per cent of Aotearoa New Zealand's total emissions, including most of our nitrous oxide and biogenic methane emissions.

Aotearoa New Zealand has legislated targets to reduce:

- methane by 24–47 per cent by 2050 (compared to 2017 levels);
- methane by 10 per cent by 2030 (compared to 2017 levels); and,
- long-lived gases to net zero by 2050.

The Climate Change Response Act 2002 requires an agricultural emissions pricing system to be in place by 2025. To support this process, the Government partnered with the food and fibre sector bodies and the Federation of Māori Authorities (FOMA) through the He Waka Eke Noa – Primary Sector Climate Action Partnership (the Partnership). The Government also commissioned the Climate Change Commission (the Commission) to assess the Partnership's

recommendations, and farmer readiness for a pricing system by 2025, and advise on any assistance that should be provided to farmers and growers under an agricultural emissions pricing system.

Officials considered the Partnership's and Commission's recommendations and advice, and assessed the following options for pricing agricultural emissions:

- Option 1 – Processor-level Pricing in the NZ ETS;
- Option 2 – Basic Farm-level Levy (Official's preferred option);
- Option 3 – Partnership's Farm-level Levy;
- Option 4 – Farm-level Pricing in the NZ ETS;

Officials conclude that Option 2: Basic Farm-level Levy, which adapts the Partnership's design recommendations and incorporates feedback received through public consultation, is the preferred option. This is based on the three key criteria of effective, practical, and equitable. Sub-options were also considered for Option 2, but not preferred. Appendix Three provides a comparison of system elements across these four macro-options in addition to the explanations and assessments of individual options throughout the Supplementary Analysis Report (SAR).

A Cost-Benefit Analysis was also undertaken, comparing the long-term benefits of emissions reductions (and market premia from carbon-neutral products), with the costs of losses in net farm revenue as well as administrative and compliance costs. The comparison was across different processor and farm-level pricing systems and varying methane prices. There was also an assessment of the fiscal sustainability of the basic farm-level levy system under high and low mitigation technology uptake assumptions.

The analysis found that all options, except a farm-level levy at the lowest price, would have positive benefit–cost ratios, indicating that both processor and farm-level pricing systems all have positive impacts compared to not pricing agricultural emissions. Benefit–cost ratios were comparable across these options; with options that result in higher emission reductions having higher benefits, but at a cost of higher losses in net farm revenue.

Modelling indicated that the largest impacts of emissions pricing are expected to be lower production on sheep and beef farms, which have high emissions relative to production, and limited options to reduce emissions other than by lowering stock numbers. Dairy farms are also likely to reduce production in response to emissions pricing, but proportionately less; and other farming types (e.g. arable, horticulture) are projected to expand modestly as a result of land-use changes from pasture.

Direct impacts on farm production from emissions pricing may have significant flow-on effects, including upstream impacts on production from reduced farm inputs (e.g. agricultural contractors), and downstream effects if processors (e.g. meat works or dairy factories) have fewer products to process. There may be effects that offset these impacts associated with alternative land uses and the spending and employment associated with this.

Māori may be disproportionately affected because of the concentration of their assets in sheep and beef farming – it is estimated that Māori operate up to 25 per cent of Aotearoa New Zealand's sheep and beef farmland – as well as high levels of employment in industries related to agriculture, such as meat processing. It is important to work with Māori landowners to understand how we can manage these impacts, to support a transition to a low-emission, climate-resilient future.

The impacts of reduced agricultural production will be greatest in areas where farming is a large part of the local economy, especially in remote rural communities with few alternative employment opportunities. Potential mitigation measures may focus around two key themes: reducing the risk of widespread financial hardship; and, building rural skills and support systems, for instance through extension services and programmes.

The designs of these systems also include elements such as: how the price will be set; the governance arrangements of the pricing system; what actions farmers will be rewarded for; and how on-farm sequestration should be recognised. Following public consultation, the Minister of Climate Change and the Minister of Agriculture (collectively, the Ministers) released a joint report

in December 2022, outlining a preferred agricultural emissions pricing system. Final policy decisions on a pricing system will be made in 2023.

Appendix One includes a description and qualitative assessment of system elements that were not integrated into any of the final options presented in the main body of this document.

Appendix Two outlines options considered for rewarding on-farm sequestration.

Appendix Three provides additional comparison of system elements across the different options.

Limitations and Constraints on Analysis

Much of the scope and scale of this analysis is determined by the history of this policy process and by legislated or Cabinet-mandated pathways.

Note that, in some places, rather than designing and assessing a range of discrete system elements under the preferred option (the basic farm-level levy), officials have taken negotiated positions and/or minimum viable products needed to meet implementation deadlines and worked to improve and streamline these for the best outcomes against our criteria.

This SAR was initially drafted as an interim document to support Cabinet decisions ahead of consultation, with the final version of the SAR integrating Ministerial decisions made in late 2022 and August 2023 and the feedback received over the consultation period.

This document ought to be read alongside the following reports for a comprehensive picture of the policy proposals:

- The Cabinet paper to which this SAR is appended;
- The discussion document, *Pricing Agricultural Emissions: Consultation document* (2022);
- The Ministers' subsequent report, *Pricing Agricultural Emissions: Report under section 215 of the CCRA* (2022); and
- More comprehensive detail on the feedback provided through the consultation process presented in *Pricing Agricultural Emissions: Summary of submissions* (2023).

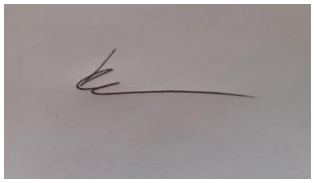
The analysis also draws on modelling of the impacts of pricing agricultural emissions on the agricultural sector undertaken by Manaaki Whenua – Landcare Research in various iterations over the course of 2022.

However, modelling of major 'shocks' such as introducing emissions pricing is inherently subject to high margins of error, and the figures quoted in this document should be treated with caution. Notwithstanding this, we consider the comparisons between different options yield realistic conclusions about relative impacts.

There is considerable uncertainty about the nature, scale, and location of impacts of changes in agricultural production on the wider economy, Māori, and rural communities. Therefore, any quantitative assessment of such impacts would be highly speculative, and we have limited our assessment to qualitative factors.

Overall, however, the modelling conducted has clearly demonstrated that all forms of pricing will have a significant impact, and that the level of price has a much greater effect on the results of any quantitative analysis than any system elements or settings that are present across the options presented. Many of the differences between options shown in the analysis represent restrictions on how prices could be set (e.g., in the NZ ETS at processor level, there would be less control and ability to start in a 'low price' scenario as in other options), and it is the subsequent variation in *price* not *architecture* that creates variation between outputs of modelling. At similar prices, the options have comparable outcomes in terms of absolute reductions achieved and aggregate socio-economic impacts.

Information received directly from submitters to the government's consultation process was largely qualitative, and even anecdotal, and was therefore unable to further refine the quantitative modelling. Instead, it predominantly reinforced the picture that we already had of the overall impacts that may be felt across the different parts of the agricultural sector. There is insufficient information available to determine the specific impacts of the different pricing options on Māori and rural communities. The information and analysis indicate that all of the pricing options will have an impact.

Responsible Manager(s) (completed by relevant manager)	
Kara Lok *Manager* *Markets Development, Climate Change* *Ministry for the Environment*  *23/08/2023*	*Fleur Francois* *Manager* *Climate Change On-Farm and Inventory* *Ministry for Primary Industries* 9(2)(a) *21/08/2023*

Quality Assurance (completed by QA panel)	
Reviewing Agencies:	Ministry for the Environment Ministry for Primary Industries The Treasury
Panel Assessment & Comment:	A quality assurance panel with members from the Treasury, the Ministry for Primary Industries and the Ministry for the Environment have reviewed the Supplementary Analysis Report (SAR). The panel considers that the SAR partially meets the quality assurance criteria. The SAR provides mostly convincing and complete analysis of the different high-level options for pricing agricultural emissions. As noted in the limitation section, the SAR does not include analysis on the specific impacts of the different pricing options on Māori and rural communities beyond qualitative factors. The SAR could have been strengthened by analysing in more detail the various system elements within the Government's preferred farm-based levy system, including what alternatives there are, and the trade-offs between decisions on system elements. As noted in the limitations section, the emissions price set will have a significant impact on the ability of the system (under any option) to achieve its objectives.

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

1. Aotearoa New Zealand needs to do its part in mitigating the worst effects of anthropogenic climate change, by reducing greenhouse gas (GHG) emissions across the economy.

2. This has been reflected in our legislated targets under the Climate Change Response Act 2002 (CCRA)[1], which include: reducing gross biogenic methane by 10% by 2030 from 2017 levels; reducing gross biogenic methane by 24–47% by 2050 from 2017 levels; and, reducing all other greenhouse gases to net zero by 2050.

3. As agriculture contributes around half of Aotearoa New Zealand's gross emissions, including 91% of our biogenic methane emissions and 94% of our nitrous oxide emissions, it is particularly important that significant reductions are achieved within the agricultural sector.

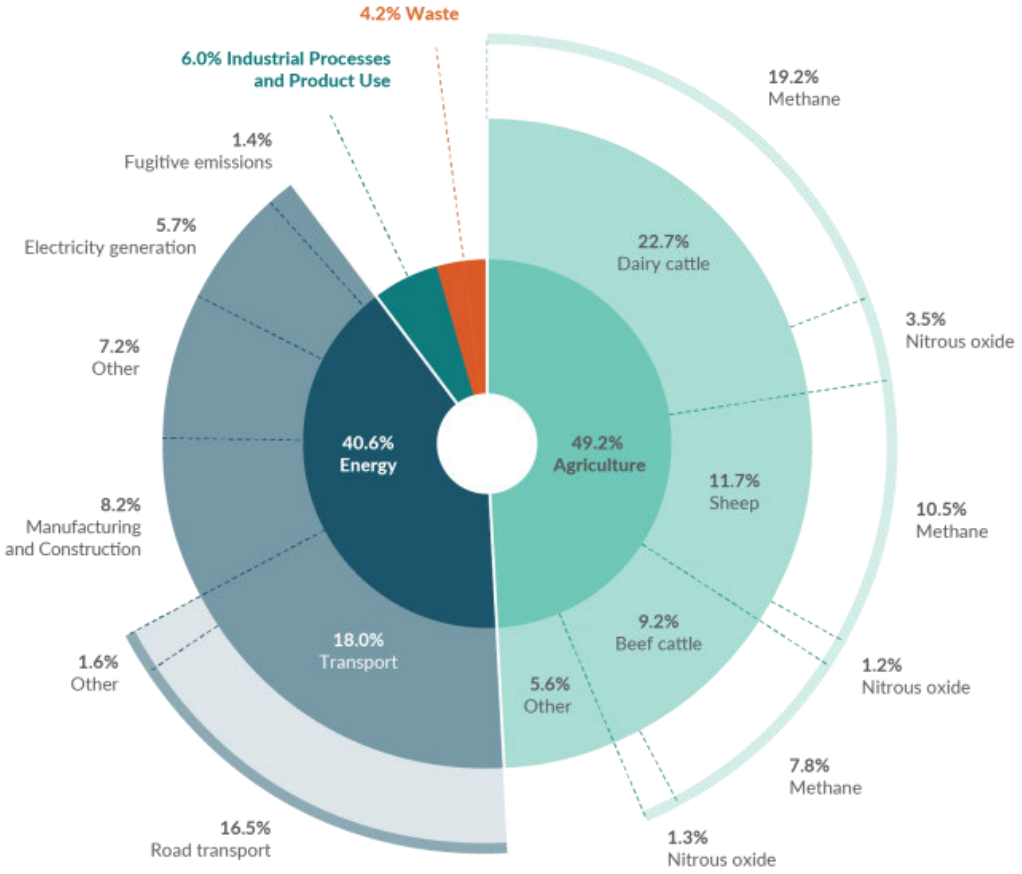


Figure 1: Greenhouse gas emissions by sector, with agriculture making up about 50% of Aotearoa New Zealand's emissions profile[2]

Purpose of current round of policy development and consultation

4. The government previously consulted on the decision between an alternative emissions pricing system or the New Zealand Emission Trading Scheme (NZ ETS) backstop through the *Action on Agricultural Emissions* consultation process in 2019, so this is not a focus of this current round of policy development and consultation. Rather, the focus is on the design details for legislation and implementation of an alternative pricing system, in particular a

[1] www.legislation.govt.nz/act/public/2002/0040/latest/DLM158584.html

[2] https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902021-snapshot/

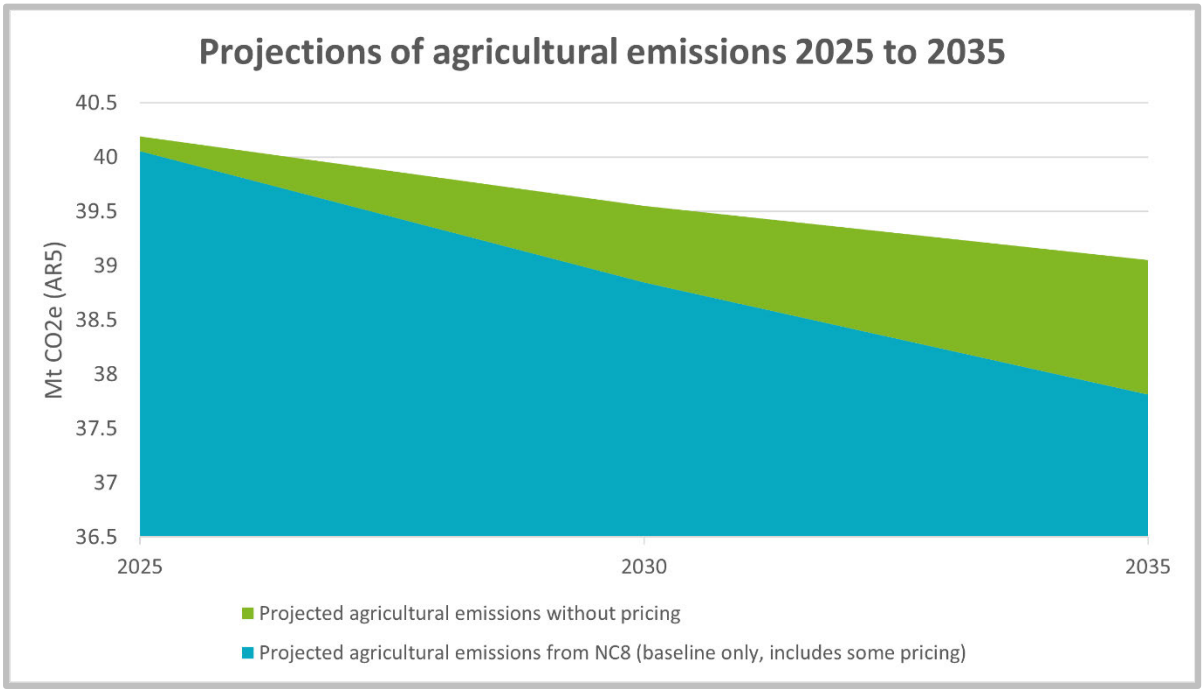
preferred option for a farm-level levy that builds on the advice of the He Waka Eke Noa – Primary Sector Climate Action Partnership (the Partnership) and the Climate Change Commission (the Commission). However, for completeness, this Supplementary Analysis Report also includes an assessment of a wider range of policy options than formed part of our *Pricing Agricultural Emissions* consultation in 2022.

5. It will also be important for the package of policy documents, including this SAR, to inform farmers and the wider public of what the entire pricing system could look like (not just the elements that sit in legislation). Details that are likely to sit in regulations or operations will be highlighted where relevant, even if they are not the core focus of this SAR.

Detailed context and status quo

6. The primary instrument for reducing Aotearoa New Zealand's greenhouse gas emissions is the NZ ETS[3], through which most industries are required to pay a carbon price. Biological emissions from the agriculture sector do not face a price. Agricultural processors are already required to report under the NZ ETS, but do not have surrender obligations, meaning that there is no price on their emissions associated with their participation.

7. Agricultural emissions are projected to decrease over the period 2025 to 2035. Some form of pricing agricultural emissions (along with other measures) is expected to lead to greater reductions than without pricing (Figure 2).[4] **Error! Reference source not found.** Projections are from New Zealand's



8.

Figure 2: Expected trajectory of agricultural greenhouse gas emissions to 2035

9. Eighth National Communication (NC8) published in December 2022. Note that the 'with pricing' projected scenario included here does not reflect any of the options presented in this RIS, but a version of the NZ ETS backstop highly simplified for the modelling exercise.

[3] See Emissions Trading Scheme | EPA for a description of the NZ ETS.

[4] projections are from New Zealand's Eighth National Communication (NC8) published in December 2022. Note that the 'with pricing' projected scenario included here does not reflect any of the options presented in this RIS, but a version of the NZ ETS backstop highly simplified for the modelling exercise.

Furthermore, with pricing beginning in Q4 2025, emissions reductions will be slightly later than portrayed here. Figure 3 When compared to the three emission budget (EB) periods over this time period, none of the projected scenarios without farm-level pricing achieve sufficient reductions to meet the required budgets (Figure 3).

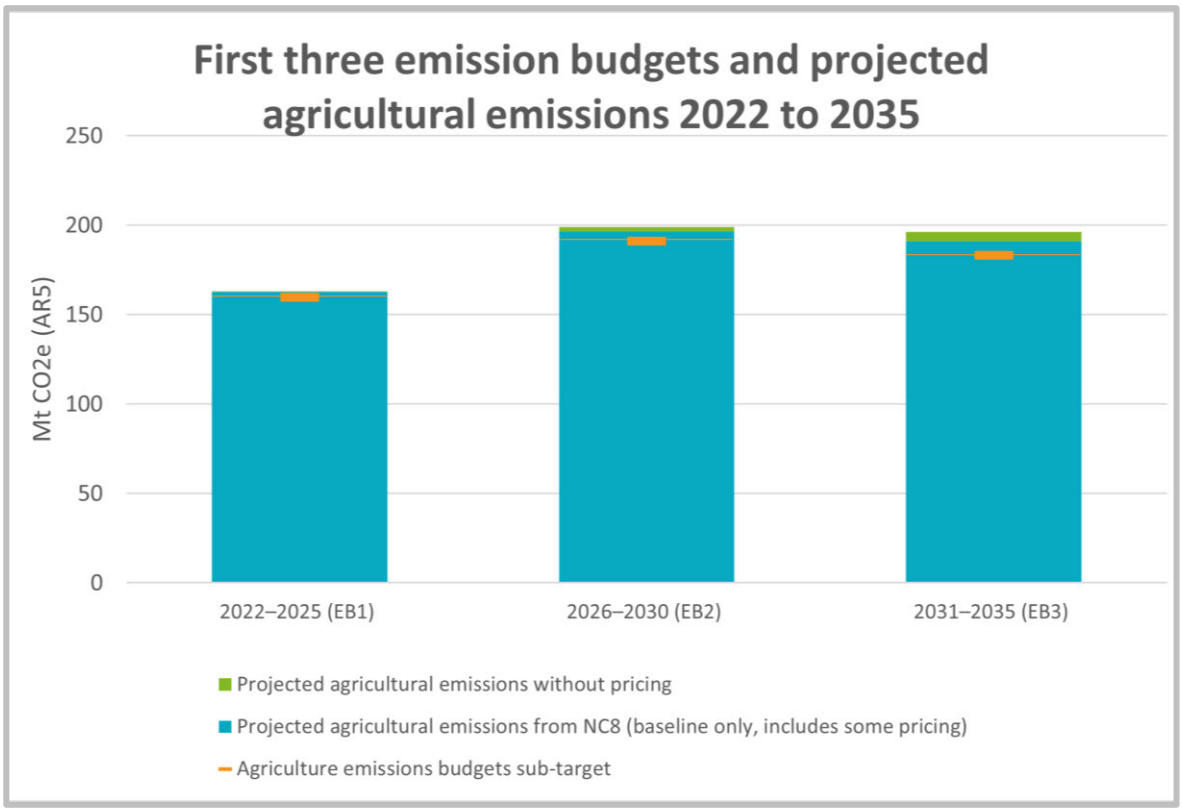


Figure 3: Emissions Budgets 1–3 and projected agricultural emissions until 2035

10. The analysis and options presented in this SAR builds on previous policy work and the legislated decision that there will be a system to price agricultural emissions by 2025, to which the previous and current government and the agricultural sector have committed. Agricultural emissions can either be priced through the NZ ETS or an alternative emissions pricing system.

11. The table below provides a high-level timeline of the policy processes underpinning these decisions and additional work supported by government to progress emissions pricing system options, most notably by the Partnership and the Commission.

2019	The Interim Climate Change Committee (ICCC) recommended agricultural emissions pricing.[5]
	The agricultural sector presented an alternative proposal entitled *He Waka Eke Noa: Our Future in Our Hands – Primary Sector Climate Change Commitment*.[6]
	Government held the *Action on Agricultural Emissions* consultation.[7]
	Government accepted the proposal to partner with the agricultural sector and iwi/Māori.
2020	The Climate Change Response (Emissions Trading Reform) Amendment Act 2020 committed to a system on agricultural emissions from no later than 2025, including: • Milestones toward farmer readiness for emissions pricing, reviewed by the Commission (Schedule 5); • 'Backstop' provisions to include agriculture in the NZ ETS if there is insufficient progress toward the milestones or a suitable alternative system (sections 220, 2A–2C, and various); • Considerations for the Minister of Climate Change and the Minister of Agriculture[8] when making final decisions on how agricultural emissions would be priced;
	• A requirement for the Ministers to release a public report outlining the alternative agricultural emissions pricing system to the NZ ETS no later than 31 December 2022 (section 215).
	The Partnership[9] was established to, among other activities, carry out a co-design policy process for an agricultural emissions pricing system that would be effective in reducing agricultural emissions, implementable and workable for the farmers, growers, and industry bodies whom it would directly affect.
2021	The Partnership continues work on policy design and farmer engagement.
2022	The Partnership provided recommendations on an agricultural emissions pricing system: • The Partnership developed policy recommendations on their preferred emissions pricing system as an alternative to the NZ ETS, including details for pricing and reporting of emissions and recognition of on-farm sequestration; • The Partnership also began the work necessary to achieve the Schedule 5 milestones in the CCRA, and put in place a wider behaviour-change framework to support farmers and growers to transition to low-emissions agriculture; • This report was delivered on 31 May 2022. It is referred to throughout the SAR as "the Partnership's Recommendations Report."
	The Commission provided advice to support Ministerial decisions,[10] including: • 'What assistance, if any' should be provided to participants an emissions pricing system. This advice was requested by the Ministers under section 5K and 215 of the CCRA, and was delivered on 31 May 2022. It is referred to in this SAR as "the Commission's 5K Advice"; • An 'agricultural progress assessment' (APA) report of progress toward milestones in Schedule 5 of the CCRA. They also generally considered farmer readiness, proposed principles for agricultural emissions pricing system options, and an assessment of the Partnership's recommended option against the NZ ETS. This review was required by section 220 of the CCRA and delivered on 30 June 2022. It is referred to in this SAR as "the Commission's APA Report."
	Government consulted on proposed options for the pricing system, which built on the recommendations of the Partnership and the Commission, in response to which we received over 21,000 submissions.[11] • The Ministers made public a report, as required in section 215 of the CCRA, outlining further details of the pricing system.[12]
2023	Further engagement has taken place with the Partnership to refine the government's preferred option for the pricing system.

Table 1: Timeline of recent policy processes from 2019 to 2023.

5 climatecommission.govt.nz/our-work/advice-to-government-topic/interim-climate-change-committee-reports

6 dairynz.co.nz/media/5792241/primary-sector-climate-change-commitment-july-2019

7 environment.govt.nz/publications/action-on-agricultural-emissions-a-discussion-document-on-proposals-to-address-greenhouse-gas-emissions-from-agriculture

8 Hereafter, the Minister of Climate Change is referred to as 'the Minister,' and the Minister of Climate Change and Minister of Agriculture are collectively referred to as 'the Ministers.'

9 hewakaekenoa.nz/about

10 climatecommission.govt.nz/our-work/advice-to-government-topic/agricultural-emissions

11 Linked toward the end of the main consultation landing page: consult.environment.govt.nz/climate/agriculture-emissions-and-pricing

12 Linked at the top of the main consultation landing page: consult.environment.govt.nz/climate/agriculture-emissions-and-pricing

Figure 4: Key recent reports underpinning the current policy process

12. Within the context and decisions outlined above, this SAR assumes that emissions from agriculture will be priced in some form no later than Q4 2025 and includes pricing system options for Cabinet consideration. These formed the basis of the Government's 2022 consultation and will continue to inform the subsequent legislation process. The assessment that underpinned the decision to use a pricing system to reduce agricultural emissions is detailed in the 2019 RIS, *Reducing Greenhouse Gas Emissions from the Agriculture Sector*.[13]

13. Our policy proposals have significant interdependencies with a number of other climate and environment interventions, including:

    a. Emissions budgets, the Emissions Reduction Plan, and Aotearoa New Zealand's Nationally Determined Contribution (NDC);

    b. The NZ ETS and other emissions pricing and incentives schemes (e.g. forestry policy, the Synthetic Greenhouse Gas Levy);

    c. Freshwater Farm Plans and Integrated Farm Planning;

    d. Resource Management reforms (both overarching reforms, and specific changes relating to the consideration of climate change by local government);

    e. Wider rural/agricultural policy, including sector and government initiatives (e.g. the National Policy Statement for Indigenous Biodiversity, Crown Pastoral Land and state-owned farming enterprises, Fit for a Better World roadmap).

14. Specific interactions with or impacts related to these interdependencies are discussed throughout this document. In particular, we need to ensure that processors and farmers are not faced with unnecessary duplication of effort and costs, or conflicting incentives, as a result of inconsistencies between different systems.

Māori economy, climate change, and the primary sector

15. Māori play a significant role in the primary sector. Māori own an estimated 1.51 million hectares of land, across approximately 28,000 blocks, either under private ownership or as registered Māori land owned by Māori authorities, enterprises, and individuals. Māori landowners have a substantial primary sector asset base including: $8.6 billion in sheep and

13 environment.govt.nz/publications/reducing-greenhouse-gas-emissions-from-the-agriculture-sector

beef farming; $4.9 billion in dairy farming; and $2.6 billion in other agriculture (including horticulture). 19,170 Māori are employed across these sectors.

16. Within the Māori economy, pastoral farming makes up a significant proportion of the Māori economy gross emissions profile (excluding forestry) – dairy farming makes up 21% and sheep and beef farming make up 51%.

17. It is important to work with Māori landowners to understand mitigation options that are feasible on Māori land, to enable a transition to a low-emission and climate-resilient future, as well as to recognise the value of mitigations found in mātauranga Māori and local/regional practices.

18. We have heard consistently that mitigating and adapting to climate change are significant priorities for Māori, alongside being recognised for the actions they take on farm. Through engagement on agricultural emissions pricing since 2019, Māori have strongly expressed the importance of the Crown prioritising and upholding the principles of the Treaty of Waitangi / Te Tiriti o Waitangi (Te Tiriti). This includes the need for genuine engagement, recognition of te ao Māori, te taiao, and mātauranga Māori, and support for Māori farmers, growers, and landowners to participate in a pricing system.

19. The Government has heard from recent engagement that the Crown must do more to uphold Te Tiriti. Concerns were raised about the consultation approach, including a desire for changes to the pricing system to address historical disadvantages and manage disproportionate impacts on Māori and Māori communities. Key areas of concern were raised during consultation and the specific policy solutions to help mitigate the impacts are covered below:

    a. Sequestration – Māori submitters emphasized the importance of recognising a wide range of carbon sequestration in vegetation, particularly that existing prior to 1990, in the pricing system. Sequestration is considered to play a key role in helping Māori reduce their emissions levy, is important for equity reasons and recognises their role as kaitiaki.

    b. Transitional assistance – Submissions raised concerns around the lack of assistance to support the transition due to a lack of access to support systems, complicated land management structures, mitigation practices, tools or technologies that take a whole-of-whenua approach (Kotahitanga) towards land development (mana tangata) and environmental sustainability (kaitiakitanga). A specific ring-fenced fund from levy revenue to support Māori will be created. Māori representation on the System Oversight Board (proposed to advise Ministers on strategy and settings for the pricing system) will assist in identifying any further measures required to mitigate the impact on Māori.

    c. Governance and revenue recycling – Māori submitters expressed a desire to have a true partnership with government, and for Māori to make decisions for Māori. Government will collaborate with Māori to ensure the structure of advisory roles is developed in a way that is fit for purpose and future-proofed, including how Māori representation is reflected with the System Oversight Board.

    d. Point of obligation – Some submissions considered that a landowner point of obligation is preferential as only allowing the business owner to be recognised for sequestration will disadvantage Māori and has the potential to denigrate the mana of whenua Māori. Ensuring Māori can report collectively will address some of these concerns.

    e. Collectives – Submissions from Māori supported the use of collectives. Government will enable Māori and all participants to collectively report on their emissions and sequestration in 2025.

20. Māori agribusinesses also provided input within the Partnership, through the Te Aukaha work stream led by the Federation of Māori Authorities (FOMA). We note, however, that FOMA do not represent all Māori, or even all Māori agribusiness interests.

21. In addition, under Te Tiriti, the Crown has obligations to Māori when making decisions, including to:

    a. Identify the interests of affected Māori;

    b. Identify the likely impact of the proposal/decision on affected Māori; and

    c. Demonstrate active steps being taken, or that it intends to take, to protect the affected interest.

Consultation process and next steps

22. More detail on the context of this policy process can be found in the discussion document (*Pricing Agricultural Emissions: Consultation document*, 2022*)*, which was developed in parallel with the interim RIS, and the Ministerial report required in legislation by the end of 2022 (*Pricing Agricultural Emissions: Report under section 215 of the CCRA*, 2022).

23. Public consultation on the proposed agricultural emissions pricing system ran for six weeks between 11 October 2022 and 18 November 2022.

24. Feedback from consultation and engagement on the *Pricing Agricultural Emissions* discussion document with Māori, the agriculture sector, and the public has informed further design work of the proposed agricultural emissions pricing system.

25. Officials from the Ministry for the Environment (MfE) and the Ministry for Primary Industries (MPI) held 28 online and in-person events across the consultation period and received over 21,000 submissions on the proposal.

26. A summary of submissions (*Pricing agricultural emissions: Summary of submissions*, 2023) has been prepared and will accompany this document to Cabinet, detailing the numbers of submissions received in various forms, and the feedback received across each element of the proposed policy options. This summary will be publicly released in the coming months.

27. The major themes from submissions are summarised below*:*

    a. Most submitters commented on the departure of the government's proposal from the proposal put forward by the Partnership, and advocated for adoption or closer alignment with the Partnership proposal.

    b. Some non-sector submitters considered the proposals an inequitable subsidy for the agricultural sector. Most sector submitters expressed concern the proposals would threaten the viability of rural communities. Many Māori submitters considered that Māori would be disproportionately impacted and shared concerns about the negative impact on rual communities and people's mental health.

    c. Submitters views were polarised on governance and implementation. Most sector submitters opposed the government's modifications, while most Māori submitters considered the government had not sufficiently engaged with Māori and most non-sector submitters argued the pricing system was long overdue and advocated for iwi and Māori playing a larger role in governing the pricing system.

    d. Submitters views were highly polarised on the approach to setting levy rates. Sector submitters overwhelmingly opposed the the government's proposed approach and most non-sector submitters either supported the government's proposal or argued it did not go far enough. Most Māori submitters were concerned the levy rates would

disadvantage Māori landowners as well as lower-socioeconomic and rural Māori communities.

e. Most submitters opposed the government's modifications to the Partnership proposal for recognising on-farm sequestration. They argued it was inequitable for farmers to be charged for their emissions while the full range of sequestration on-farm was not recognised. Most Māori submitters argued that recognising sequestration from only limited types of vegetation was inequitable and would unfairly disadvantage Māori.

f. There was support from most submitters for a single centralised emissions calculator, farm level pricing of fertilser emissions, and transitional suppport, while the response to adopting an interim processor level levy was mixed.

28. The Ministers' section 215 report on an alternative agricultural emissions pricing system to the NZ ETS, informed by the emerging themes from submissions and broader consultation feedback, was published in December 2022. Following this, Cabinet agreed in August 2023 to make final decisions on the establishment and implementation of a farm-level, split-gas levy system for agricultural emissions with mandatory reporting beginning in Q4 2024 and pricing beginning in Q4 2025 [CAB-23-MIN-0370 refers]. Cabinet invited the Minister of Agriculture and the Minister of Climate to deliver a detailed Cabinet paper on a farm-level pricing system, as indicated in the December 2022 section 215 report before the 2023 General Election. This SAR provides analysis and support for that detailed Cabinet paper.

29. The proposed farm-level pricing system based on what was outlined in the section 215 report and the preferred option identified in the SAR has the following features:

a. A farm-level split-gas levy for agricultural emissions that would price emissions from biogenic methane and long-lived gases (nitrous oxide and carbon dioxide) separately;

b. Mandatory reporting of farm emissions starting in Quarter Four (Q4) 2024 of the calendar year;

c. Farmers and growers will be priced on their farm's emissions and recognised and rewarded approved mitigation technology used from Q4 2025 of the calendar year;

d. The legal point of responsibility for reporting and paying for emissions would be IR-registered businesses who meet one or more of the emissions thresholds (equivalent to ~200 tonnes CO_2-e per year);

e. Reporting could be done at either the individual farm level or via a collective;

f. Relatively low, unique prices would be set initially for both biogenic methane and long-lived gases for two years, based on set criteria;

g. On-farm sequestration would be recognised in an interim system in the event the innovation pathway (more details in Appendix Two) is not in place when the levy system comes into effect;

h. Revenue raised from the levy would be recycled back in the system, in line with a strategy outlining spending priorities to mitigate agricultural emissions and operate the system. The strategy would include operating costs, incentive and sequestration payments, and a dedicated fund for Māori landowners;

i. Advice on various elements of the pricing system and its settings would include the Commission and a non-statutory System Oversight Board, which will have representation from the agriculture sector and Māori;

j. Implementation of the pricing system would involve the Ministry for Primary Industries, Ministry for the Environment, and the Inland Revenue Department;

k. Information requirements would be detailed in primary legislation and regulations;

What is the policy problem or opportunity?

30. Aotearoa New Zealand needs to reduce its agricultural greenhouse gas emissions in order to meet our legislated targets, emissions budgets, and NDC, as well as to remain internationally competitive and environmentally sustainable producers of food and fibre.

31. However, the absence of a price for agricultural emissions means that farmers and growers have limited financial incentives to reduce their emissions. They are likely to be producing more food and fibre than would be the case if they faced the true cost of emissions (and other less emissions-intensive types of agriculture such as fruit, vegetables, and crops will produce less). Farmers and growers would not be incentivised to adopt practices and technologies that could reduce emissions.

32. The 2019 RIS on reducing emissions from the agriculture sector established the following problem definition and opportunity, from which the decision was made to price agricultural emissions:

Problem Definition

Reducing Greenhouse Gas Emissions from the Agriculture Sector, 2019 (summarised)

Urgent transformational economy-wide action is needed in New Zealand as part of the global response to the challenge of constraining climate change. Further reductions in agricultural emissions of methane and nitrous oxide are required to meet New Zealand's domestic and international targets for 2030 and 2050.

The burden of making the necessary low-emissions transition also needs to be distributed efficiently and equitably across the economy. Other emissions (from energy, waste, and industrial processes) are already priced through the NZ ETS and only agricultural emissions are not priced.

Government intervention is necessary to deliver the emissions reductions required because the status quo does not provide sufficient incentive for the uptake of emissions-reducing practices and technologies across the agriculture sector.

An ideal policy mix would build the capacity and capability to find new and better ways to further reduce the biological emissions from agriculture over time, consistent with maintaining a profitable agricultural sector within a productive, sustainable, and inclusive economy.

Box 1: Problem definition outlining the need to reduce agricultural emissions from the 2019 RIS.

33. The CCRA requires some form of system to price agricultural greenhouse gas emissions to be in place by 2025, even if full farm-level pricing is delayed:

    a. If no suitable alternative emissions pricing system can be implemented by 2025, or if farmers are not ready to participate in this system, then the CCRA includes provisions to place NZ ETS surrender obligations on agricultural processors.

    b. While this would need to be operationalised and conflicting provisions would need to be removed by Order in Council, from a legislative perspective the NZ ETS 'backstop' is automatic.

34. The policy opportunity is to ensure that the system chosen to price agricultural emissions is effective at reducing emissions in line with Aotearoa New Zealand's emission reduction targets and supports a viable agricultural sector. This includes the opportunity to either develop an alternative to the NZ ETS for pricing agricultural emissions, or to incorporate processors and/or farmers into the NZ ETS (which could include tweaking how they would interact by default under legislation and creating additional policy to support participation in the NZ ETS).

35. The opportunities, costs, and risks of putting agricultural processors and/or farmers in the NZ ETS are considered in Section 2, along with non-NZ ETS farm-level or processor-level options, and fertiliser-only NZ ETS.

36. Any of the options for pricing agricultural emissions, once implemented, will have significant distributional impacts, especially on the agricultural sector. Distributional impacts are therefore a key element of our assessment framework employed throughout this SAR and are addressed where relevant in later sections.

What objectives are sought in relation to the policy problem?

37. Our objectives in addressing this policy problem build on decision-making frameworks and factors for consideration from several places:

    a. Legislated milestones and requirements, primarily those in section 215 and Schedule 5 of the CCRA;

    c. The Climate Change Response (Zero Carbon) Amendment Act 2019 sets out Aotearoa New Zealand's domestic emissions reduction target framework, including the separate biogenic methane targets for 2030 (10% reduction) and 2050 (24–47% reduction), as well as the net-zero target for all other gases by 2050;

    d. Aotearoa New Zealand is using a system of emissions budgets to meet our 2050 target. The Government published the first three emissions budgets (2022–2025, 290 Mt CO_2-e; 2026–2030, 305 Mt CO_2-e; 2031–2035, 240 Mt CO_2-e) in May 2022. The emissions reduction plan setting out policies and strategies for meeting emissions budgets was published on 16 May 2022;

    e. Aotearoa New Zealand also has international obligations, in particular our NDC;

    f. Objectives and outcomes agreed in collaboration by the Partnership, including with government Partners, as well as the principles recommended by the Commission for general assessment of agricultural emissions pricing.

38. Officials have summarised these into three overarching objectives, presented in Box 2: Objectives for agricultural emissions pricing system below:

Policy Objectives	
(1)	The agricultural emissions pricing system should be **Effective,** in generating incentives that will result in meaningful reductions in emissions that contribute to meeting Aotearoa New Zealand's targets**.** *While agriculture is not expected to achieve the 2030 target alone, agricultural emissions should be reduced to contribute to the gross reductions in biogenic methane of 10% from 2017 levels required to meet this target.*
(2)	The agricultural emissions pricing system should be **Practical,** in that it can be implemented within statutory timeframes and established, operated, and modified in a cost-effective manner.
(3)	The agricultural emissions pricing system should be **Equitable,** within the agricultural sector, between it and other industries**;** and in terms of its impact on Māori agribusiness and broader iwi/Māori aspirations**.**

Box 2: Objectives for agricultural emissions pricing system

39. The criteria outlined in the following section (see Table 4) expand on and define these objectives against which we assess the set of options. This includes by identifying specific metrics against which the more subjective elements of the objectives (e.g., equity) are assessed.

Section 2: Deciding upon an option to address the policy problem

What criteria will be used to compare options to the status quo?

40. The following table outlines the criteria from the decision-making framework built by officials.

41. Officials have also endeavoured to reflect the principles for assessing agricultural emissions pricing proposed by the Commission in the detail of these criteria. These are described in full in the Commission's APA review.

Objectives	Detailed Criteria	Key Trade-offs
(1) Effective	(a) at reducing emissions in line with domestic and international climate change targets and the emissions budgets	The simplest way to achieve emissions reductions is through cuts in pastoral farm production; however, major reductions in production could have significant negative impacts on associated industries (suppliers, processors), farming regions and some rural communities. The data and verification required to recognise specific on-farm technologies and practices is complex and costly, reducing the ability to streamline the system to keep it practical.
	(b) by recognising and incentivising the uptake of farm management, system, and land-use changes that result in emissions reductions	
	(c) by having independent, robust, and transparent policy setting and adjustment processes	
(2) Practical	(a) by being simple and easy to understand and participate in	As the system is made more simple and low cost, fewer reductions and mitigations that can be incentivised, and fewer levers are available to ensure equity, as the price becomes a blunt signal.
	(b) by being as low cost as possible to implement, audit, and verify	
	(c) by being adaptable, enabling changes to be incorporated over time	Incorporating changes over time and aligning with other systems both introduce complexity, creating a trade-off within this group of criteria.
	(d) by being actively aligned with other related climate and environmental systems	
(3) Equitable	(a) among agriculture sub-sectors, by minimising disproportionate losses in production and economic impacts	Treating the agriculture sector equitably with the rest of the economy would require a high price on all emissions as soon as possible, in line with NZ ETS settings. However, to support effective transition and minimise undue disruption (including to livelihoods and wellbeing, as well as production) within the agriculture sector, and for Māori, a more gradual transition will be important.
	(b) between agriculture and other sectors / the wider economy	
	(c) by supporting Māori agribusinesses and broader iwi and Māori aspirations	

Table 2: Criteria for assessment of agricultural emissions pricing system options

42. Assessment against these criteria will use a scoring system with a tick (or double tick), neutral, or cross (or double cross) to show whether each pricing system scores as

exceeding/meeting the criterion, neutral against/partially meeting the criterion, or not meeting/failing by a significant margin to meet the criterion.

What scope will options be considered within?

43. Much of the scope and scale of this policy is determined by the history of this policy process and by the legislated or Cabinet-mandated pathways. In summary, the options analysed here fall within the following constraints:

    a. The form of policy intervention is an economic instrument (pricing system), which applies to the producer (whether farmer or processor) not the consumer;

    b. Agricultural emissions in this context refer to biological emissions from agricultural activities, including any methane, nitrous oxide, and carbon dioxide[14] from livestock and fertiliser use, but not including emissions such as transport, electricity, industrial heat processing, etc.;

    c. A backstop through the NZ ETS could come into effect prior to 2025 (if recommended by the Minister), and will come into effect from 2025 if no other system is put in place or it is determined by Ministers that farmers are not ready to comply with farm-level pricing;

    d. No system considered places the full 'market' price on agricultural emissions, as the NZ ETS options include a 95% free allocation as provided for in legislation, and the pricing scenarios explored under the alternative pricing systems are all well below expected NZ ETS prices – noting that some sectors in the NZ ETS also receive free allocation, and early years of the NZ ETS included other discounting mechanisms to support transition;

    e. Final policy decisions to implement the pricing system will be made in 2023.

44. In addition, Ministers must consider a range of independent advice (as outlined in Section 1) that they have received. Some of this advice forms a legislated part of this policy process (i.e., the Commission's advice on assistance), and other pieces have significant public and sector expectations to be considered (i.e. the Commission's advice on progress, and the Partnership's advice).

What options are being considered?

45. The range of options draws on the pathways already set out in the CCRA, the recommendations of the Partnership, and further advice and analysis by the Commission and officials. The Partnership explored a greater range of options in their final recommendations throughout their policy design process. A summary of their policy design and assessment process can be found in the Partnership's 2022 recommendations report.

46. Officials considered a range of approaches to effectively and feasibly implement agricultural emissions pricing from 2025, including whether to directly implement farm-level pricing or begin by pricing processors as a transitional step, and with varying levels of complexity introduced from day one or over time.

47. Due to constraints around the time required to legislate and implement, and outstanding policy design concerns, the government has identified that it will be necessary to implement a 'minimum viable product' system to meet the 2025 deadline. Most options considered by this SAR include simplifications in the short to medium term with the intention of incorporating more comprehensive elements in the future.

[14] The call on whether carbon dioxide will or will not be included within the system from 2025 will be made by Cabinet.

48. The set of options assessed here include, with a more explicit breakdown comparing sub-elements included as Appendix Three:

Option 1 – Processor-level Pricing in the NZ ETS This is the option known as our 'backstop,' which could come into effect from 2025.
Option 2 – Basic Farm-level Levy (Government Proposal) This is officials' version of a simple farm-level pricing adapted from the Partnership's 2022 recommendations, consultation feedback, and further engagement with the sector, with enhancements to be incorporated over time. The implementation pathways for this option include: **2A** – Direct implementation at the farm-level if the system is ready to come into effect and farmers are ready to participate; or, **2B** – Triggering an interim processor-level levy that begins pricing emissions at this level for a short period of time, until farm-level obligations are possible. **2C** – Consideration has also been given to pricing fertiliser via processors in the NZ ETS, while livestock emissions are priced through a Basic Farm-level Levy. Option 2A is the core model on which the government publicly consulted and has since modified based on submitter feedback and further negotiations with the Partnership. The final version of this option is expanded in greater detail in the section on "*What option is likely to best address the problem…*", including optionality and/or decisions made on sub-options and system elements for Cabinet's approval.
Option 3 – Partnership's Farm-level Levy This is the Partnership's recommended transitional option to a more comprehensive system unmodified by officials.
Option 4 – Farm-level Pricing in the NZ ETS This is comprehensive farm-level pricing as already provided for in the CCRA, either transitioned to from the backstop or directly implemented in 2025.
Other system design elements Significant design work was carried out on other key system elements, such as assistance to participants, which is also reflected in this section. These elements are described and assessed in Appendix 1.

Table 3: Four options (and sub-options) for agricultural emissions pricing

49. The baseline scenario is no pricing of agricultural emissions, with business-as-usual levels of output and emissions out to 2025 and 2030. This baseline is intended to provide a robust and consistent basis from which to assess and compare impacts of different options. This means that we are treating the absence of emissions pricing as the status quo, rather than any of the pricing options as a counterfactual.

50. However, Option 1: Processor-level Pricing in the NZ ETS is the 'backstop' option that will come into effect if no other option is agreed, unless it is repealed prior. Therefore, the 'no pricing' status quo is not considered a valid outcome of this policy process. Note that implementing Option 1 would nevertheless require Government decisions about expenditure (to establish appropriate systems within the NZ ETS) and development of regulations.

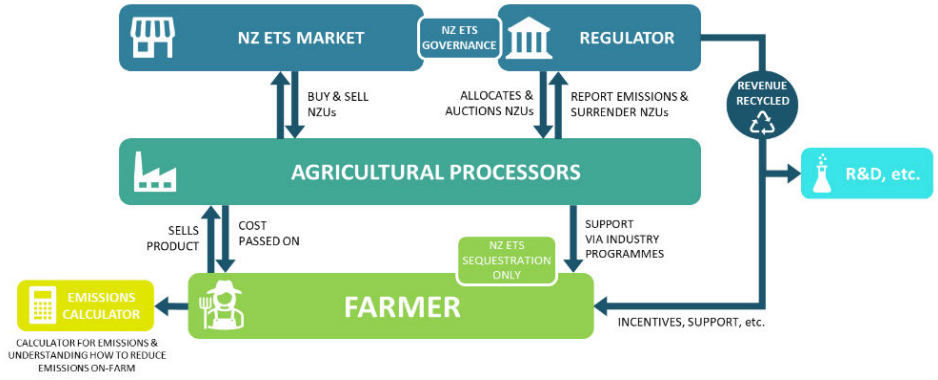
51. Detailed descriptions of options and the assessment of each are on the following pages.

Note on interpretation of emissions reduction figures

- The following tables present emissions reduction figures as percentages to quantify each option's estimated effectiveness for total GHGs, and for biogenic methane and nitrous oxide separately.
- The model used by Manaaki Whenua – Landcare Research was built on a baseline of 2020 emissions and land uses, and projects a 'business-as-usual' scenario out to 2030 (2030 BAU); the results of the modelling are compared with the 2030 BAU scenario.
- Aotearoa New Zealand's target for 2030 is for a gross reduction in biogenic methane of 10% from 2017 levels. Therefore, the percentage reductions against the 2030 BAU scenario are not comparable to the figures presented in our targets.
- For a conversion of these results as a comparison against the legislated target, see the 2022 discussion document.

Box 3: Emissions reduction percentages in this SAR are against a 2030 BAU

Option 1: Processor-level Pricing in NZ ETS



This is the 'backstop' option that already exists in legislation should insufficient progress be made toward farm-level emissions pricing. It draws on existing provisions to rapidly enable processors to participate in the NZ ETS but would also include enhancements to incentivise reductions on-farm.

System	NZ ETS.
When would it start	01 January 2025.
Point of obligation	Processors (milk & meat). Importers/manufacturers (fertiliser).
Emissions calculation	Through existing NZ ETS reporting – based on emissions associated with livestock products, or with fertiliser sold.
Emissions price	NZU surrender obligations for all gases in line with other NZ ETS participants.
Reduction incentives	Cost of emissions passed onto farmers, incentivising lower production. On-farm incentive regime that pays for mitigations and technology uptake.
Financial assistance	95% free allocation (output-based) as prescribed in legislation.
Sequestration	Primary channel is NZ ETS forestry, with investigation into improving access for agriculture.
Revenue recycling	Goes into the general pool of revenue raised from the NZ ETS, but agriculture is then eligible for recycled revenue out of this pool.
Governance	Uses existing NZ ETS governance structures.
Transitional options	Long-term transition to NZ ETS at the farm-level if feasible and worthwhile.

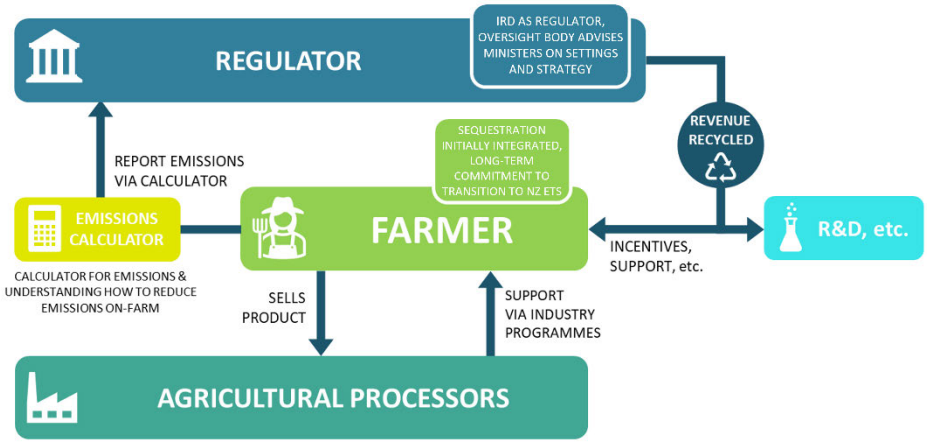
Qualitative Assessment of Option 1

Effective	This option is expected to more than achieve the targets through a combination of sheep and beef farms reducing production and stock, and any revenue recycled to agriculture from the general NZ ETS funds. Modelling results indicate that this option could achieve significant reductions, up to –15.7% in all gases (–16.7% methane, –12.6% nitrous oxide) below the baseline scenario in 2030. This and other results used a price of \$108.62/tCO_2-e for all gases discounted by 90% (\$10.87/tCO_2-e). However, the flat price at the processor-level appears to incentivise greater reductions in stock and production than one with separate prices for carbon and methane; increases the risk of emissions leakage[15] and does not directly recognise or incentivise on-farm mitigation, (which would rely instead on incentive payments). By operation through the NZ ETS, the policy-setting and adjustment processes are independent, robust, and transparent.

[15] Emissions generated outside New Zealand from food production to replace production losses in this country.

Practical	This is the most practical of all the options as it is simplest to set up because primary legislation and the reporting system are already in place. Therefore, costs are relatively low ($3m to set up, $10m pa to operate). Can be adapted over time, though selecting this option would likely set a clear direction for pricing to continue via the NZ ETS. Aligns well with existing NZ ETS policy, including forestry, but will be more complex to align with farm planning.
Equitable	High costs concentrated on sheep and beef farms. It is equitable with other sectors because of common inclusion in the NZ ETS, but the 95% discount in 2025 limits the benefits of this. This option also limits Māori agribusinesses from making decisions and being recognised for actions on their farm. A blunt price passed down from the processor is also likely to not consider disproportionate disadvantages faced by Māori agribusinesses, as their specific on-farm circumstances cannot be differentiated from other farming operations; however, this can be alleviated by recycled revenue being used to support Māori agribusinesses.
Additional comments	This option is considered implementable in 2025. This option had very little buy-in from farmers, the sector, and Māori, in particular because it diverges significantly from the Partnership's proposals. A number of primarily non-sector submitters supported this option for the greater certainty and ambition that it provides for steep emissions reductions.

Option 2A: Basic Farm-level Levy (implemented in 2025)



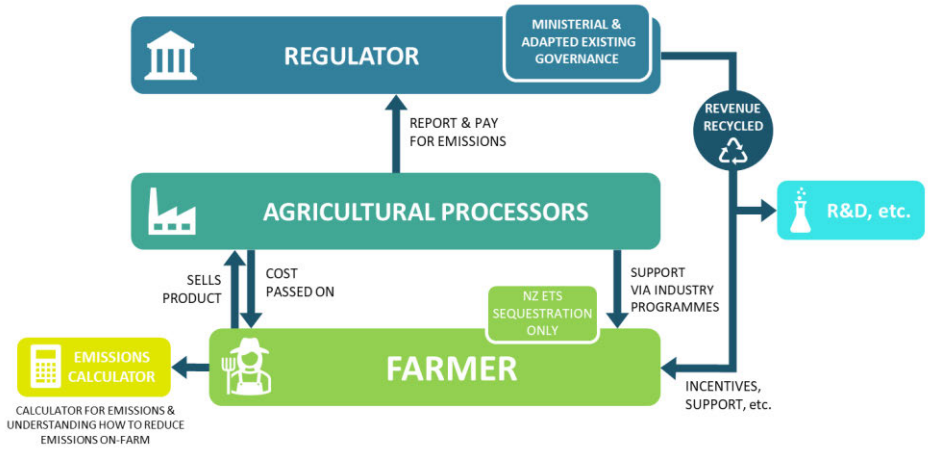
This option begins agricultural emissions pricing with farmers directly and is delivered through a simple levy system. It includes rewards to incentivise reductions on-farm and would incorporate further enhancements over time.

Officials have built this option on the basis of the Partnership's recommendations (see Option 3), as well as incorporating consultation feedback.

System	Alternative pricing system.
When would it start	During quarter 4 of 2025.
Point of obligation	Farmers and growers (business owner).
Emissions calculation	Using a simple calculator that uses a range of data points to directly estimate on-farm emissions.
Emissions price	Unique price for both biogenic methane and long-lived gases set with primary consideration to achieving emissions reductions in line with targets, with additional factors also taken into account.
Reduction incentives	Direct signal to farmers through price on emissions. On-farm incentive regime that pays for the uptake of approved mitigations and technology.
Financial assistance	No structured assistance or free allocation. Low price to raise revenue for incentive payment for emissions mitigating technology and on-farm sequestration on an interim basis. Transitional assistance may be explored for Māori agribusinesses and farmers who are unduly impacted by the pricing system.
Sequestration	The innovation pathway will set out the pathway and most appropriate reward scheme for on-farm vegetation. However, as a backup measure, if the innovation pathway does not come into effect at the same time than the pricing system, on-farm sequestration through riparian planting and the management of indigenous vegetation will be recognised in the interim via a reduction in the levy payment from 2025
Revenue recycling	Funds administration of the system, on-farm incentives, on-farm sequestration (if included in the system), a dedicated fund for Māori landowners, and other priorities identified through the revenue recycling strategy.
Governance	Either the Minister of Climate Change is responsible for the system, in consultation with Minister of Agriculture; or there will be joint ministerial responsibility across the Minister of Climate Change and the Minister of Agriculture. Cabinet will make the decision on this. The Commission will provide advice to Ministers on levy rates, after seeking advice from the sector and Māori (through a skills-based, non-statutory advisory board to be established). The advisory board will also directly advise Ministers on the strategy for investment of levy revenue including incentive and sequestration rates. Māori representatives on the advisory board will be responsible for advising Ministers on ring-fenced funds for Māori.
Transitional options	The effectiveness of the system will be improved over time, for example, by increasing the range of farm system changes and mitigations that can be recognised.

Qualitative Assessment of Option 2A	
Effective	At appropriate levy prices, this option is expected to more than achieve the targets, primarily through a combination of reduced production and stock numbers (especially on sheep and beef farms) and (to a lesser extent) uptake of mitigation technologies across all farm system types through the price signal and incentive payments. In the system elements material in a modelling context, this option does not vary significantly from the Partnership's recommendations, so the economic modelling aggregated these two options. Modelling results indicate that this option could achieve significant reductions, up to –12.3% in all gases (up to –13.6% methane, –8.2% nitrous oxide) below the baseline scenario in 2030. The results used a range of prices for methane (5–14c/kgCH_4), \$100/tCO_2-e for nitrous oxide, and \$50/tCO_2-e for incentive payments. This modelling showed that the 5c price for methane was likely insufficient to meet Aotearoa New Zealand's targets in combination with several other contributing factors in the baseline. The farm-level point of obligation allows recognition of on-farm mitigation actions through emissions reporting. The proposed system governance arrangements include independent, robust, and transparent policy setting and adjustment processes.
Practical	A report prepared by Perrin Ag and advice from the Commission indicates that a simple farm-level pricing is feasible for farmers, albeit easier for dairy than sheep and beef. This option will involve much greater costs to both the administrator/regulator and farmers than any processor-level pricing system due to the large number of participants and time required by them to engage with the system. Estimated costs are (administration costs may be partially or fully recovered from farmers):[16] • establishment (administrator) – \$86m; • operating (administrator) – \$32m pa; • operating (farmers) – \$28-39m pa. Can be adapted over time. Aligns well with farm planning, other on-farm regulatory systems and NZ ETS policy, including forestry. Proposed alterations to the NZ ETS should encourage investment and research to include further categories of vegetation in the Inventory and NZ ETS providing farmers with the full NZU price as a reward for eligible sequestration. This will require farmers and growers to participate in the NZ ETS market through trading of NZUs and meeting more stringent evidential requirements. The inclusion of an interim system to recognise on-farm sequestration from 2025 via the recycling of levy revenue affects the practicality of this option with transitional arrangements still to be determined.
Equitable	Depending on price level, this option has greater impacts on sheep and beef sector with fewer mitigations available. The relative price compared to the NZU value will affect how equitable this option is with other sectors; however, even if agricultural emissions are priced differently to the rest of the economy, it is still more equitable than the status quo because we are incentivising domestic reductions rather than purchasing mitigation overseas. Domestic reductions achieved decrease the volume of emissions that have to be purchased offshore to meet our NDC, avoiding the cost associated with this where these reductions are less expensive. A portion of revenue is ringfenced for Māori agribusinesses, which can help alleviate some of the impacts of the pricing system. Māori agribusinesses will be able to make decisions on their farming operations and undertake their reporting and payment obligations as collectives. Collectives will be enabled for all participants that meet regulatory requirements as business owners from 2025.
Additional comments	This option is considered implementable in quarter four of 2025, though higher risk than the processor-level options. This option in the form presented for consultation had mixed buy in from farmers and the sector as it builds on the Partnership's proposals but ultimately does make some changes. We have reflected this feedback and addressed a number of concerns raised during consultation, resulting in a number of policy changes to strengthen sector support and buy-in for the option.

[16] Here and through the rest of the document: These costs were estimated in October 2022, with the information available at the time. More accurate costs will become available as the business case is developed.

Option 2B: Processor-level Levy (transitioning to Option 2A)	
	This option begins agricultural emissions pricing with processors, which can be triggered, if necessary, based on the feasibility of Option 2A coming into effect from 2025. It includes rewards to incentivise reductions on-farm and would transition over time to Option 2A. Officials built this option on the basis of the Partnership's analysis of a processor-level system, which we further progressed as a potential interim option.

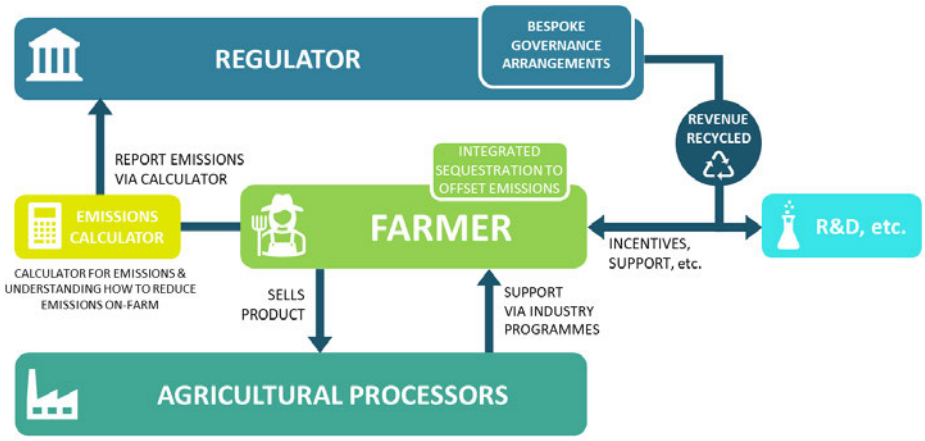
System	Alternative pricing system.
When would it start	01 January 2025.
Point of obligation	Processors (milk & meat). Importers/manufacturers (fertiliser).
Emissions calculation	Based on emissions associated with livestock products, or with fertiliser sold.
Emissions price	Prices for biogenic methane and long-lived gases will be set out in regulations and will remain constant until the farm-level levy transition is enacted.
Reduction incentives	Cost of emissions passed onto farmers. On-farm incentive regime that pays for mitigations and technology uptake.
Financial assistance	No structured assistance or free allocation. Low price to raise revenue for on-farm incentives.
Sequestration	Primary channel is NZ ETS forestry.
Revenue recycling	Funds administration of the system and on-farm incentives.
Governance	Ministers are jointly responsible for oversight of the pricing system and spending of public money.
Transitional options	Optional short-term implementation pathway to Option 2A.

Qualitative Assessment of Option 2B	
Effective	At the right levy prices, this option is expected to more than achieve the targets through a combination of reduced production and stock numbers (especially on sheep and beef farms) and uptake of mitigation technologies through incentive payments. Modelling results indicate that this option could achieve significant reductions, up to –9.1% in all gases (up to –9.4% methane, –8.1% nitrous oxide) below the baseline scenario in 2030. The results used a range of prices for methane (5–14c/kgCH_4), \$100/tCO_2-e for nitrous oxide, and \$50/tCO_2-e for incentive payments. This modelling showed that the 5c price for methane was likely insufficient to meet Aotearoa New Zealand's targets in combination with several other contributing factors in the baseline.

Effective (cont.)	However, there is no direct price signal on farmers to engage in mitigation technologies when the obligation sits with processors (though this option will include revenue recycling to incentivise mitigations). This means that reductions in production and stock will be much more likely than the uptake of mitigation. The proposed system governance arrangements include independent, robust, and transparent policy setting and adjustment processes.
Practical	The initial administrative costs are of a similar order of magnitude to Option 1A, with lower operating costs ($6 million pa). The transition between two systems adds complexity, and the eventual farm-level system retains the same issues as directly going to farm-level. Is not designed to be adaptable over time, as this option would only be implemented as a temporary mechanism before transitioning to farm-level pricing. Aligns well with farm planning, other on-farm regulatory systems and NZ ETS policy, including forestry.
Equitable	Depending on the price level, this option has higher impacts on the sheep and beef sector and with less recourse to mitigation. The relative price compared to the NZU value will affect how equitable this option is with other sectors; however, even if agricultural emissions are priced differently to the rest of the economy, it is still more equitable than the status quo because we are incentivising domestic reductions rather than purchasing mitigation overseas. Domestic reductions achieved decrease the volume of emissions that have to be purchased offshore to meet our NDC, avoiding the cost associated with this where these reductions are less expensive. A portion of revenue is ringfenced for Māori agribusinesses, alleviating some of the impact of the pricing system. Māori agribusinesses will be able to make decisions on their farming operations when the system transitions to a farm-level levy system.
Additional comments	This option is considered implementable in 2025. There was mixed support for this option. Māori submitters opposed an interim levy noting cost, complexity, ineffectiveness as well as the risk that it would remain in place. Sector submitters also generally opposed the interim levy, citing uncertainty for farmers and a blunt tax on production. Those that supported the levy noted it was a simple and straight forward approach and better to move forward than delay pricing.

Option 2C: Fertiliser-only Pricing in NZ ETS	
This option would separate out fertiliser pricing from livestock pricing. Officials have built this option on the basis of the Commission's recommendation in their APA review to price fertiliser in the NZ ETS. Biogenic methane emission and nitrous oxide from livestock would be priced as per Option 2A.	
System	NZ ETS.
When would it start	01 January 2025.
Point of obligation	Fertiliser importers/manufacturers.
Emissions calculation	Through existing NZ ETS reporting – based on emissions associated with fertiliser sold.
Emissions price	NZU surrender obligations for all gases in line with other NZ ETS participants.
Reduction incentives	Cost of emissions passed onto users of fertiliser, incentivising lower use.
Financial assistance	95% free allocation (output-based) as prescribed in legislation.
Sequestration	Fertiliser emissions could be offset through NZ ETS forestry.
Revenue recycling	Goes into the general pool of revenue raised from the NZ ETS.
Governance	Uses existing NZ ETS governance structures.
Transitional options	N/A.

Qualitative Assessment of Option 2C	
Effective	Separating out fertiliser was not specifically modelled. However, Option 1 was modelled for all nitrous oxide (fertiliser and livestock) and suggests significant reductions in both. By operation through the NZ ETS, the policy-setting and adjustment processes are independent, robust, and transparent.
Practical	This would be simple to set up because primary legislation and the reporting system are already in place. Costs are likely to be low because of the small number of firms involved and inclusion into the existing NZ ETS. However, it would be necessary to set up a parallel system to price methane emissions so the total cost would be similar to whatever option is selected for that purpose. Can be adapted over time, though selecting this option would likely set a clear direction for fertiliser pricing to continue via the NZ ETS. May cause misalignment between incentives on fertiliser versus livestock emissions created through different policies and systems.
Equitable	Avoids bringing livestock farmers who use fertiliser into the NZ ETS, which could potentially create disruption with the significant change to number of participants and total unit supply. Similarly, avoids bringing growers without livestock into a farm-level system that requires more complex reporting. Is expected to have slightly lower impacts than other options for sheep and beef farms as their reliance on fertiliser is lower than other sub-sectors such as dairy. It is somewhat equitable with other sectors because of common inclusion of a portion of agricultural emissions in the NZ ETS, but 95% discount limits the benefits of this. Is expected to have only minor equity differences from any other option for Māori agribusinesses (in particular, those with extensive systems) as their reliance on fertiliser is lower than other groups within the sector.
Additional comments	This option is considered implementable in 2025. This option was supported by some submitters, primarily from the environmental sector. Sector and Māori submitters generally did not support this option preferring fertiliser to be priced within the farm-level pricing system.

Option 3: Partnership's Farm-level Levy	
	This option begins with simplified emissions pricing at the farm-level and is delivered through a levy system. It includes rewards to incentivise reductions and sequestration on-farm and would incorporate further improvements over time. Officials have endeavoured to present this option here without modifications from the Partnership's original recommendations.[17]

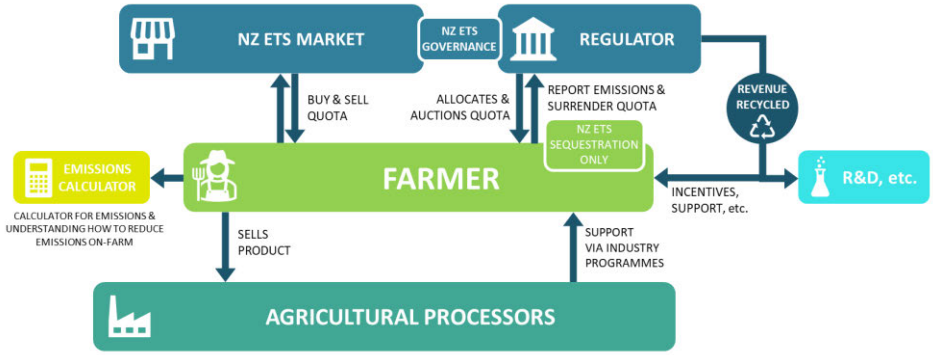
System	Alternative pricing system
When would it start	01 July 2025
Point of obligation	Farmers and growers (business owner)
Emissions calculation	Using a simple calculator that uses a range of data points to directly estimate on-farm emissions (the Partnership's proposed calculator and data requirements differ from and are more complex than in option 2A)
Emissions price	Long-lived gas price set to fund sequestration and administration costs Unique methane price set through advisory process and approved by Ministers
Reduction incentives	Direct signal to farmers through price on emissions On-farm incentive regime that pays for technology uptake
Financial assistance	No structured assistance or free allocation Low price to raise revenue for on-farm incentives. Levy relief available
Sequestration	Sequestration payments for vegetation (that are already verified elsewhere) are fully integrated into the levy, with a broad range of on-farm vegetation recognised over time
Revenue recycling	Funds administration of the system, on-farm incentives, and sequestration
Governance	New governance structures to advise on price, progress toward farm-level pricing, revenue use, etc.
Transitional options	Short-term implementation pathway to more detailed emissions reporting and recognition of sequestration as defined in the Partnership's recommendations (by 2027)

Qualitative Assessment of Option 3	
Effective	At the right levy prices, this option is expected to more than achieve the targets through a combination of reduced production and stock numbers (especially on sheep and beef farms) and uptake of mitigation technologies through incentive payments. The economic modelling covered both this option and Option 2a with one scenario, as they did not significantly differ.

[17] The sector Partners, in their submission to the government's consultation process, identified on a narrower range of key elements. In reflecting feedback received in policy changes, officials primarily focused on these key elements identified. This option as presented here solely reflects the Partner's 2022 recommendations report, not their subsequent submission.

Effective (cont.)	Modelling results indicate that this option could achieve significant reductions, up to –12.3% in all gases (up to –13.6% methane, –8.2% nitrous oxide) below the baseline scenario in 2030. The results used a range of prices for methane (5–14c/kgCH_4), \$100/tCO_2-e for nitrous oxide, and \$50/tCO_2-e for incentive payments. This modelling showed that the 5c price for methane was likely insufficient to meet Aotearoa New Zealand's targets in combination with several other contributing factors in the baseline. The farm-level point of obligation allows on-farm behaviour change to be recognised through the reporting and emissions bill. The proposed system governance arrangements are relatively robust and transparent but lack sufficient independence. The very low price and the framework for price settings are not target-oriented.
Practical	The option is considered infeasible to implement, as the 'simplified' initial system still has considerable cost and complexity. The 2027 elements need to be legislated and implemented as one phase of work, so this transitional period does not provide additional time for policy development, legislation, regulations, and implementation. Its costs were estimated[18] as: • establishment (administrator) – \$138–165m; • operating (administrator) – \$41–45m pa; • operating (farmers) – \$28–39m pa. The detail of the proposed sequestration option is impractical, creating a significant administrative and compliance burden. The detailed reporting requirements also limit the practicality of this option. Reporting will be particularly challenging for sheep and beef farms as fewer are currently using models or reporting farm activities. Also, monthly livestock reconciliations (or preferably livestock movements) will be relatively more complex and time consuming for this sector. The level of detail required for detailed reporting includes quarterly animal weighing, timing of mating, and dates of grazing different feeds. Can be adapted over time and has set pathways for improvements. Could align with farm planning and other on-farm regulatory systems, but is significantly misaligned with existing NZ ETS policy, including forestry.
Equitable	The inclusion of a wide scope of sequestration mitigates the impacts on some sheep and beef farms and on Māori, and the overall option supports long-term economic viability for the sector. Not equitable between the agricultural sector and wider Aotearoa New Zealand with the sequestration component as currently designed.
Additional comments	This option is not considered implementable by 2025. Most submitters commented on the departure of the government's proposal from this proposal by the Partnership and advocated for the complete adoption of the proposal or much closer alignment. Some non-sector submitters considered the proposals an inequitable subsidy for the agricultural sector.

[18] HWEN Partnership – Pricing system admin costs

Option 4: Farm-level Pricing in NZ ETS	
	This option already exists in legislation and puts farmers into the NZ ETS directly. It could be implemented directly or transitioned to from the Option 1 'backstop.'

System	NZ ETS.
When would it start	01 January 2025, or at a later date if beginning with Option 1.
Point of obligation	Farmers and growers (likely business owner).
Emissions calculation	Through NZ ETS reporting – based on emissions associated with livestock, or with fertiliser bought.
Emissions price	NZU surrender obligations for all gases in line with other NZ ETS participants.
Reduction incentives	Direct signal to farmers through price on emissions. Possibility of on-farm incentive regime.
Financial assistance	Possibility of free allocation regime, likely output based as already provided for in legislation.
Sequestration	Primary channel is NZ ETS forestry, with investigation into improving access for agriculture.
Revenue recycling	Goes into the general pool of revenue raised from the NZ ETS, but agriculture is then eligible for recycled revenue out of this pool and/or has a portion ringfenced for incentive payments.
Governance	Uses existing NZ ETS governance structures.
Transitional options	N/A (either directly implemented or a possible system transitioned to from Option 1).

Qualitative Assessment of Option 4	
Effective	This option was not modelled, but given the significant reductions achieved through the NZ ETS by Option 1, these same prices applied at the farm-level are likely to result in significant reductions. The farm-level point of obligation allows on-farm behaviour change to be recognised through the reporting and emissions bill, for those farmers able to sufficiently absorb the high prices to make changes on-farm. By operation through the NZ ETS, the policy setting, and adjustment processes are independent, robust, and transparent.
Practical	This option is considered highly impractical and expensive, both from a regulatory perspective (because of the large number of participants introduced into the NZ ETS) and for farmers (as this is a much more complex system to interact with). Can be adapted over time, though selecting this option would likely set a clear direction for pricing to continue via the NZ ETS. Aligns well with existing NZ ETS policy, including forestry, etc., but will be more complex to align with farm planning.

Equitable	This option puts high costs on the sheep and beef sector, of a similar magnitude to Option 2A, and can potentially drive land-use change out of sheep and beef. It is equitable with other sectors because of common inclusion in the NZ ETS, but 95% discount limits the benefits of this. This option also limits Māori agribusinesses from making decisions and being recognised for actions on their farm. A blunt price passed down from the processor is also likely to not consider disproportionate disadvantages faced by Māori agribusinesses. However, this can be alleviated through ring-fenced revenue being used to support Māori agribusinesses.
Additional comments	This option is not considered implementable by 2025 – the system and legislation already exist, but farmers would not be prepared to participate by 2025, and significant updates would be needed for the existing system to handle 23,000 or more new participants. This option did not form part of the consultation process, due to its infeasibility and being ruled out in previous stages of analysis and engagement.

Key issues in and approaches to comparing options

Modelling the impacts on agriculture

52. Economic modelling using farm-scale data was commissioned to support decisions on the preferred pricing option and carried out by Manaaki Whenua – Landcare Research (MWLR) in 2022. The MWLR modelling used several pricing options, which collectively cover off the majority of the options presented here (noting that the modelling was limited to a core set of policy scenarios):

Modelled Scenarios	Policy Options
'Processor NZ ETS' – Agricultural processors and fertiliser manufacturers & importers in the NZ ETS	Option 1A
'Processor Levy' – with separate components for carbon (based on NZ ETS prices) and methane	Option 2B
'Farm-level Levy' – with separate components for carbon (based on NZ ETS prices) and methane	Option 2A Option 3
Not represented in the modelling	Option 2C Option 4

Table 4: The scenarios used by MWLR to represent the range of pricing system options

53. The farm-level option was further broken down by modelling the impacts of different prices for methane:

Units	CH_4 Price A	CH_4 Price B	CH_4 Price C	CH_4 Price D
$/tCO$_2$-e	$1.79	$2.86	$3.93	$5.00
c/kgCH_4	5c	8c	11c	14c

Table 5: Range of prices used for biogenic methane in the farm-level levy

54. The modelling compares the impact of each option with a baseline of what would occur with no pricing of agricultural emissions in 2030, as seen in Table 6 and Table 7:

	Processor NZ ETS	Processor Levy	Farm-level levy			
			CH_4 Price A	CH_4 Price B	CH_4 Price C	CH_4 Price D
Emissions Reductions						
All gases	–16%	–9%	–6%	–10%	–11%	–12%
Methane	–17%	–9%	–7%	–11%	–12%	–14%
Nitrous oxide	–13%	–8%	–1%	–6%	–7%	–8%
Commodity production						
Milk solids (t)	–8%	–5%	–3%	–5%	–4%	–5%
Lamb (t)	–19%	–9%	–11%	–20%	–18%	–20%
Beef (t)	–51%	–44%	+50%	+11%	+8%	+10%
Net revenue						
Dairy	–10%	–6%	–4%	–6%	–6%	–7%
Sheep & beef	–32%	–17%	–11%	–18%	–21%	–24%

	Land–use change					
Dairy	–4%	–2%	–1%	–2%	–2%	–2%
Sheep & beef	–16%	–7%	0%	–8%	–10%	–12%
Indigenous forest / scrub	+14%	+6%	0%	+9%	+7%	+6%

Table 6: Key results from the MWLR model – arable, fruit, vegetable, and forestry also modelled, which can be found in the final modelling report by MWLR. Refer to table 4 for how modelling carried out aligns with final options presented in this SAR.

[All gases (net, AR5) are expressed in Mt CO_2-e]	Emissions Budget 2 (2026–30) Provisional	Additional emissions reductions required
Agriculture – emissions budgets sub-target	191.0	
Agriculture – baseline	199.0	8.0
Processor-level NZ ETS	187.3	–3.7
Processor-level levy	196.5	5.5
Farm-level levy – CH_4 price A	199.4	8.4
Farm-level levy – CH_4 price B	194.9	3.9
Farm-level levy – CH_4 price C	193.4	2.4
Farm-level levy – CH_4 price D	191.4	0.4

Table 7: Estimate of how policies perform against Emissions Budget 2

55. The key finding from the modelling was that all options can meet the 2030 biogenic methane emissions reduction targets[19] except for the lowest methane price (A), but most fall short of emissions budget period two. This included some other measures in combination with emissions pricing, such as NZ ETS forestry. However, assessment of these results alongside our subsequently published Eight National Communication[20] suggests that CH_4 price A may be sufficient.

56. The price of methane, and consequential reductions in production and stock numbers, is a key driver of emissions reductions. The adoption of mitigation technology on farm in response to incentives is another driver of emissions reduction particularly under the farm level levy.

57. The NZ ETS option at processor-level would generate the highest reductions in emissions, but also the largest losses in production.

58. The modelling also incorporated the impacts of implementation of emissions-reducing technology, assuming slow versus rapid uptake ('headwind' and 'tailwind' scenarios); and of payments to farmers for land-use change (especially to scrub and indigenous forest).

19 See Box 3.

20 environment.govt.nz/publications/new-zealands-eighth-national-communication

59. New technologies had minor impacts, even under the most optimistic assumptions about uptake.

60. Sequestration incentives (particularly payments for new scrub sequestration) appear to improve the effectiveness of pricing. They reduce gross methane and nitrous oxide emissions through incentivising landowners to retire larger areas of marginal land and carry less livestock. Carbon removals from this vegetation are small in comparison.

61. All options are expected to have little impact and only a small reduction in profit for horticulture and arable farming. Analysis undertaken for the He Waka Eke Noa Partnership's proposal[21] shows that horticulture and arable farms will simply pay the levy and are not expected to actively reduce emissions – in fact, their emissions will increase as a result of increased production from changes in land use away from sheep & beef and dairy farming.

62. It should be noted that this modelling makes a range of assumptions and has limitations:

    a. It assumes there is no uptake of farm system changes and mitigation practices in the baseline.

    b. The impact of the National Policy Statement for Freshwater Management was not incorporated in the model, which could be significant as this policy is expected to drive widespread changes in farm practices and land-use by 2030.

    c. Prices for farm outputs are assumed in 2030 to be equivalent to the average of the past five years.

    d. The modelling framework assumes that farm and land-use decisions are driven by profit maximisation and that farmers have good information about the range of options available to them.

    e. The commercial availability, cost and efficacy of mitigation technologies is highly uncertain.

63. Following peer review of the modelling, a number of updates were made, including nuancing the costs of certain mitigations for different animals and farm systems, and adjusting the elasticities related to the balance of land-use change versus uptake of mitigations.

Cost-Benefit Analysis

64. The MWLR modelling was used as the basis for a Cost-Benefit Analysis (CBA) model prepared by the New Zealand Institute of Economic Research (NZIER). Like MWLR, the CBA compares costs and benefits of each option to what would occur with no pricing of agricultural emissions in 2030.

65. A more detailed breakdown of costs and benefits of the preferred option (Option 2A: Basic Farm-level Levy) is presented in Table 12 and Table 13, following the summary of our analysis behind determining a preferred option.

66. This CBA incorporates the following:

    a. *benefits*, in terms of:

[21] hewakaekenoa.nz/wp-content/uploads/2022/06/FINAL-Pricing-agricultural-GHG-emissions-sectoral-impacts-and-cost-benefit-analysis

- emissions reductions, valued at $108.62/tCO -e – split between reductions that achieve NZ's domestic targets, and reductions beyond that (with negative benefits where emissions do not achieve the targets);
- demand in overseas markets for carbon neutral products – this is estimated to increase net revenue by 18% on farms that can supply carbon-neutral milk and meat.[22] Emissions reductions in Aotearoa New Zealand in line with targets will enable marginally more supply of carbon-neutral product from Aotearoa New Zealand. We assume an additional 10% of Aotearoa New Zealand product exported will be able to make carbon neutral claims and meet this demand.[23]

b. *costs,* in terms of*:*

- losses in net farm revenue as a result of lower production;
- administrative costs to government and compliance costs to farmers.

67. The CBA estimates the Net Present Value (NPV) of costs and benefits, in real (inflation adjusted) dollars, using a discount rate of 5% (per standard Treasury guidance[24]) over the period from 2023 to 2035.

68. The administrative costs of and compensation to farmers for sequestration and uptake of mitigation technologies, as well as the benefits of the additional sequestration/mitigation incentivised, are not quantifiably captured within the cost-benefit analysis. However, they have been captured within the impact analysis modelling (see previous section), where the emissions reduced on farm and the cost of compensation within the system are wrapped up into the total cost and benefit figures resulting from the modelling.

69. Results are shown Table 8 below:

	Processor NZ ETS	Processor Levy	Farm-level Levy			
			CH_4 Price A	CH_4 Price B	CH_4 Price C	CH_4 Price D
Benefits						
Value of achieving GHG domestic target (millions of dollars net present value 2023 to 2035))	3,740	3,740	3,503	3,503	3,503	3,503
Value of over/(under) mitigation of GHGs (million)	851	–544	-1,391	-242	28	205
Value of additional supply of carbon neutral product (million)	449	482	459	445	439	434

[22] A simple average of the range of 11–25% identified in Lucci, G, W Yang, S Ledgard, G Rennie, G Mercer, and M Wang. (2020). *The added value of value-add: brief synopsis of findings* Credence Attributes On Farm - Our Land & Water - Toitū te Whenua, Toiora te Wai (ourlandandwater.nz)

[23] This would incentivise higher levels of production on farms that would secure this premium, above the assumptions in the MWLR model. However, this has not been incorporated into the model.

[24] Cost Benefit Analysis for Social Investments (treasury.govt.nz)

Costs						
Loss of net farm revenue (million)	3,997	2,937	2,262	2,739	2,923	2,923
Administration costs (government) (million)	16	16	241	241	241	241
Compliance costs (farmers) (million)	53	27	98	98	98	98
Total benefits (million)	5,040	3,678	2,571	3,706	3,970	4,142
Total costs (million)	4,067	2,980	2,601	3,078	3,263	3,263
Net benefits (million)	**974**	**698**	**-31**	**628**	**708**	**879**
Benefit-cost ratio	**1.24**	**1.23**	**0.99**	**1.20**	**1.22**	**1.27**
Results without premium for carbon action						
Net benefits (million)	***524***	***216***	**-490**	**183**	**268**	**445**
Benefit-cost ratio	***1.13***	***1.07***	**0.81**	**1.06**	**1.08**	**1.14**

Table 8: Cost-benefit analysis of options. Refer to table 4 for how modelling carried out aligns with final options presented in this SAR.

70. The above table shows that:

    a. The option for a farm levy at the lowest price (CH_4 Price A) has costs that slighly exceed benefits (significantly exceeding benefits if there is no premium for carbon action). This is because the reductions in emissions estimated within the MWLR model at this price are below the GHG domestic target.

    b. All other options have positive net benefits and benefit-cost ratios greater than 1, which indicates that they have positive impacts compared to not pricing agricultural emisssions.

    c. All of these options have similar benefit-cost ratios, ranging from 1.20 (the farm levy CH4 Price B) to 1.27 (the farm levy CH_4 Price D.

    d. Options which result in higher emission reductions have higher benefits, but at a cost of higher losses in net farm revenue.

    e. The impact of removing any premium for carbon neutral product would lower benefit-cost ratios, but (for other than the low price option) these still remain positive.

71. Sectoral impacts are discussed in paragraphs 90–95.

Key trade-off: processor versus farm-level pricing

72. The question of who within the sector should be subject to pricing involves the following trade-offs:

    a. *Processors*, such as meat works, dairy factories, and fertiliser manufacturers and importers.

        - As these are relatively few in number (approximately 80), the pricing system would be low cost. The He Waka Eke Noa Partnership estimated establishment costs of $3 million and operating costs of $10m per annum to bring processors into the NZ ETS system, with most operating costs falling on

processors.[25] Separate estimates for a processor levy are for operating costs of $6m per annum.

- The levies would be passed on to farmers through reductions in prices paid for milksolids and stock for slaughter, which would in turn influence on-farm decisions on production, stock, and land use.

b. *Farmers*, including both farmers of livestock and growers of crops, fruit and vegetables

- As there are an estimated 23,000 farms potentially subject to pricing, this would be relatively expensive to operate. The Partnership estimated establishment costs of $117–141 million (subsequently re-estimated at $70m) and operating costs of $32m to government and $17m to farmers per annum
- However, depending on specific policy design decisions, farm-level pricing has two advantages over processor-level pricing:
  - It more accurately aligns the profile of on-farm emissions for sheep and beef farms, in that prices would be based on livestock numbers at any given time, rather than when stock is sent to meatworks for slaughter, and therefore provides more appropriate incentives.
  - For all farm types, it would provide stronger incentives for the development and uptake of actions to reduce emissions such as farm management practices and new technologies. While these technologies are limited and expensive at present, improvements may be expected if sufficient numbers of farms demand them.

Emissions leakage modelling

73. Dairy, meat, and wool products comprise over half of Aotearoa New Zealand's export revenue, with the majority of agricultural production exported into world markets, where it competes with product from other countries. Any loss in production associated with Aotearoa New Zealand's emissions reduction will reduce the amount of product sent to world markets. If those emissions increases are not offset by reductions elsewhere in those economies, this process reduces the impact that Aotearoa New Zealand's emission reductions have on overall global emissions, resulting in emissions leakage.

74. Recent OECD[26] modelling suggests that, in general, emissions leakage in agriculture will be lower if more mitigation technology is available and a wider range of countries reduce agricultural emissions. There are also other measures to minimise leakage risks, such as specific terms in Aotearoa New Zealand's free trade agreements.

75. The Commission's advice on agricultural assistance also considered emissions leakage and found that 'the risk of emissions leakage is highly uncertain but appears to be low for agriculture in Aotearoa New Zealand in the near term'.

---

25 HWEN Partnership - Pricing system admin costs
These are combined costs to the government and to processors/ farmers. Some or all of the government's costs may be cost recovered from levy payers.
The document also provides estimates of costs to government and farmers of systems to provide incentive payments for implementing new technologies and for sequestration of land.

26 OECD (2021), Global assessment of the carbon leakage implications of carbon taxes on agricultural emissions.

76. The Government has modelled the policy options considered in this discussion document for one illustrative scenario. This modelling uses the Aglink-Cosimo model, which analyses supply and demand of world agricultural products and is managed and developed by the OECD and FAO.[27] Agricultural greenhouse gas emissions have been added to Aglink-Cosimo in its most recent update.

77. Mitigation technology uptake under the basic farm-level levy results in less emissions leakage compared to the processor-level NZ ETS option. Availability of more and cheaper mitigation technology could reduce leakage further.

Farm-level levy (Med price)	**NZ emissions change**	**Global emissions change**	**Leakage**	
Product	*$MtCO_2$-e*	*$MtCO_2$-e*	*$MtCO_2$-e*	*% of NZ reductions leaked*
Dairy	–0.7	–0.4	0.3	37%
Beef	–1.4	–1.4	0	0%
Sheep meat	–1.6	0.5	2.1	133%
Total	**–3.7**	**–1.1**	**2.4**	**65%**
Processor-level NZ ETS	**NZ emissions change**	**Global emissions change**	**Leakage**	
Product	*$MtCO_2$-e*	*$MtCO_2$-e*	*$MtCO_2$-e*	*% of NZ reductions leaked*
Dairy	–1.3	–0.7	0.6	47%
Beef	–5.9	–1.3	4.6	78%
Sheep meat	–1.7	0.6	2.3	136%
Total	**–8.9**	**–1.4**	**7.5**	**84%**

Table 9: Emissions leakage modelling results

78. Submitters were generally concerned about the risks of emissions leakage as a result of this proposal. However, there was also misinterpretation that the emissions leakage estimates above showed net increases global emissions, as opposed to net reductions despite some leakage.

Fiscal sustainability analysis

79. Since the farm level levy option achieves emissions reductions through both the direct impact of the price and the use of the levy proceeds to incentives the adoption of emissions reducing technology, managing the levy proceeds to achieve these goals is important. The revenue recycling strategy is the main mechanism to achieve fiscal sustainability within the system. Within each three-year revenue strategy, the expenditure planned for in the strategy will be achieved through alterations to rates of reward for adopting emissions mitigating technology and (potentially) sequestration on eligible on farm vegetation. These adjustments to rates of reward can occur annually.

80. An indicative overview of the scheme's revenue and expenditure in the first two years is presented below in Table 10. The adoption rates used for the uptake of low methane

[27] The Food and Agriculture Organization of the United Nations.

sheep genetics and EcoPond, were modelled based on the Adopt framework (https://adopt.csiro.au/) which factors in the characteristics of the mitigation technology (for example the ability or not to trial the technology and any environmental co-benefits), the risk tolerance of potential adopters, the extension support available for farmers among other characteristics. The results indicate that, even at low levy prices, the system will likely be fiscally sustainable unless there is a very high rate of uptake of emissions mitigating technology and on-farm sequestration if it was included in the system.

Items	Q4 2025	2026	2027
Revenue (5 cents per kg CH_4 and $4 per tonne CO_2e N_2O levy)	$20.74	$82.41	$81.94
Expenditure - Low mitigation and sequestration uptake scenario			
Mitigation incentives ($150/tonne CO_2-e low uptake)	$0.32	$4.67	$10.63
Sequestration incentives ($20/tonne CO_2-e low uptake)	$3.59	$14.84	$15.33
Research and development	$2.95	$12.03	$12.27
Administration	$6.18	$24.70	$24.70
Māori landowners' fund	$0.88	$3.61	$3.68
Total expenditure (low uptake)	**$13.91**	**$59.85**	**$66.61**
Scheme surplus or deficit (low uptake)	**$6.82**	**$22.56**	**$15.33**
Expenditure - High mitigation uptake scenario			
Mitigation incentives ($150/tonne CO_2-e high uptake)	$0.57	$6.33	$16.93
Sequestration incentives ($20/tonne CO_2-e high uptake)	$6.47	$27.39	$28.90
Research and development	$2.66	$10.88	$11.10
Administration	$6.18	$24.70	$24.70
Māori landowners' fund	$1.33	$5.44	$5.55
Total expenditure (high uptake)	**$17.20**	**$74.73**	**$87.17**
Scheme surplus of deficit (high uptake)	**$3.53**	**$7.68**	**-$5.23**

Table 10: Estimated revenue and expenditure of the farm-level levy – millions of dollars

How do the options compare to the criteria?

81. The table below summarises how each option performs against the criteria. Note that in interpreting the table:

    a. The sub-criteria are condensed in the left-hand column of the table below for reference. The full descriptions are included in Table 2;

    b. Details of the qualitative assessment behind this scoring can be found in the tables that describe each option in the sub-section "What options are being considered?" under Section 2.

	Option 1 *Processor-level Pricing in NZ ETS*	**Option 2A** *Basic Farm-level Levy*	**Option 2B** *Interim Processor-level Levy*	**Option 2C** *Fertiliser-only Pricing in NZ ETS*	**Option 3** *Partnership's Farm-level Levy*	**Option 4** *Farm-level Pricing in NZ ETS*
1 – Effective						
(a) targets and budgets	✓ *Per modelling results, all options can achieve gross emissions reductions.*	✓ *Per modelling results, all options can achieve gross emissions reductions.*	✓ *Per modelling results, all options can achieve gross emissions reductions.*	✓ *Per modelling results, all options can achieve gross emissions reductions.*	✓ *Per modelling results, all options can achieve gross emissions reductions.*	✓ *Per modelling results, all options can achieve gross emissions reductions.*
(b) on-farm mitigation	✗ *May be more effective depending on the final form of the Early Adopters Fund.*	✓ *Allows farmers to consider their full emissions profile through one system.*	✗ *May be more effective depending on the final form of the Early Adopters Fund.*	✗ *Does not allow farmers to consider their full emissions profile through one system.*	✓ *Allows farmers to consider their full emissions profile through one system.*	✓ *Allows farmers to consider their full emissions profile through one system.*
(c) policy setting processes	✓ *Processes are independent, robust, and transparent.*	✓ *Processes will be independent, robust, and transparent*	✓ *Processes will be simple and transparent*	✓ *Processes are independent, robust, and transparent.*	— *Transparent and somewhat robust, but not independent.*	✓ *Processes are independent, robust, and transparent.*
2 – Practical						
(a) simple and easy	✓ *Simplest to set up bas legislation and reporting are already in place*	✗ The transition arrangements for sequestration and possible interim processor levy add complexity to this option	— *Transitional arrangement only*	✓ *Simplest to set up bas legislation and reporting are already in place*	— *Difficult to implement by 2025 but has a defined implementation pathway*	✗ *Impractical and expensive due to large number of participants*
(b) low cost[28]	✗ *Lower cost to set up and operate than farm level options*	✗✗ *More expensive than processor-level options*	— Though this option is low-cost, it is a short-term investment before transitioning to farm-level pricing.	✗ *Lower cost to set up and operate than farm level options*	✗✗ *More expensive than processor-level options*	✗✗ *More expensive than processor-level options*
(c) adaptable	✓ *Can be adapted over time*	✓ *Can be adapted over time*	— Not designed to be adaptable as only temporary.	— Separating fertiliser out may limit future interactions between fertiliser and livestock emissions pricing.	— Though this option does incorporate changes over time and retain optionality for certain settings, it does so within a pre-determined framework that has limited flexibility.	✓ *Can be adapted over time*
(d) actively aligned	— Aligns with NZ ETS, forestry, etc. Does not align with farm planning.	✓ Aligns with farm planning	— Aligns with farm planning. Does not align with NZ ETS.	— Aligns with NZ ETS, forestry, etc. Does not align with farm planning.	— Aligns with farm planning. Does not align with NZ ETS, forestry, etc.	— Aligns with NZ ETS, forestry, etc. Does not align with farm planning.
3 – Equitable						
(a) participants within the sector	✗ *Price passed down from processors*	✓ Inclusion of sequestration reduces the impacts on sheep and beef farms. Minor impacts on other farm types	✗ *Price passed down from processors*	— Similar equity issues to the backstop; could prevent fertiliser-only participants (e.g., growers) coming into a complex farm-level system.	✓ Inclusion of sequestration reduces the impacts on sheep and beef farms. Minor impacts on other farm types	✗ *Will likely have a greater impact on sheep and beef*
(b) other sectors and wider economy	✓ However, noting that agriculture will receive higher free allocation.	— Not priced the same as other sectors.	— Not priced the same as other sectors.	— However, noting that agriculture will receive higher free allocation, and this is only some of emissions from agriculture.	— Not priced the same as other sectors.	— Agriculture will receive higher free allocation and could disrupt the market with many new participants.
(c) Māori agribusinesses	— No specific funding in initial system.	✓ Specific funding for Māori agribusiness.	— No specific funding in initial system.	— No specific funding in system.	✓ Specific funding for Māori agribusiness.	— No specific funding in initial system.
(d) Rural communities	✗ Generates the largest losses in production and subsequent impact on rural communities	✓ Inclusion of sequestration reduces the impacts on sheep and beef farms and flow-on impacts on rural communities.	✓ *Transitional arrangement on processors*	— Similar equity issues to the backstop but avoids bringing fertiliser-only participants into a farm-level system.	✓ Inclusion of sequestration reduces the impacts on sheep and beef farms and flow-on impacts on rural communities.	✗ Higher NZ ETS price will have greater impact on rural communities
Overall assessment	**+1**	**+5**	**+2**	**+1**	**+3**	**–1**

Table 11: Multi-criteria analysis for the full set of pricing system options considered

[28] Note that, since *no pricing* has been used as the baseline for the CBA, all options generate additional costs above this baseline. The difference between options is that some (farm-level) generate much higher costs than others (processor-level).

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

82. Officials recommend that Option 2A: A Basic Farm-level Levy is the preferred option on the basis of the analysis presented in this SAR.

83. This option reflects the proposed alternative pricing system described in the s215 report published by Ministers in December 2022. The Basic Farm-level Levy is based on the farm-level, split-gas levy designed by the Partnership, with changes informed by feedback received from consultation and engagement with Māori, the agriculture sector, and the general public.

84. In summary from our analysis of the range of options:

    a. The results of the economic modelling suggest that all of the options would be effective in terms of achieving absolute emissions reductions. Therefore all score positively against sub-criterion 1(a).

    b. Processor pricing provides very little incentive for farm-level mitigation such as improved practices and technology, and therefore these options score negatively against sub-criterion 1(b). Note however that, at least in the initial stages, the impacts of farm-level mitigation are minor.

    c. All options have costs above the no pricing baseline, and all farm-level options are more expensive to establish and operate compared to processor pricing.

    d. All options improve equity between agriculture and other industries that are already subject to emissions pricing through the NZ ETS, recognising that agriculture will still be treated relatively generously because of proposed relatively low initial pricing..

    e. All options have substantially different impacts across sub-sectors of agriculture. While the size of the impacts varies between options, the general trend is:

        - significant losses of production and revenue in sheep and beef farming;
        - some losses of production and revenue in dairy farming;
        - minor increases in production and revenue in other types of farming, in particular growers of crops, fruit and vegetables.

    f. All options except the Partnership's proposal establish robust and transparent processes for price setting and other policy settings and therefore score positively against this sub-criterion. The Partnership's proposal is transparent, but does not meet the test of independence.

85. All options are designed in a way that can align with either the NZ ETS (e.g., forestry policy) or farm planning systems (e.g. freshwater farm plans). Option 2A is expected to align well with both following the proposed changes to the NZ ETS to include additional verified vegetation categories Officials conclude that the most effective and feasible approach is Option 2A (Basic Farm-level Levy).

86. We see Option 2A as the best compromise for implementing the core aspects of the Partnership's recommended option, and addressing concerns raised during consultation, while also ensuring that pricing of some form comes into effect in 2025.

This includes modifications following further negotiation with the Partnership post-consultation. This approach also draws on the Commission's advice that a farm-level approach is preferred, though sequestration and synthetic nitrogen fertilisers are proposed to be included within the same system from 2025 rather than separated out (noting that sequestration may shift into the NZ ETS in future).

Detailed Overview of Optionality and System Elements in Option 2A

87. This section steps through in more detail the various aspects within Option 2A that have been proposed for Cabinet approval in early 2023. These reflect modifications to the original version of Option 2A that was included in the 2022 consultation document, based on feedback from submitters and further negotiation with the Partnership and between various Ministers.

88. Note that, in many cases, rather than designing and assessing a range of discrete options, officials have taken negotiated positions and/or minimum viable products needed to meet implementation deadlines and worked to improve and streamline these for the best outcomes against our criteria.

89. The table below sets out these system elements, mirroring the Cabinet paper that this SAR will accompany, and includes explanations of how positions were reached on each element, and how we have balanced their design to meet the criteria as best possible within the constraints of this iterative policy context.Note that the final emissions reduction modelling and cost-benefit analysis of Option 2A presented throughout this document represents the modified version of the option post-consultation. For quantitative analysis of the unmodified version presented during consultation, please see the 2022 interim RIS.

Purpose of the levy (Refer to Section 1 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
• The purpose is "to incentivise emissions reductions from the agricultural sector aligned with our climate change targets and international commitments." • In addition, the levy will fund administration costs, support Māori, and a revenue recycling strategy will be developed to redirect remaining funds to sequestration, mitigation uptake, extension, and R&D.	• The levy is designed to achieve emissions reductions and two options were originally considered – a high price with assistance or a low price with revenue recycling (preferred).	*Effective* – Yes, relatively low prices + revenue can achieve emissions reductions. *Practical* – Yes, can be practically implemented in 2025. *Equitable* – Yes, equitable across sectors and a lower price is required to meet methane compared to that needed for long-lived gases
Administration and revenue recycling	• The levy is required to be self-funding covering administration costs and revenue expenditure. • We expect that a small number of participants will generate particularly high costs for administrative services and functions. A regulation-making power is proposed that would enable fees or charges (i.e., cost recovery) to be imposed on participants who generate these atypical costs. Any charges will be set at rates consistent with other similar regimes and based on the Auditor General's guidance and would be subject to consultation and a regulatory impact assessment process.	*Effective* – Yes, the levy will be self-funding and fiscally sustainable *Practical* – Yes, the system is designed to cover the ongoing costs of operation now and into the future. *Equitable* – Yes, consistent with the principle that those who generate the need for a system will pay for its operation including cost recovery for individuals that generate high costs

Who pays the levy (Refer to Section 2 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
Legal obligation • IR-registered businesses who meet specified thresholds. • Can be delegated to a third party. • Levy participants can form collectives. • Procedural detail in legislation.	• Thresholds align with the Partnership's recommendations and has the highest emissions coverage possible while minimising the number of participants that need to be managed (and administration costs). • IR-registered businesses align with the Partnership's recommendations and links most directly to on-farm decisions. • Third party delegation is intended to align with the tax system. • Enables collective reporting for all levy participants to ease administrative burden and collectively benefit from sequestration and incentives.	*Effective* – Yes, capturing the majority of emissions. *Practical* – Yes, encourages actions linked to farm decision making. *Equitable* – Neutral, further work needed where complex business structures exist
Complex business structures • Special provisions (potentially including amendment to other legislation) needed for sharemilking, lease holders, and collective structures.	• Consultation, feedback, and outside agencies noted issues with the point of obligation for complex business structures. • Analysis determined a number of issues that could be addressed with special provisions.	*Effective* – Neutral, while provisions are intended to capture emissions that the point of obligation may miss, it may not address all issues *Practical* – Neutral, while it addresses potential emissions it does add additional admin costs. *Equitable* – Yes, allows for accountability for emissions to be determined across all business structures.
Collectives • Enabled if practical in 2025. • Only include participants who individually meet the levy threshold. • IR-registered entity nominated.	• Consultation and feedback noted overwhelming support for collectives to be enabled. • Analysis of different collective structures determined collectives for all levy participants could be enabled. • A nominated entity was included to align with IR processes.	*Effective* – Yes, it will potentially increase compliance with the levy. *Practical* – Neutral, while it can be enabled it will increase auditing and verification as well as admin costs. *Equitable* – Yes, all participants are able to enter into collectives, and mirrors consolidated group functions in the NZ ETS.
Exemptions • Specified minor sectors exempt. • Ministerial power to grant exceptions through an order-in-council.	• Minor sectors exemptions align with Partnership recommendations, and do not currently contribute emissions proportionately to the cost of administering their inclusion. • The inclusion of Ministerial exemption powers allows for the exclusion of participants or classes of participants under certain circumstances which could not be captured in legislation.	*Effective* – Yes, they allow the system to manage the number of participants, with options for future inclusion. *Practical* – Yes, keeps the costs of administration of the system lower *Equitable* – Yes, only those businesses who farm for revenue from their farming business are captured in the levy system.

Levy settings (Refer to Section 3 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
Principles for setting the levy prices. • Primary consideration is emissions reductions: legislated targets and current national -level emissions budgets. • Secondary considerations are availability and cost of mitigations; socio-economic impacts; best available information; emissions leakage.	• Original proposal considered single criteria of emissions reductions only. • Final proposal aligns more closely with the Partnership recommendations requiring consideration of a broader range of factors with primary consideration on emissions reductions while also assessing the impact on viability of sector and rural communities.	*Effective* – Yes, considering a broader range of factors would achieve emissions reductions and maintain viability of the sector. *Practical* – Neutral, as incorporates independent and sector advice across a range of factors although weighing multiple criteria could require difficult decisions for Ministers. *Equitable* – Yes, the secondary factors address concerns about maintaining the viability of the sector.
Process for updating the levy prices. • Prices will be set in regulations by Ministers. • Set out for five years, review every three years. • Set by Order in Council as recommended by the Ministers. • Prices updated out of cycle if certain conditions met. • Provisions for advice from the Commission.	• We propose that the Ministers of Climate Change and Agriculture are responsible for setting and updating the levy through regulations based on advice from the Commission and feedback from consultation with the agriculture sector and Māori and the wider public considering the above factors. • Officials considered both yearly and three yearly price setting updates. Yearly would give more certainty for hitting targets, but three-yearly gives more certainty for farmers. • Out-of-cycle updates also proposed to mitigate the risks of three-yearly updates. • Commission's advice allows independent input into updates.	*Effective* – Yes, allows sufficient flexibility to update to reflect progress toward targets. *Practical* – Yes, manageable frequency of updates. *Equitable* – Yes, compromise between certainty for farmers and meeting targets.

Support to recognise emissions reductions technologies and practices, sequestration, and to participate in the pricing system (Refer to Section 4 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
Incentives • Incentive payments provided for mitigations on-farm. • Uniform rate of incentive payment for all mitigation types set out in regulations. • Incentive payment is a deduction from the levy bill. • On-boarding processes for new mitigations set in regulations.	• A low price with incentive payments was selected over a high price with assistance. • One purpose of the levy is to raise funds for payments to incentivise the use and uptake of emissions mitigation technologies and practices. • Incentives as a deduction of a levy bill will make the uptake of mitigations more cost-effective.	*Effective* – Yes, a low price plus incentives can drive emissions reductions aligns with the emissions reduction plan for agriculture, which focuses on supporting producers to make changes and accelerating new mitigation technology. *Practical* – Yes, approved technologies will be available to farmers at a fixed rate following a simple process for annual updates. *Equitable* – Neutral, as incentive payments are available to all, but some mitigations may favour certain farm system types.

Sequestration • NZ ETS as long-term solution, with proposed related work programmes to achieve. If this long-term solution is not in place in 2025, an interim integrated sequestration in levy from 2025 using a declaration-based approach. • Sequestration rates set in regulation by the Ministers. • Sequestration payment is a deduction from the levy bill.	• NZ ETS considered by the government and Partnership to be the most equitable mechanism for recognising sequestration in the long term. • Recognition for sequestration occurring on-farm was identified through consultation as a critical component of the pricing system as it provides a way to offset some of the emissions cost, particularly if no mitigations are available. • A backup system to include sequestration in the levy from 2025 is included if the transition to the NZ ETS is not ready. • Setting rates of reward for sequestration in regulations would allow considering fiscal sustainability and the revenue recycling strategy.	*Effective* – Neutral, recognising on farm sequestration from 2025 makes the pricing system more acceptable for farmers. However, as the payment will be deducted from the emissions bill, this may reduce the incentive to reduce gross emissions. Sequestration payments may also reduce funding available for mitigation incentive payments. *Practical* – Neutral, there is still work to be completed to ensure sequestration can be integrated into pricing system by 2025 and into NZ ETS in long term, including defining categories, determining emissions factors for carbon sequestration, and terms and conditions for payment given it will be an interim system to start with. *Equitable* – Neutral depending on which categories are recognised, sequestration payments may be available to some levy participants and not others. Transition of categories to the NZ ETS makes the system more equitable for non-levy participants.
Offsetting levy payments • Sequestration and incentive payments may be larger than an individual's emissions bill.	• Aligned with Partnership recommendation that payments can be greater than the emissions bill at an individual level but not at a system level. • Rates for sequestration and incentives will be set so as not exceed the revenue available at a system level.	*Effective* – Yes, if payments were capped, otherwise it may not result in gross emissions reductions. *Practical* – Yes, Ministers have the power to cap payments in regulations if needed. *Equitable* – Yes, supports a pricing system that is equitable to all participants
Transitional assistance • None provided initially on the basis that the low-price design of the system with incentive, sequestration, and dedicated Māori funding reduces the impact of the sector. • Whether further transitional assistance is required cannot be determined until initial levy prices are set • The ability to provide transitional assistance will be enabled in secondary legislation, should this prove necessary.	• Options considered included differential pricing (a lower price for some participants based on criteria), phased in reporting and payment obligations (exclusion of some most-impacted sectors or participants to start), and targeted levy relief (deferrals or delays to payment due to exceptional circumstances) as well as using levy revenue to support transition to a lower emissions land use option. • These options weren't progressed due to the complexity of designing and implementing a system requiring calls on a participant's economic viability. • A low starting price with revenue recycling was proposed to alleviate the need for transitional support.	*Effective* – Yes, modelling indicates a low price plus revenue recycling can achieve targets and viability of sector. *Practical* – Yes, simple to administer. *Equitable* – Yes, most participants have equal opportunities for support, and Māori have a dedicated fund to support Treaty obligations.
Dedicated Māori transition fund • A fixed amount of the revenue less administrative costs is ringfenced for Māori.	• A dedicated Māori transition fund aligns with Partnership's recommendation, but setting a fixed amount rather than reflecting levies paid by Māori landowners will better support transition to a low-emissions economy for Māori.	*Effective* – Yes, assists Māori to transition to low-emissions economy. May depend on what funds are used for. *Practical* – Yes but is dependent on proportion set and assistance required. *Equitable* – Yes, helps mitigate the adverse impacts on Māori due to historical barriers and complex land ownership structures.

Responsibilities (Refer to Section 5 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
The implementation of the pricing system includes roles and responsibilities for Ministers, implementation agencies, the Climate Change Commission and an advisory board with sector and Māori representatives	Options considered included: • Joint/single Ministerial responsibility • Single/multiple implementation agencies • Various combinations of independent, sector and Māori advisory roles	*Effective* – Neutral, joint Ministerial decision making in legislation is not recommended, all other functions have been clearly defined and allocated to the most appropriate agency. *Practical* – Neutral, with responsibilities spread across Ministers, agencies, and advisory groups. *Equitable* – Yes, as independent sector and Māori participants will all have a role in advising on the price system settings.

Operational requirements (Refer to Section 3 of the 2023 Cabinet paper)

Proposed System Elements	Optionality / Analysis	Assessment Against Criteria
Introduction to pricing and reporting requirements • Reporting begins Q4 2024. • Specified reporting and data requirements proposed. • Flexible year-end reporting period.	• CCRA requires reporting to be in use by 1 January 2025. • Data and reporting support the audit and verification process to ensure system integrity. • Flexible reporting is more user-friendly for participants and was supported by Partnership.	*Effective* – Yes, supports participation in the system and system performance to achieve its purpose. *Practical* – Yes, meets legislated timeframe. *Equitable* – Yes, as it provides flexibility for participants to align with their existing reporting requirements.
Compliance and enforcement • MPI to run compliance and enforcement with specified roles and requirements. • Penalties, fees, and fines proposed. • Legislative vs. regulatory components proposed. • Criminal offenses proposed.	• MPI is the best placed in terms of expertise, capability, capacity, and existing relationships to lead and deliver the compliance and enforcement functions. • We proposed an offences and penalties regime that is similar to the existing NZ ETS and SGG levy as laid out in the CCRA. This is because they serve a similar purpose and function to the agricultural emissions pricing scheme, namely that participants are required to calculate and pay for their emissions. • We proposed criminal offences for serious acts of offending in alignment with the provisions of the CCRA – NZ ETS and SGG levy.	*Effective* – Yes, as MPI has the expertise and capability to accomplish the compliance and enforcement roles. *Practical* – Yes, the choice of MPI makes sure that compliance and enforcement will be done in the most consistent and practical way possible. *Equitable* – Yes aligning the offences and penalties regime with the CCRA ensures inter-sectoral equity.
2030 review • Review conducted by MfE and MPI to consider whether the levy meets its purpose and if changes are needed. • Consultation requirements proposed.	• Review after 5 years will help ensure it is fit for purpose, sustainable and appropriate to assist New Zealand in transition to low-emissions future. • Consultation allows for those operating within the system and CCC to provide advice.	*Effective* – Yes, ensures system is on-track to assist New Zealand in meeting its legislated targets and budgets. *Practical* –Yes, provides opportunity for system to be reviewed, and if necessary modified. *Equitable* – Yes, sustainability of the system, which could include financial sustainability, social or economic impacts or other implications, will be considered in the review.

What are the marginal costs of Option 2A – Basic Farm-level Levy?

Additional costs of the preferred option compared to taking no action (All costs are in 2030, except establishment costs which span 2023–25)			
Affected groups	**Comment**	**Impact**	**Evidence Certainty**
Regulated groups	Significant administrative and compliance burden on participants in the pricing system.	Operating: $17m pa	High
	Significant overall impact on the profitability and productivity of the agriculture sector.	$494–620m total loss in net revenue (2025–2030) • Dairy: $250–295m • Sheep & beef: $242–325m (depending on methane price[29])	
Regulators	Setting up a new pricing system will have both one-off and ongoing costs and will require ongoing resourcing. (Note that some or all of these costs may be recovered from users.)	Establishment: $70m Operating: $32m pa	High
Others (e.g., wider government, consumers, etc.)	Some costs could be passed onto consumers through increased product prices and/or reduced availability of product.	Low	Medium
	Related industries beyond the farm gate would be affected by reduced agricultural output – suppliers to farms, processors such as freezing works and dairy factories, and transport operators and higher value-added food manufacturers.	High – could be of a similar order of magnitude to loss in on-farm net revenue	Low
Total monetised costs		**$540–669m** (excluding establishment costs, as these are covered by government) (depending on methane price)	
Non-monetised costs		**HIGH**	**MEDIUM**

Table 12: Costs associated with Option 2A.

[29] For prices B-D, but not including price A which does not achieve the domestic GHG target.

What are the marginal benefits of Option 2A – Basic Farm-level Levy?

Additional benefits of the preferred option compared to taking no action (All benefits are in 2030)			
Affected groups	**Comment**	**Impact**	**Evidence Certainty**
Regulated groups	Global perceptions that some NZ products are carbon-neutral secures premium in global markets increasing profitability of dairy and sheep & beef farms by 18%, for 10% of exports	$92–94m pa (depending on methane price)	Medium
	Reducing emissions will support avoiding the worst effects of climate change, which could significantly affect our ability to produce food.		Low
Regulators	Will support meeting legislated targets.	$605m pa	Medium
	Over/under-achieving targets	–$51 to 71m pa (depending on methane price)	High
	Domestic reductions achieved decrease the volume of emissions that have to be purchased offshore to meet our NDC, avoiding the cost associated with this where these reductions are less expensive.	(Unquantified)	High
Others (e.g. wider government, consumers, etc.)	Some industries (arable, horticulture) will expand as a result of lower sheep and beef production and consequential land use changes.	$34–88m pa (depending on methane price)	Medium
	Reducing emissions will support avoiding the worst effects of climate change, which could significantly affect most aspects of life. Shifting to low-emissions practices supports building resilience in our economy against changing consumer demands and emergent products and technologies.		Medium
Total monetised benefits		**$733–804m pa** (depending on methane price)[30]	
Non-monetised benefits		**HIGH**	**MEDIUM**

Table 13: Benefits associated with Option 2A

[30] These are the combined values of these components for the farm levy with low and high methane prices respectively, and not the column totals.

90. The table below presents a simplified version of the cost-benefit analysis in paragraphs 64–71, with disaggregation by major sector in agriculture (compared to the 'no pricing' baseline) in 2030, for two options – including processors in the NZ ETS, and a basic farm-level levy with methane price B (8c/kgCH_4).[31]

Values in 2030	Dairy		Sheep & beef		Other agriculture	
	NZ ETS	Farm levy (CH_4 price B)	NZ ETS	Farm levy (CH_4 price B)	NZ ETS	Farm levy (CH_4 price B)
Benefits						
Value of GHG mitigation (million)	232	116	635	439	–2	–1
Value of premium for carbon action (million)	71	74	17	20	0	0
Costs						
Loss of net farm revenue (million)	415	250	430	242	–64	88
Administration costs (million)	4	23	7	39	0	0
Total benefits (million)	303	190	651	459	–2	–1
Total costs (million)	419	273	436	281	–64	88
Net benefits (million)	–116	-84	215	178	62	-89
Benefit-cost ratio	0.72	0.69	1.49	1.63	N/A	N/A
Results without premium for carbon action						
Net benefits (million)	*–187*	*-158*	*198*	*158*	*62*	*–89*
Benefit-cost ratio	*0.55*	*0.42*	*1.45*	*1.56*	*N/A*	*N/A*

Table 14: Costs and benefits by agricultural sector

Notes:

- These values are from a national perspective; the value of GHG mitigation[32] would be generated by each sector but would not provide benefits directly to them; whereas other costs and benefits would directly accrue to the relevant sector.
- The estimates shown for 'Loss of net farm revenue' for Other agriculture represent increases in revenue and are shown as negative losses for consistency in presentation. Cost-benefit ratios calculated on this basis would not be meaningful and are not shown.

91. As with the results for all agriculture, there are no major differences between options. However, there is considerable inter-sectoral variation.

92. The key driver of this variation is differing levels of 'emissions intensity' between sectors. Both dairy and sheep & beef farming are projected to have similar emissions in the 'no pricing' baseline – 24 million and 26 million tonnes respectively. However, annual net revenue in 2030 is projected at $4.4 billion for dairy farming, compared to $1.4 billion for

[31] Equivalent calculations have been made for all other options. These show similar results to this table and have been omitted for brevity.

[32] The CBA estimates the Net Present Value (NPV) of costs and benefits, in real (inflation adjusted) dollars, using a discount rate of 5% (per standard Treasury guidance[24]) over the period from 2023 to 2035.

sheep & beef. Therefore, emissions for any given level of net revenue are much lower in dairy farming than for sheep & beef.

93. Emissions reductions under all options are primarily a result of reduced production. In the case of less 'emissions-intensive' dairy farming, this results in costs significantly exceeding benefits. While the modelled reductions in emissions and losses in net revenue are low in percentage terms, the low emissions intensity of this sector means that revenue losses significantly exceed the benefits of reduced emissions.

94. The biggest contribution to both emissions reductions (benefits) and losses of net revenue (costs) comes from sheep & beef farming. However, the opposite effect applies to what occurs in dairy; it is modelled to have much larger reductions in output, and the high emissions intensity means that the value of reduced emissions exceeds the losses in net revenue, resulting in positive benefit-cost ratios under all options.

95. The impacts in 'Other agriculture' are a result of land use changes and increased production in arable and horticultural sectors, resulting in modest increases in emissions and net revenue.

Wider impacts

96. Direct costs to farmers and growers may have significant flow-on effects. There may be upstream impacts on production if farmers and growers reduce their inputs (e.g., agricultural contractors), and downstream effects if processors (e.g. meat works or dairy factories) have fewer products to process. The size of these indirect effects needs to be estimated empirically, but they are typically of a similar order of magnitude to the direct impacts.

97. There may be offsetting impacts associated with alternative land uses and the spending and employment associated with this.

98. With the considerable uncertainty about the impacts of emissions pricing on agricultural production, and the nature, scale, and location of wider impacts, any quantitative assessment of such impacts, including on Māori and rural communities, would be highly speculative. For this reason, we have limited our assessment to qualitative factors in the following two sub-sections.

99. Submitters, especially from the farming sector, expressed concerns about the loss of production expected to result from pricing emissions. They noted that impacts are likely to vary markedly between different farms and farm types, and referred to effects such as:

    a. negative effects on farmers' mental wellbeing;

    b. exit of young farmers from the farming industry;

    c. widespread change in land use from farming to forestry;

    d. loss of farm-related jobs and downturns in rural communities.

100. We note that the descriptions of impacts in the submissions were qualitative and anecdotal and did not provide any estimates of the scale of potential impacts. Nor was there any acknowledgement of offsetting impacts such as growth in other industries.

Impacts on Māori

101. Most Māori submitters raised concerns that the proposals were not equitable for Māori. Many Māori submitters noted that Māori land's complex ownership structures must be

considered in the development of policies relating to climate change and emissions pricing. Māori landowners face multiple barriers to managing and developing their land, including land ownership and governance structures, access to capital and advice, and less productive land. These same factors will likely impact Māori landowners' ability to respond to an emissions pricing policy.

102. An emissions pricing system is likely to disproportionately disadvantage Māori landowners with flow on effects for Māori more broadly, particularly if there is no assistance in place to mitigate some of the impacts. In submissions, Māori indicated that they would face additional barriers without adequate and appropriate support systems in place and conveyed that representation in the system is critical to enable exercise of rangatiratanga, kaitiakitanga and manaakitanga by Māori participants. Draft modelling shows the price of methane emissions will drive reductions in production and stock numbers, and from this land-use change, which will in turn drive emissions reductions. Most of this land-use change will likely occur in the sheep and beef sector.

103. It is estimated that Māori operate up to 25 per cent of Aotearoa New Zealand's sheep and beef farmland. A high methane price would therefore significantly and disproportionately impact Māori sheep and beef farmers due to the barriers already mentioned, and the limited emissions mitigation options available to sheep and beef farmers, compared to dairy farmers.

104. Reduced production resulting from an emissions pricing policy are also likely to have a flow on effect on the Māori economy and communities. For example, any reduction in Aotearoa New Zealand's sheep and beef sector has the potential to impact Māori employment as approximately 28 per cent of meat processing workforce are Māori.

105. Looking ahead at the mitigations that are currently under different stages of development, these are more suited to dairy farmers than sheep and beef farmers, for example, EcoPond and Bovaer. With high rates of Māori-owned sheep and beef farms, this will impact on the ability of Māori farmers and landowners to take up mitigation incentives.

106. It is important to work with Māori landowners to understand how we can manage these impacts, to support a transition to a low emission, climate resilient future.

Impacts on rural communities

107. The impacts will be greatest in areas where farming is a large part of the local economy. The impact may be magnified if job losses occur among people living in remote rural communities, with few alternative employment opportunities (and any new jobs are filled by people from provincial towns and cities).

108. Potential negative effects could include a significant change in spending power across rural communities, further de-population and impacts on community services, quality of living.

109. Feedback from consultation noted that the levy would not be felt evenly across the sector due to differences in farm profitability, but the decisions taken by each farm "aggregate up to community impacts."

110. Most sector submitters expressed concern the proposals would adversely affect or threaten the viability of rural communities. These submissions often noted the levy would reduce the number of jobs in rural communities, causing farm workers to leave, which,

in turn, would lead to the closure of schools and basic amenities, and then to further job losses.

111. Many sector submitters and some Māori submitters were concerned about the impact of the proposals on the mental health of rural people.

112. But it is also possible that some rural communities might benefit, for example from jobs arising from alternative land uses. Or businesses in other industries like tourism that are currently facing staff shortages may be able to expand through re-employing primary sector workers.

113. Affected rural communities with high Māori populations could suffer if people move to get alternative jobs. The social and cultural impacts of losing connection with ancestral whenua and whānau could contribute to loss of language and identity.

114. Potential mitigation measures may focus around two key themes: reducing the risk of widespread financial hardship; and building rural skills and support systems, for instance through extension services and programmes. The proposed pricing system includes relatively low levy prices and recycling revenue back to the sector.

Section 3: Delivering an option

How will the new arrangements be implemented?

115. The farm level pricing system will be introduced through a staged approach beginning with mandatory farm level reporting for eligible farmers and growers in Q4 of the 2024 calendar year. This first stage will facilitate operational delivery and sector readiness for eventual pricing.

116. In Q4 2025 of the calendar year farmers and growers face a price on their on-farm biological greenhouse gas emissions and recognised and rewarded for eligible sequestration and approved mitigation technology used.

117. 'Implementation Agency' in this section refers to MPI, MfE and IR, who will be responsible for implementing the levy system.

Implementation arrangements for an Implementation Agency

118. The Implementation Agency and respective responsibilities will need to be outlined in primary legislation; the underpinning detail on the different functions will sit in secondary legislation alongside the broader operational policy framework.

119. Eight core functions of the Implementation Agency have been identified which will form the basis of an agricultural emissions pricing system:

    a. Participant registration & relationship management – this component of the system will deal with the registration and participant aspects of the system (farmer and growers, collectives). It will also be the interface by which the customer opts into the sequestration grant scheme and the incentive payments.

    b. Emissions calculation – this is the central emissions calculator where participant's emissions will be calculated. Where applicable, the sequestration and incentive payment approved mitigations will be factored in.

    c. Levy assessment & collection – using the participant's emissions calculation and the sequestration and incentive payment (if applicable), this function will calculate the levy to be paid and will collect the payment. It will also administer the rebates from incentive payments and the sequestration grants.

    d. Compliance monitoring and enforcement – this component includes the audit and verification sub-function (desktop and on-farm audits), and any compliance, monitoring and enforcement which is required as a result of this.

    e. Revenue recycling & re-investment – this includes the re-investment of funds towards the incentive payment rebates and sequestration grants, and the revenue recycling strategy and accompanying advisory body/bodies. This strategy will also set the framework for funding to support Māori landowners and agribusiness, as well as research directions.

    f. Policy management – this function includes the development and ongoing updates to the system policy settings, including levy price, sequestration, emissions reporting methodology, incentive payments, and the operational policy settings (on-boarding new mitigations, cost recovery, and compliance, monitoring and enforcement strategy).

    g. Governance and system stewardship – System monitoring, review, and evaluation against emission targets and budgets and wider socio-economic considerations.

h. Extension services – Underpinning supporting framework which ensures farmers have the information, tools, and advice needed to respond to a price on emissions.

Governance of the pricing system

120. For our preferred option, Ministers are jointly responsible for oversight of the pricing system and spending of public money. We are expecting Cabinet to establish the System Oversight Board to provide advice to the Commission on levy settings and prepare a revenue recycling strategy.

121. The Commission will seek advice from the System Oversight Board and other affected parties on setting the levy rates.

122. Section 215 of the CCRA states that the System Oversight Board (Board) will be a non-statutory body that will provide Ministers a revenue recycling strategy; and will be consulted by the Commission on levy price settings, before the Commission provides its advice to Ministers.

123. The Commission will provide advice to Ministers on levy rates, after seeking advice from the sector and Māori (through a skills-based, non-statutory advisory board to be established). The System Oversight Board will also directly advise Ministers on the strategy for investment of levy revenue including incentive and sequestration rates. Māori representatives on the advisory board will be responsible for advising Ministers on ring-fenced funds for Māori.

Information required from farm businesses in a farm-level pricing system

124. Farm businesses required to report their emissions within the emissions pricing system, and pay the levy, will need to register on the system. The obligation will extend to recording relevant farm data, submit emission reports using approved tools, and payment of the requisite levy.

125. The data required upon registering could include information on ownership, farm address, farm type/size, farming enterprise, stock type and numbers, farm map and GST number(s). This information would then be useful in aiding the audit, verification, and compliance processes. For agents registering for others, authority to act on behalf would need to be demonstrated. This could involve the completion of a signed agreement submitted with registration.

126. Participants will input farm information into the bespoke calculator on an annual basis. They will receive a notification directing them to do this.

Farmer Collectives

127. Farmer collectives are being considered for implementation in 2025. Collectives offer a way for business owners to opt-in and collaborate with other business owners to report and pay for their emissions.

128. Collectives could also provide an opportunity for farmers to offset emissions through vegetation owned by another enterprise.

129. Te Aukaha, the Māori agribusiness work stream of the Partnership led by the Federation of Māori Authorities, identified collectives as a mechanism to reflect the fact that whenua Māori is owned collectively with interests in across multiple, potentially non-contiguous land blocks. Enabling the formation of collectives would support owners of whenua Māori to interact with the pricing system by reducing administration burden.

130. We recognise the importance of collectives but acknowledge that this may reduce the practicality of the basic farm-level levy in early years. We also need to test how collectives could impact the effectiveness of the pricing system at reducing emissions.

131. We are looking into simple solutions for supporting collectives (including those already used by government agencies) to interact with the farm-level levy that would allow collectives to be enabled from 2025.

Compliance and enforcement

132. It is critical to the operation of the levy that participants comply with their obligations. To ensure a high level of compliance, we propose to establish a cost-effective compliance and enforcement regime that is similar to that under the NZ ETS and Synthetic Greenhouse Gas Levy (SGG levy).

133. The compliance and enforcement regime needs to ensure a high level of compliance and enable appropriate action to address non-compliance. An effective compliance and enforcement regime will give legitimacy to the scheme, promote equity and fairness by ensuring all participants are fulfilling their obligations, and ensure expected revenue is collected.

134. The implementation agency will be responsible for ensuring levy payers comply with their obligations and take any necessary enforcement action. To support this, key powers and functions will be needed. These include:

    a. Powers to appoint enforcement officers who can inquire with levy participants to verify compliance;

    b. Enabling third-party verification processes through regulations; and

    c. Powers to amend emissions returns or make default assessment in cases of non-reporting.

135. An offences and penalties regime will incentive compliance, while enabling appropirate enforcement action to be taken in cases of non-compliance. A range of tools will be provided to the implementation agency to enforce obligations:

    a. Establishing criminal offences for serious non-compliance with obligations (e.g. knowingly providing false information);

    b. Enabling the use of infringement offences to punish lower level non-compliance; and,

    c. Administrative penalties for reporting errors (including non-reporting) that align to the size of the error, and for non-payment.

136. There will be costs associated with administering the farm levy, which could be funded from Crown revenue, revenue collected from the levy, or via separate fees. We are therefore considering enabling cost recovery for the functions involved in running the agricultural pricing system within legislation. If cost recovery is implemented, it would be applied through regulation and subject to consultation before fees are set or changed.

Is implementation of a farm level pricing system by 2025 feasible?

137. The Government enshrined implementation milestones in the CCRA. These milestones, between 2020 and 2025, prepare the agricultural sector for calculating and reporting its annual emissions. The milestones – and the assessment this year by the Commission of progress towards them – are set out Table 15 on the following page.

138. There is no longer sufficient time to legislated and implement a pricing system by the 1 January 2025 deadline previously envisaged. The intention is now to implement a farm level pricing system in quarter four 2025, with mandatory emissions reporting beginning from Q4 2024. This mandatory reporting will help ensure sector readiness to engage with the pricing system once it takes effect.

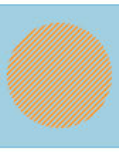
	Milestone	Due Date	Status	
1	For 25% of farms, a person responsible for farm management holds a documented annual total of on-farm emissions, by methods and definitions accepted by the He Waka Eke Noa Steering Group	31 December 2021		Complete 61% farms reached
2	For all farms, a person responsible for farm management holds a documented annual total of on-farm emissions, by methods and definitions accepted by the He Waka Eke Noa Steering Group	31 December 2022		Very likely will not be met
3	A pilot of a farm-level accounting and reporting system has been completed across a range of farm types	1 January 2024		Can be met
4	A system for farm-level accounting and reporting of 2024 agricultural emissions at farm level is in use by all farms	1 January 2025		Likely will not be met
5	Guidance is provided to farmers on how to measure and manage emissions through farm planning	1 January 2021		Complete
6	A quarter of farms have a written plan in place to measure and manage their emissions	1 January 2022		Not complete 21% farms reached
7	All farms have a written plan in place to measure and manage their emissions	1 January 2025		Very likely will not be met

Table 15: Implementation milestones and due dates from Schedule 5 of the CCRA

Increasing farm and sector readiness in implementation

139. Implementation planning will need to address how the capability and capacity of the agriculture sector will increase to support farms to meet requirements, and to ensure MPI can enforce requirements.

How will the new arrangements be monitored, evaluated, and reviewed?

140. The proposed farm-level pricing system is designed specifically for the agriculture sector to be practical to implement and to ensure it is most effective at reducing emissions in line with Aotearoa New Zealand's emissions reduction targets. The system is also designed with a view to maintaining a viable and productive agriculture sector.

141. There will be a role for the Commission in monitoring the overall successes of the system as Section 5ZJ of the CCRA requires the Commission to monitor progress towards emission budgets, of which this pricing system will be key.

142. To ensure that the agricultural emissions pricing system is fit for purpose, sustainable and appropriate to assist Aotearoa New Zealand in the transition to a low-emissions future, a legislated 2030 implementation review is proposed. The Implementation Agency would be responsible for conducting the review.

143. An implementation review in 2030 will provide an opportunity to consider:

    a. The extent to which agricultural emissions have reduced;

    b. The sustainability of the system, which could include financial sustainability, social or economic impacts, or any other implications;

    c. Opportunities to enhance or improve the system.

144. As part of the review the Implementation Agency will seek information and advice from the agricultural sector, Māori, and the Commission.

145. Price pathways for biogenic methane and long-lived gases will be set for five years with a review after three years. Annual monitoring of emissions will inform the price setting and identify any significant variances that could trigger an earlier review.

146. The information the Implementation Agency receives from farmers and growers, the results of its monitoring and enforcement actions, and the uptake of revenue recycling programmes would also support the monitoring and evaluation of the policy.

147. A revenue recycling strategy will be developed outlining spending priorities to mitigate agricultural emissions and operate the system. The strategy would include incentive and sequestration payments, and a dedicated fund for Māori landowners. The rate received by farmers and landowners as incentive payment for the uptake of approved actions that reduce emissions, such as the adoption and use of methane inhibiting technology will be periodically reviewed. These will include payments or credit for on-farm vegetation which are not eligible for registration in the NZ ETS.

148. The Government and the agriculture sector will jointly develop a sequestration strategy to determine what sequestration will be recognised in 2025. The strategy will recommend how sequestration is to be accounted for and rewarded within the pricing system and the process and criteria for any transition of vegetation categories to the NZ ETS.

149. Specialised climate-focused services will complement wider efforts by industry and the Government to support whole-of-system farming change. The regulator will facilitate and enable extension services/programmes to reduce the risk of widespread financial hardship and building rural skills and support systems, so that farmers can carry out to mitigation measures.

150. There are significant fiscal risks in setting the levy, in that the forecasting of the sequestration and incentive payments is quite uncertain, meaning that while we will set the levy and payments with the best available information in mind, there are risks that the levy revenue may not cover all the payments. For example, for one scenario of the cost of the low and high estimates of sequestration uptake range from e.g. $ 50m to $300m. There are several mitigations for this risk, including setting a higher levy and being conservative with pay-outs.

Appendix One: Other System Design Elements

151. A range of other system design elements were considered throughout this policy proposal, which do not constitute options in their own right but nevertheless were significant areas of work that officials assessed against our core criteria.

152. There are four key additional elements either not progressed, or are still under consideration for whether they can be incorporated into the initial system or should be considered possible improvements to the system over time:

    a. Structured assistance;

    b. Comprehensive reporting.

Structured Assistance

153. Structured assistance has *not been progressed* within the final options.

154. Structured assistance is a potential mechanism for returning funds to farmers in a way that supports them to face and appropriately respond to the price on their emissions, without weakening the price signal necessary to achieve emissions reductions. Essentially, farmers would receive the full marginal benefit for every unit of reduction that they make or taken on the full marginal cost for every unit of emissions that they increase, but the overall emissions bill would be offset with a rebate that softens the financial impact on the farm's viability.

155. Under any NZ ETS options, free allocation functions as a form of structured assistance, so this is considered built into the option.

156. For an alternative pricing system, the Partnership and government considered a range of methodologies for structured assistance, which were then assessed by the Commission. Their advice on assistance (which also included other forms of assistance) was provided to Ministers as the report linked in *Table 1*.

157. Several methodologies discarded early on included:

    a. A proportional discount, where the price is simply lowered by a significant amount. This does not preserve a strong incentive, though the concept of using a low price with other system elements driving reductions continues to exist in all of the alternative pricing system options considered by this SAR.

    b. Grandparenting, where farmers receive a rebate on the basis of their emissions reductions compared with a fixed historical year. This option creates a very strong incentive to reduce emissions, but comes with significant equity issues, especially for early adopters who cannot be recognised for past reductions and for Māori farms who have not had the same level of opportunity to intensify their land in the past unlike many other groups within the agricultural sector.

    c. Rolling average, good management practices, and target-based rebates were also all considered. The Commission's report sufficiently covers the flaws in these methodologies.

158. Two key methodologies were designed in much more detail, and remained viable candidates for a significant portion of the policy design process:

    a. Output-based rebates reward farmers on the basis of how emissions efficient they are per unit of product. It strongly rewards efficiency gains, and could be implemented in a basic form with minimal additional reporting. However, achieving

the full benefit of this methodology would require much more complex reporting. An output-based approach also creates equity issues between sub-sectors, as mitigations available to dairy often contribute to efficiency gains, but most of the already-limited mitigations available to the drystock sector would not be picked up within the benefit of this methodology.

b. Carrying capacity (or land-based) rebates[33] reward farmers on the basis of how emissions efficient they are per hectare (within a range of land-use categories). It strongly rewards both deintensification and absolute emissions reductions. However, it could not be implemented without significant additional investment and much greater reporting complexity. This methodology builds on the concept of Land-use Classes (LUC), but to be effective and accurate would require a fit-for-purpose land-use map, which officials do not consider feasible in the near future. A carrying capacity approach also creates equity issues between sub-sectors, as dairy farms can best achieve emissions reductions while remaining viable through efficiency gains within their intensive systems, which would be disincentivised within this methodology.

159. Ultimately, officials continue to see structured assistance as useful tool for achieving emissions reductions, but this does not sufficiently stack up against the complexity and equity issues and other significant trade-offs required for structured assistance to function.

160. The on-farm technology and mitigation incentives approach outlined under the options considered in this SAR effectively takes the place of structured assistance, as a way of recycling funds back to farmers to simultaneously incentivise emissions reductions and soften the financial impact of the price.

161. Other approaches to assistance (such as levy relief or other funding or support provided on a conditional basis) are continuing to be explored by officials to mitigate the most strongly felt impacts of the pricing system, such as on Māori agribusinesses, as recommended by the Commission.

Comprehensive Reporting

162. Comprehensive reporting has *not been progressed* within the final options. However, it is *still being* considered as a possible improvement to the system over time.

163. A comprehensive reporting system provides for farmers to be recognised for a wider range of mitigations on-farm, and to better understand their emissions footprint and where reductions can be achieved. It is referred to by the Partnership as the 'detailed method,' and could include farm-systems improvements (e.g. improved animal genetics, forage type, farm-specific management, timing of operations), efficiency gains not related to specific mitigations, and land-use change (for example, from pasture to arable or horticulture).

164. Comprehensive reporting is not considered practical to implement by 2025 as more work will be required for detail in regulations and for integration with the single, centralised calculator in the IT system.

165. There is also a question of the cost-benefit of comprehensive versus simple reporting system. Increasing the complexity of reporting comes with significant cost, including to

[33] Carrying capacity or land-based assistance provides rebates on the basis of the natural productive capacity of the land.

farmers – particularly sheep and beef. However, it has potentially diminishing impacts on the ability to recognise and reward meaningful reductions.

166. The availability of comprehensive reporting could create equity issues, as some sub-sectors, such as the drystock sector, do not have robust systems to collect the data required and would need to invest more time compared to dairy sector participants in order to receive any benefit.

Appendix Two: Recognising sequestration options

Inclusion of additional categories in NZ ETS

167. The Partnership recommended for the NZ ETS be improved and updated to allow more vegetation categories. The NZ ETS is the most appropriate mechanism to reward all forms of eligible sequestration from vegetation. Having one system that recognises sequestration for all landowners in Aotearoa New Zealand is a coherent, efficient, and equitable approach.

168. A key barrier to recognising non-forest sequestration categories in the NZ ETS is the gap between New Zealand's Greenhouse Gas Inventory and our target accounting. Currently, forestry is the only form of sequestration that is eligible to be recognised in the Nationally Determined Contribution (NDC) accounting and the NZ ETS.

169. Cabinet has therefore agreed in-principle to expand the NDC accounting to recognise a wider range of non-forest removal activities, and to be rewarded alongside forestry as part of New Zealand's climate change response. This will help alignment of emissions accounting between the NZ ETS and international targets.

170. Another significant barrier is the administrative and fiscal bottleneck presented by the current system, where the burden of proof falls on the government to do the research and development required to bring additional forms of sequestration into the NZ ETS.

171. To enable the long-term goal of including on-farm vegetation in the NZ ETS, in August 2023 Cabinet agreed to develop and implement an innovation pathway with the aim of having this in place by 2025, which includes:

    - drafting legislation to enable new removals activities to be included in the ETS or other appropriate mechanism,
    - developing the criteria and expectations for the research and evidence required for market entry, to provide certainty for investors; and
    - establishing the process and operational system to test and verify this evidence.

172. Cabinet recognised that it would be ideal for the necessary legislation to be in place in 2025 (in time for when the pricing mechanism comes into effect). However, if the innovation pathway is not in place by 2025, the intention is to reward certain categories of on-farm sequestration in an interim system, as set out below.

Interim sequestration system via the farm level levy

173. To be recognised for on-farm sequestration, farmers and growers would need to complete a declaration while inputting their emissions and sequestration. Scientifically robust vegetation categories that can be included in Aotearoa New Zealand's international target accounting will transition to the NZ ETS immediately.

174. Under this approach, levy funds will be used to pay farmers for eligible sequestration. Legislation would specify that funding these categories of sequestration is a purpose of the levy.

175. To determine the sequestration component of the levy, legislation and regulation would need to define the eligible vegetation, the rates of sequestration associated with this vegetation, the price per tonne of carbon sequestered. This option allows individual farmers to offset their methane and nitrous oxide levy bill with these categories of carbon sequestration.

Option	Effective	Practical	Equitable
Inclusion of additional categories in NZ ETS	Is likely to be more effective at reducing agricultural emissions as levy revenue from an agricultural pricing system can fund more activities to reduce gross agricultural emissions, instead of funding sequestration.	Would require a significant legislative and policy process to add and alter the extra categories. For small areas of vegetation, the NZ ETS mechanism becomes less practical because the NZ ETS involves trading in NZUs, has a high level of assurance for sequestration occurring, and has higher liability provisions for destroyed vegetation.	Recognition of this vegetation in the NZ ETS does not restrict access to reward only levy payers and is therefore more equitable to general Aotearoa New Zealand private landowners.
Sequestration as a use of funds raised by the farm-level levy	This option will reduce the effectiveness of the farm-level levy as it directs funds away from activities that reduce methane and nitrous oxide emissions. If higher levy rates can be secured, this impact on effectiveness will be avoided. This option does not provide as strong of an assurance of the permanence of carbon sequestration as the other two mechanisms analysed here. Due to the lower assurance and expectation around permanence, the rate of reward will be lower than in the NZ ETS to reflect this.		Only levy payers would have access to this sequestration reward, it is not an equitable option to private landowners who do not pay the levy. This is somewhat mitigated by the fact the reward is paid with levy revenue. It is proposed that Māori landowners who are part of a collective (as a levy payer) will also have access to this sequestration reward.

Appendix Three: Comparison of elements across options

	Option 1 Processor-level Pricing in NZ ETS	**Option 2A** Basic Farm-level Levy (Government proposal)	**Option 3** Partnership's Farm-level Levy	**Option 4** Farm-level Pricing in NZ ETS
System	Processor-level NZ ETS	Farm-level Levy	Farm-level Levy	Farm-level NZ ETS
When would it start	01 January 2025	Q4 2025	Later than 01 July 2025	Considerably later than 01 January 2025
Point of obligation	Processors	Farmers & growers	Farmers & growers	Farmers & growers
Emissions calculation	NZ ETS reporting system	Simple calculator	Simple calculator in 2025 and more detailed in 2027	NZ ETS reporting system
Emissions price	NZU market price	Unique price for both biogenic methane and long-lived gases set as low as possible to achieve the emissions reductions required to meet our targets and be sufficient to support the uptake of mitigation technologies, with additional factors also taken into account.	Long-lived gas price set to fund sequestration and admin costs. Unique methane price set through advisory process and approved by Ministers.	NZU market price
Reduction incentives	Cost of emissions passed onto farmers, incentivising lower production. On-farm incentive regime that pays for mitigations and technology uptake	Direct signal to farmers through price on emissions On-farm incentive regime that pays for the uptake of approved mitigations and technology, and in future, on farm practices	Direct signal to farmers through price on emissions On-farm incentive regime that pays for the uptake of approved mitigations and technology	Direct signal to farmers through price on emissions Possibility of on-farm incentive regime
Financial assistance	95% free allocation	Low price plus revenue recycling Levy must be self-funding and sustainable	Low price plus revenue recycling Levy relief available	Possibility of 95% free allocation regime
Sequestration	NZ ETS forestry	Sequestration payments for eligible vegetation that is not eligible for the NZ ETS until these categories are transitioned to an appropriate long term sequestration reward scheme via the innovation pathway.	Sequestration payments integrated into levy for a broad range of vegetation	NZ ETS forestry
Revenue recycling	General pool of revenue raised from the NZ ETS	Self-funding and covers system administration, on-farm incentives and sequestration, a dedicated fund for Māori landowners, and other priorities identified	Funds system administration, on-farm incentives and sequestration, a dedicated fund for Māori landowners and other priorities identified	General pool of revenue raised from the NZ ETS

		through the revenue recycling strategy.	through the revenue recycling strategy.	
Governance	Existing NZ ETS governance structures	Ministers govern system with advice from Climate Change Commission and advisory board with sector and Māori representatives	Sector led governance structures to advise on price, progress toward farm-level pricing, revenue use, etc	Existing NZ ETS governance structures
Transitional options	Possible long-term transition to NZ ETS at the farm-level	Effectiveness to be improved over time	Short term implementation to a more detailed system by 2027	N/A

Appendix 5: Climate Implications of Policy Assessment: Disclosure Sheet

This disclosure sheet provides the responsible department's best estimate of the greenhouse gas emissions impacts for New Zealand that would arise from the implementation of the proposal or option described below. It has been prepared to help inform Cabinet decisions about this proposal. It is broken down by periods that align with New Zealand's future emissions budgets.

Section 1: General information

General information	
Name/title of proposal:	Agricultural emissions pricing
Agency responsible for the proposal:	Ministry for the Environment Ministry for Primary Industries
Date CIPA finalised:	
Short description of the policy proposal:	Implementing a farm-level levy on agricultural greenhouse gases by 2025, to achieve emissions reductions from agriculture in line with our legislated targets More information can be found in the following SAR: Agricultural Emissions Pricing (September 2023)

Section 2: Greenhouse gas emission impacts

Table 1 below shows the estimated impact of different agricultural pricing systems on overall agricultural greenhouse gas emissions, based on modelling conducted by Manaaki Whenua Landcare Research. Carbon dioxide emissions from agriculture were not reported as it is not a significant source of agricultural emissions.

Note this Manaaki Whenua Landcare Research modelling took account of the Emissions Trading Scheme driving afforestation, but did not incorporate the impact of other environmental policies (such as the Essential Freshwater reforms), which will also impact agricultural emissions.

Table 1 – overall impact of agricultural pricing systems on agricultural greenhouse gases[1]

Option	Annual emissions impact by 2030	
	Change in GHG emissions in 2030 (Mt CO_2-e) ***Relative to baseline projected emissions by 2030***	**% Change in GHG emissions in 2030** ***Relative to emissions in 2020 as a proxy for 2017 reference year in CCRA targets***
Option 1 – NZ ETS at processor-level:	8.0	–16%

[1] The modelling commissioned by officials included the impact of agricultural emissions pricing and the NZ ETS driving afforestation. It did not include the impact of the Essential Freshwater reforms and other environmental policies, which are expected to drive significant changes in farm practices and land use by 2030 (and therefore, agricultural emissions).

Option	Annual emissions impact by 2030	
	Change in GHG emissions in 2030 (Mt CO_2-e) ***Relative to baseline projected emissions by 2030***	**% Change in GHG emissions in 2030** ***Relative to emissions in 2020 as a proxy for 2017 reference year in CCRA targets***
Option 2 – Levy at processor-level:	4.6	–9%
Option 3 – Levy at farm-level with sequestration incentive		
CH_4 Price A ($1.79/t$CO_2$-e) and a N_2O price of $10.86/t$CO_2$-e:	3.1	–7%
CH_4 Price B ($2.86/t$CO_2$-e) and a N_2O price of $10.86/t$CO_2$-e:	5.1	–10%
CH_4 Price C ($3.93/t$CO_2$-e) and a N_2O price of $10.86/t$CO_2$-e:	5.7	–11%
CH_4 Price D ($5.00/t$CO_2$-e) and a N_2O price of $10.86/t$CO_2$-e:	6.3	–12%

Table 2 shows the estimated impact split by the major agricultural greenhouse gases (methane and nitrous oxide) based on the Manaaki Whenua Landcare Research modelling.

Table 2 – estimated percentage emissions reductions in 2030 relative to 2020, by gas

Gas	Processor NZ ETS	Processor Levy	Farm-level levy (all options have a N_2O price of $10.86/t$CO_2$-e)			
			CH_4 Price A ($1.79/t CO_2-e)	CH_4 Price B ($2.86/t CO_2-e)	CH_4 Price C ($3.93/t CO_2-e)	CH_4 Price D ($5.00/t CO_2-e)
All gases	–16%	–9%	–7%	–10%	–11%	–12%
Methane	–18%	–10%	–8%	–12%	–13%	–15%
Nitrous oxide	–10%	–5%	–3%	–3%	–5%	–5%

Table 3 below shows, for the farm-level levy option, the estimated impact of the levy per kg of output, based on a nitrous oxide price of $10.86/t$CO_2$-e and at different potential methane prices. Note this is just an estimated average impact; different farms will have different relationships between emissions (and therefore, levy bill) and output.

Table 3 – impact of the farm-level levy option per kg of output

Methane Price	Impact of levy per kg of output ($)			
	Sheep meat	Beef	Venison	Milk solids
Price A ($1.79/t$CO_2$-e)	$0.04	$0.07	$0.09	$0.03
Price B ($2.86/t$CO_2$-e)	$0.05	$0.09	$0.12	$0.04
Price C ($3.93/t$CO_2$-e)	$0.07	$0.12	$0.15	$0.05
Price D ($5.00/t$CO_2$-e)	$0.08	$0.14	$0.17	$0.06

** Results are based on the following emissions factors:*
Sheep meat – 12.87kg NH_4/kg, 1.33kg N_2O/kg
Beef – 20.30kg NH_4/kg, 3.27kg N_2O/kg
Venison – 27.06kg NH_4/kg, 3.64kg N_2O/kg
Milk solids – 8.04kg NH_4/kg, 1.76kg N_2O/kg

Section 3: Additional information

Additional information

- As stated in the Supplementary Analysis Report attached to the Cabinet paper, the key finding from the modelling was that all options can meet the 2030 biogenic methane emissions reduction targets except for the lowest methane price ($0.05/kg). We note that the He Waka Eke Noa Partnership, in their final recommendations report, indicated that that a farm-level levy with a methane price of $0.11/kg in 2025, rising to between $0.17/kg and $0.35/kg by 2030, should result in sufficient methane reductions to meet the 2030 biogenic methane target.
- The Manaaki Whenua Landcare Research modelling took account of the Emissions Trading Scheme driving afforestation, but did not incorporate the impact of other environmental policies (such as the Essential Freshwater reforms), which will also impact agricultural emissions.
- New Zealand also produces emissions projections as part of its reporting to the UNFCCC. These projections incorporate a range of policies that impact agricultural emissions, including the NZ ETS, the Essential Freshwater reforms, and the ETS backstop for agricultural emissions pricing. If the impact of the ETS backstop is excluded (so the projections are indicative of emissions in the absence of pricing), the latest published version of these projections (from December 2022) have agricultural methane falling by 6.2% in 2030 relative to 2017.
- Note that the baseline scenario used in the modelling is *no* pricing of agricultural emissions, which is projected out to 2030 as a business-as-usual scenario. This baseline is intended only to provide a consistent basis from which to assess the impacts of different options. The ‘true’ counterfactual is Option 1: Processor-level Pricing in the NZ ETS. This is the ‘backstop’ option that will come into effect if no other option is agreed. Note that implementing Option 1 would require further Government decisions about expenditure and development of regulations in order to operationalise.
- A key assumption is that the modelling represents well the changes that will unfold because of these policies. Also assumed are aspects such as on-farm compliance and implementation, farmer capability and willingness, that the policy is implemented well, and that the 5-year average of recent product prices represents average product prices in the study period. The modelling framework used assumes rational profit maximising behaviour and full information to make decisions. Input data from 23 sheep and beef farms and 24 dairy farms is assumed to represent these sectors in aggregate.
- The main drivers for gross agricultural emissions is feed intake which in turn is driven by the number of animals (cows, sheep, cattle etc), livestock weights, what they are fed, how they are managed, the use of fertilisers, and use of technology (e.g., inhibiters). The main driver of agricultural emission reduction

Additional information

is financial (e.g., price of levy), but also aspects such as other environment regulations, farmer capability and willingness, availability and uptake of technology.

- OECD analysis of emissions leakage from taxing agricultural emissions suggests emissions leakage rates can be expected to be higher when smaller groups of countries tax agricultural emissions and when mitigation is unavailable[2]. For example, over 80% of domestic emissions reductions are "leaked" to offshore competitors increasing their production and emissions in one scenario where Australia and NZ tax emissions at $100 USD per tonne CO2e and mitigation technology is unavailable. MPI is currently doing more detailed modelling internally linked to the policy scenarios described in Section 2 above.
- Further to the assumptions listed above, uncertainty exists around the certainty provided by the science. For example, the accuracy of estimating nitrous oxide emissions is low, the impact on farm of the use of inhibitors in real situations is not well confined, the barriers to land use change may not be well understood. For example, quality input data is needed to model well the emissions. The economic modelling aims to maximise profit, where there may be other drivers limiting or controlling on farm actions.
- Peer review of the modelling indicated a range of areas in which the modelling assumptions and inputs could be improved. These were addressed where possible in the timeframes, including nuancing the application of mitigations and technologies across different farm systems (e.g. beef-only vs sheep and beef) and adjusting elasticities around the choice that farmers have between shifting land-uses versus the update of mitigations.
- Calculations and results are made at a single time point (2030) and are relative to a single base year (2020). This means the modelling is limited in accounting for and providing insights on gradual step changes in inputs and outputs over short time periods. The NZFARM modelled used, however, is as sophisticated as available in New Zealand for modelling changes to farm systems in the future, and no model was available at the farm-scale that can provide a time series.

Section 4: Summary and quality assurance

Quality assurance

- The Climate Implications of Policy Assessment (CIPA) requirement applies to this proposal as it is expected to have a significant emissions impact.
- All three pricing options are expected to support agriculture to meet its relative portion of the 2030 biogenic methane emissions reduction target to reduce methane emissions by 10% below 2017 levels, at sufficient price levels. Only the CH_4 Price A is insufficient to meet the 2030 target alone, but nevertheless achieves significant reductions that could be supported by other policies and measures. This is largely due to the land-use change that occurs at even a

[2] https://www.oecd-ilibrary.org/docserver/fc304fad-en.pdf?expires=1660516464&id=id&accname=guest&checksum=05603E8528134D0AC7CBB9640BE25456

Quality assurance

moderate price on agricultural emissions in combination with existing incentives for forestry through the NZ ETS.

- The processor-level NZ ETS option is estimated to result in the highest level of emissions reductions of the options modelled, at the highest impacts and cost to the sector. The farm-levy levy option is expected to result in less emissions reductions but is estimated to also meet the biogenic methane target under every price scenario that was modelled, with less impact and cost to the sector.
- While the processor-level levy option is also expected to deliver significant emissions reductions, it is expected to fall slightly short of meeting the biogenic methane target when considered in isolation. However, in conjunction with other actions to reduce emissions from agriculture, it is likely that the biogenic methane target is met under this scenario.
- Modelling of different options and scenarios has indicated that the emissions price is a very strong driving factor of the level of emissions reductions that are likely to be achieved through pricing agriculture emissions, regardless of which option is implemented. The actual emissions reductions achieved will also be dependent on effective implementation of the chosen option and farmer decision-making.
- The CIPA team has reviewed the results and analysis at a high-level and considers them to be reasonable for providing indicative relative emissions impacts between the different options and scenarios modelled. Expected emissions impacts will continue to be assessed and disclosed where appropriate as proposals are advanced.

Te tātai utu o ngā tukunga ahuwhenua

Pricing agricultural emissions

Summary of submissions

Ministry for the Environment
Manatū Mō Te Taiao

Ministry for Primary Industries
Manatū Ahu Matua

Te Kāwanatanga o Aotearoa
New Zealand Government

Disclaimer

The information in this publication is, according to the Ministry for the Environment's best efforts, accurate at the time of publication. The Ministry will make every reasonable effort to keep it current and accurate. However, users of this publication are advised that:

- The information does not alter the laws of New Zealand, other official guidelines, or requirements.
- It does not constitute legal advice, and users should take specific advice from qualified professionals before taking any action based on information in this publication.
- The Ministry does not accept any responsibility or liability whatsoever whether in contract, tort, equity, or otherwise for any action taken as a result of reading, or reliance placed on this publication because of having read any part, or all, of the information in this publication or for any error, or inadequacy, deficiency, flaw in, or omission from the information in this publication.
- All references to websites, organisations or people not within the Ministry are for convenience only and should not be taken as endorsement of those websites or information contained in those websites nor of organisations or people referred to.

Acknowledgements

Significant sections of the analysis and summary text that underpins this summary of submissions was provided by Allen + Clarke.

This document may be cited as: Ministry for the Environment. 2023. *Pricing agricultural emissions: Summary of submissions*. Wellington: Ministry for the Environment.

Published in March 2023 by the
Ministry for the Environment
Manatū Mō Te Taiao
PO Box 10362, Wellington 6143, New Zealand

ISBN: 978-1-991077-36-3 (online)

Publication number: ME 1747

This document is available on the Ministry for the Environment website: environment.govt.nz.

Contents

Tables

Executive summary

To address the impact on the climate of Aotearoa New Zealand's agriculture sector – which makes up 50 per cent of our total greenhouse gas emissions – the Government joined with sector representatives and Māori to design an agricultural emissions pricing system, though a partnership entitled the He Waka Eke Noa – Primary Sector Climate Action Partnership (the Partnership).

From 11 October 2022 to 18 November 2022, the Ministry for the Environment (MfE) and Ministry for Primary Industries (MPI) held a public consultation on a range of options and system elements for pricing agricultural emissions; this built on the Partnership's recommendations to the Government, as set out in 'Te tātai utu o ngā tukunga ahuwhenua – Pricing agricultural emissions.'

This summary of submissions reflects the feedback on these proposals gathered from public meetings and in submissions to the Government. The points submitters raised will support Cabinet's decisions, in 2023, on the final, preferred pricing system option, and on the pathway to implementation by 2025. Any changes made to policy elements by Cabinet, based on the feedback received by submitters, will be captured in the Cabinet papers and minutes associated with this process.

Submissions received

MfE and MPI received 21,323 written submissions on the consultation document. Submissions were coded based on the themes and questions in the consultation document. Meeting notes from 28 consultation events held by MfE and MPI on the proposed pricing option – including a webinar specifically for hapori Māori – which were coded and analysed alongside written submissions.

Most of the coding and analysis of individual submissions was carried out by the independent consultants Allen + Clarke. This analysis informs the ongoing policy development and further detailed design work on the agricultural emissions pricing system.

Next steps

A section 215 report – released in December 2022 by the Minister of Climate Change and Minister of Agriculture (the Ministers) under section 215 of the Climate Change Response Act 2002 (CCRA) – further clarified and confirmed some aspects of the agricultural emissions pricing system. That report only reflects early analysis of feedback and submissions received, because analysis of all submissions had not been completed by the deadline for releasing the report. The Government's full response to the consultation, as well as final decisions on the agricultural emissions pricing system and its implementation, will be made by Cabinet over the course of 2023.

The section 215 report was made public in December 2022 and can be found on the Ministry's website, along with other documents relating to this policy and consultation process.

Individual submissions, where permission was given by submitters, as well as submissions made by organisations, will be made publicly available through Citizen Space on MfE's website later in 2023.

Major themes

Some common themes emerged when analysing the views of submitters. These are summarised below.

Submitters' views on the governance and implementation of the pricing system were polarised. Most sector submitters opposed the Government's modifications and argued for either returning to the Partnership's proposal or delaying/abandoning the implementation of any pricing system. Most Māori submitters considered the Government had not sufficiently engaged with Māori. Most non-sector submitters argued the pricing system was long overdue, and advocated for iwi and Māori playing a larger role in governing the pricing system.

Most submitters commented on the departure of the Government's proposal from the recommendations put forward by the Partnership. Ten members of the Partnership, through a joint submission, expressed concern that the Government's proposal had shifted the overall balance of the Partnership's original recommendations. The Partners argued that the Government proposal no longer provided assurance the sector would remain viable or achieve a 'just transition'. Other submitters, who referenced the Partnership's recommendations generally, advocated for either a complete adoption of the Partnership's recommendations or much a closer alignment to them.

Submitters were highly polarised on the proposed approach to setting levy rates. Sector submitters overwhelmingly opposed the proposed approach and argued that the Government should return to the Partnership's recommendations. Most non-sector submitters either supported the Government's proposal or argued that it did not go far enough and would function as a government subsidy to the agricultural sector. Most Māori submitters were concerned that the levy rates would disadvantage Māori landowners, as well as lower-socioeconomic and rural Māori communities. They stated that the proposed levy did not recognise the complex ownership models of Māori land, that it targets extensive sheep and beef farms, and that it would increase food prices.

Some non-sector submitters considered that the proposals were an inequitable subsidy for the agricultural sector**.** These submitters were concerned that neither proposal would provide a sufficiently strong signal to cause behaviour change and emissions reductions.

The Partners noted that, as the viability of some farms is tested, there will be a "strong existing pressure of current ETS forestry settings that incentivise blanket afforestation of productive farms with exotic and monoculture pine trees".[1] Most sector submitters shared a concern that pine trees could take over a sizeable proportion of Aotearoa New Zealand's productive farmland.

Most sector submitters expressed concern that the proposals would threaten the viability of rural communities. They noted that the levy would reduce the number of jobs in rural communities, causing farm workers to leave, in turn leading to the closure of schools and basic amenities, and then to further job losses. Submitters who commented on the impact on rural communities were very likely to express strong concerns about impacts on mental health.

Many Māori submitters considered that Māori would be disproportionately impacted because of the greater proportion of Māori landowners operating drystock farms with substantial areas of pre-1990 forest and/or undeveloped land. Māori submitters often shared the concerns of non-Māori submitters that the proposals could negatively impact rural communities and have

[1] EM0888

significant impacts on their people's mental health. One submitter noted that "Māori tāne already are disproportionately represented in these statistics".[2]

Most submitters opposed the Government's modifications to the Partnership's recommendations for recognising on-farm sequestration. They argued that it was inequitable for farmers to be charged for their emissions while the full range of sequestration on farm was not recognised. Most Māori submitters argued that recognising sequestration from only limited types of vegetation was inequitable and would unfairly disadvantage Māori; they urged the Government to reward early adopters and recognise their role as kaitiaki.

Most submitters supported a single, centralised emissions calculator. They considered this would ensure consistency and help minimise overall administration costs. Many Māori submitters were concerned that emissions calculations would not recognise the complex ownership models of whenua Māori or the collective use of land.

While the consultation document did not ask submitters to choose a preferred option, most submitters supported pricing synthetic nitrogen fertiliser emissions, but not putting a price on organic fertiliser emissions. However, there was not a clearly preferred option for the system through which synthetic nitrogen fertiliser emissions should be priced.

The response to adopting an interim processor-level levy as a transitional measure was mixed. Māori submitters opposed such a levy, noting that it would add cost and complexity, would be ineffective at reducing emissions and would pose a risk that "Māori will never get out of such a levy system"[3]. Sector submitters were also generally opposed to an interim processor-level levy, noting that such an approach would create uncertainty for farmers and would act as a "blunt tax on production"[4]. Those submitters supporting an interim processor-level levy generally noted that it was a relatively simple, straightforward approach and considered it was better to move forward with such an option rather than further delaying a price signal on agricultural emissions.

Views were also mixed on tradeable methane quotas. Supporters generally noted the advantages of managing emissions quantity, rather than prices, when seeking to achieve emissions reduction targets and considered this approach to have less risk of political interference. Sector submitters were generally opposed to the idea of tradeable methane quotas, expressing concerns about the complexity of such a scheme and inequal impacts within the farming sector (favouring larger farming operations rather than smaller, family-run farms). Several submitters expressed concern that a trading mechanism would create opportunities for manipulation by, or interference from, traders.

Most submitters argued that transitional support (such as education, guidance, mitigation technologies and a relief fund) would be necessary, especially for those in more vulnerable positions, including Māori, rural communities and those without access to mitigations.

---

2 Beef + Lamb New Zealand form submission [Wayne Jensen, received Thu 17/11/22 8.39pm]

3 SS1310

4 SS0873

Part one: Overview

Introduction

For a more in-depth summary of the context of this consultation, the policy development process it has supported, and decisions made before and after the consultation period, please refer to the consultation landing page, including the consultation document and post-consultation updates.

The impacts of climate change are being felt across Aotearoa New Zealand

Climate change is increasing the severity and frequency of hazards, like flooding, heatwaves, drought, and wildfire. We will also face new risks as a result of slow-onset, gradual changes, such as sea-level rise, ocean warming, more hot days, and more rainfall in some parts and less in others.

These effects will impact New Zealanders in different ways – and there is a risk that some groups, such as farmers, growers, Māori, and rural communities will face a higher risk of disruption.

Enabling a just transition to a low-emissions, climate-resilient future is a priority for the Government. The agricultural sector, which makes up half of Aotearoa New Zealand's emissions, is a crucial part of this transition.

The Government was required to report on an alternative agricultural pricing system by the end of 2022

In May 2022, the He Waka Eke Noa – Primary Sector Climate Action Partnership (the Partnership) recommended implementing a farm-level, split-gas levy as an alternative to the New Zealand Emissions Trading Scheme (NZ ETS). In the same month, the Climate Change Commission (the Commission) provided advice to the Government on the financial assistance that should be provided to farmers participating in a farm-level emissions pricing system.

Under the Climate Change Response Act 2002 (CCRA), a system for pricing agricultural emissions must be in place by 01 January 2025. By 31 December 2022, the Minister of Climate Change and Minister of Agriculture (the Ministers) were required to prepare and publish a 'section 215' report that outlines an alternative system to the NZ ETS.

Some further clarification and decisions were presented in this section 215 report, with final decisions on the agricultural emissions pricing system to be made by Cabinet over the course of 2023.

The Government consulted on a proposed system in October 2022

In October 2022, the Ministry for the Environment (MfE) and Ministry for Primary Industries (MPI) published the consultation document 'Te tātai utu o ngā tukunga ahuwhenua – Pricing agricultural emissions' (the consultation document). The consultation document detailed

options to price agricultural emissions, including a modified version of the Partnership's proposed split-gas, farm-level levy that the Government proposed to introduce in 2025.

MfE and MPI held a public consultation on the consultation document from 11 October 2022 to 18 November 2022. The people of Aotearoa were invited to submit views on the consultation document via email or using the public consultation website, Citizen Space. MfE and MPI also held 28 consultation events as part of the consultation. This included a webinar for hapori Māori, a workshop for NZ ETS participants, and three agriculture sector nationwide Q+A sessions. Combined, more than 600 people participated in these sessions.

A full list of questions included in the consultation document are attached as Appendix A.

This report summarises, in five parts, the submissions received during the public consultation

Part 1: Overview introduces the report and provides a high-level summary of all submissions. It also contains a section on key themes and messages across the entire consultation. Many of these themes were common in responses within specific sections, and in cross-cutting or high-level submissions.

Part 2: Proposed farm-level pricing system summarises the views related to the key components of the proposed agricultural emissions pricing framework, including:

- who would be required to report on and pay for their emissions
- the calculation methods and data required for estimating emissions
- reporting and payment periods
- the process of setting levy rates for biogenic methane and long-lived gases
- options for pricing emissions from synthetic nitrogen fertiliser
- recognition of sequestration from on-farm vegetation
- the governance and implementation of the system
- the proposed approach to audit, verification and compliance.

Part 3: Equity and impacts summarises views related to the impacts of the pricing system and how the impacts will be distributed among farmers, the agriculture sector and wider society.

Part 4: Revenue and transitional support summarises feedback on how revenue generated from the proposed farm-level levy should be used and the approach to supporting the agriculture sector's transition to emissions pricing and adoption of new mitigation technology.

Part 5: Alternative pricing options and other mechanisms summarises views on other pricing options outlined in the consultation document, how the proposed system fits with other Government work programmes, and the advice provided by the Partnership and the Commission.

How to read this report

This report refers to different types of submitters, who are defined the table below.

Table 1: Definitions of submitters

Terminology used	Definition
The Partners ***or*** **The Partnership**	Ten primary sector and Māori agribusiness partners submitted a joint submission on the Government proposals. These ten Partners were: • Apiculture New Zealand • Beef + Lamb New Zealand • DairyNZ • Dairy Companies Association of New Zealand • Deer Industry New Zealand • Federation of Māori Authorities • Foundation for Arable Research • Horticulture New Zealand • Irrigation New Zealand • Meat Industry Association. • Federated Farmers of New Zealand was not part of the joint submission.
Māori submitters	Submitters who self-identified as Māori or as submitting on behalf of a Māori organisation, including iwi, hapū and Māori agribusinesses Survey submitters were able to select if they were associated with iwi/hapū.
Sector submitters	Submitters who self-identified as being farmers, working within the agriculture sector, or being an industry body Survey submitters were able to select if they were associated with farmer/grower or agricultural processor/representative
Non-sector submitters	Submitters not within the agriculture sector, including members of the public and non-governmental organisations
All submitters	All submitters

Few/some/many/most/all has been used throughout this report to indicate the approximate quantity of submitters, including written submissions, who shared the same view or whose submissions were on the same theme. This approach is not intended as a precise, quantitative measure of number of submitters or workshop participants. The below guide was used to apply approximations.

Table 2: Guide for applying approximate quantities to submitters who shared the same view

Classification	Definition
Few	Fewer than 10% of submitters on this topic
Some	10 to 25% of submitters on this topic
Many	26 to 50% of submitters on this topic
Most	More than 50% of submitters on this topic
All	100% of submitters on this topic

Methodology

MfE collated the submissions received through Citizen Space (an online public engagement and survey platform) and its consultation inbox. Submissions on Citizen Space included information on region, sector association, social demographics, and organisation type. However, this data was not collected for other submissions. No data was collected on age or gender.

Submissions were reviewed to identify those that were unique and those that were form submissions (i.e. submissions that shared common text from another source, such as a template provided by an organisation to its members). Form submissions were further reviewed for unique content, which was extracted for analysis alongside other unique submissions.

Submissions were uploaded into NVivo 12 qualitative analysis software (NVivo) and coded against a framework based on the themes and questions in the consultation document. The uniform material in form submissions was coded once, while each unique comment was also coded. This was tested on a sample of submissions and further refined in an iterative process. Throughout the coding process, the database was checked against the coding framework to ensure the submissions had been coded accurately and consistently in order to highlight any issues in the coding framework that required adjustment. Specific reports by theme and question were exported from NVivo and used to inform this summary of submissions, including the unique content from form submissions.

Coding of submissions continued in parallel to the analysis. The content of this coding was checked for new information, to ensure the report was representative of all feedback. Any additional themes were then added to the summary of submissions.

A small number of submissions that were received in an incompatible format were cleaned prior to being uploaded to NVivo. Some were unable to be coded in the software, so were reviewed separately. A small number of submissions were withdrawn after the consultation closed and were excluded from this summary of submissions.

Who we heard from

MfE and MPI received 21,323 written submissions during the consultation on the consultation document, as well as direct feedback from attendees at 28 in-person or online meetings across the country. This included submissions from individuals, community groups, iwi/hapū, companies and sector organisations, local government, academics, and non-governmental organisations.

There were two types of written submissions: emails and survey responses. In addition, MfE and MPI recorded notes during consultation events, which were also coded for themes.

Table 3: Numbers of submissions received

Submission type	Number
• **Unique feedback** – **1,415 Citizen Space questionnaire responses** – **1,024 unique emails**	2,439
• **28 in-person or online meetings** (meeting notes were coded and analysed alongside online submissions)	28
• **Form submissions** – **11,909 Groundswell NZ emails** – **4,316 people signed Greenpeace's petition** – **2,324 Beef + Lamb New Zealand emails (1,050 included some unique content)** – **284 Federated Farmers of New Zealand** – **25 Federation of Māori Authorities emails** – **18 Rangitikei River Catchment Collective emails** – **14 emails using other form submissions**	18,884
Total feedback	21,351

Part two: Proposed farm-level pricing system

Calculating and reporting emissions

Sector submitters

The Partners argued that detailed emissions calculations were essential in order to accurately recognise emissions reductions. They wanted the Government to provide dates for when detailed calculations would be implemented. They considered the Government's proposal did not sufficiently integrate data or recognise the role of new technologies. They stated that the source code for the calculator should be published and readily available to farmers.

They supported a 'simple method' to calculate emissions, as part of the interim farm-level system they proposed.

Māori submitters

Many Māori submitters were concerned that emissions calculations would not recognise the complex ownership models of whenua Māori or the collective use of land. Many argued that responsibility for reporting emissions should sit with the landowner, not the business owner. They considered this crucial, in order to recognise leased Māori land. One submitter wrote:

> …the point of responsibility for reporting and paying for emissions, including receiving recognition of sequestration, as being held by the landowner – with the ability to delegate to the business owner. This is particularly important for Whenua Māori that is leased.[5]

Many Māori submitters argued that emissions calculations were inequitable, as they would not recognise early adopters of emissions reduction measures.

Some Māori submitters opposed the proposed approach to reporting emissions and argued for regional councils to play an increased role in emissions reporting. A form submission supported by a number of Māori agribusinesses stated:

> The proposed approach requires massive double handling of information by farmers. Information should primarily be collected and processed by regional councils already currently responsible for FEPs and nutrient loss limits. These councils are already collecting and using this information to achieve regulatory goals.[6]

Some argued for a by-Māori-for-Māori approach to emissions calculations. The Federation of Māori Authorities (FOMA) stated:

> …[the proposal] requires a specific Māori extension programme built on Māori cultural and environmental prerogatives to be delivered amongst Māori agribusiness networks in a way that informs, motivates and mobilises an effective Māori agri-business response.[7]

---

5 SS1310

6 Māori-owned farming entity form submission – EM0441

7 EM0365

All submitters

Most submitters supported a single, centralised emissions calculator. They considered that this would ensure consistency and help minimise overall administration costs. They noted that it was critical the calculator be transparent and as accurate as possible. Many submitters highlighted the need for the calculator to be integrated with already operating on-farm reporting systems. Some added that they were encouraged by the Government's acknowledgement that the process will be developed iteratively and cannot be entirely accurate from the beginning. One submitter wrote:

> We have to start with something somewhere. The centralised calculator allows continuous updating and including of new measures, prices and algorithms, without risking a multitude of potentially out-of-date software versions and incompatible calculators being out in the field. It's a very reasonable starting point.[8]

The New Zealand Bankers' Association noted:

> We support the suggestion that the data capture tool should be nimble and continually improved over time as additional data becomes available and competencies increase.[9]

Many submitters argued that emissions calculations must be straightforward and easy for farmers to use. They considered this a basic requirement for any pricing system, and that it would be crucial to creating and maintaining industry support for the system. One submitter wrote:

> The system is broadly reasonable but will rely on making sure that government calculators for emissions are easy to use and that there is support within the industry for their use. A farmer shouldn't need a consultant to tell them their emissions, but should be given tools they can use that is within their ability and knowledge.[10]

Many submitters argued that the emissions calculator had been overly simplified and would no longer recognise best-practice and emissions reductions on farm. They considered this a significant flaw, which would go against the intent of a farm-level pricing system. The Canterbury Regional Council wrote:

> We note that this will mean an initially limited scope to directly incentivise emissions reduction beyond simple reductions in stocking, production, and fertiliser rates. We emphasise the need for the scheme to enable detailed emissions calculation, which has a greater ability to recognise on-farm emissions mitigation, as soon as possible.[11]

A few submitters were concerned that the stock-unit thresholds being captured under the pricing system would create a perverse incentive for some farmers to split farms into smaller holdings, to avoid the system and paying any levies.

Submitters made a range of suggestions to improve emissions calculation and reporting, including that:

- collective emissions reporting should be available to everyone in the sector;
- Inland Revenue Department (IRD) information should feed into emissions calculations;
- regional councils should be provided with guidance on the pricing system, to enable staff on the ground to answer any general questions from farmers.

---

8 SS0245

9 EM0743

10 SS0113

11 SS0381

Setting levy prices

All submitters

Submitters were highly polarised on the proposed approach to setting levy rates. Sector submitters overwhelmingly opposed the proposed approach and argued that the Government should return to the Partners' proposal. Most non-sector submitters either supported the Government's proposal or argued that it did not go far enough and would function as a government subsidy to the agriculture sector. Most Māori submitters were concerned that the levy rates would disadvantage Māori landowners, as well as lower-socioeconomic and rural Māori communities.

Similarly, most sector submitters advocated for less frequent (three- or five-yearly) review of the levy rate, to provide more price certainty, while most non-sector submitters supported more frequent reviews.

Māori submitters

Most Māori submitters were concerned that the levy rates would disadvantage lower-socioeconomic and rural Māori communities by increasing the cost of food. Many Māori submitters argued that the levy price must consider a broad range of impacts and take a more holistic view of environmental, economic, social, and cultural considerations. The Awhina Group form submission stated:

> The Awhina Group considers that the pricing of methane must take into account more than the limits and targets for reductions and must include modelling of cost-of-living impacts to Hapori, rural communities, urban communities and the New Zealand economy (including analysis of differential socio-cultural economic factors).[12]

Most Māori submitters supported less frequent reviews of the levy rate and discussed how Māori farmers operate with an intergenerational view. One Māori agribusiness form submission argued that the Government should engage with the sector and Māori before setting the review period, stating:

> The decision on how often pricing will be updated should be subject to further discussions and analysis being undertaken by the primary sector participants and should include diverse Māori representation.[13]

Many Māori submitters argued for increased Māori representation in how the levy rate will be set. Most of these submitters argued that this should be achieved within an independent system oversight board, as proposed by the Partnership. One submitter wrote:

> An independent oversight board should be appointed and must include Māori representation that is not political … diverse Māori representation.[14]

---

12 Awhina Group form submission – EM0950

13 Whenua Māori form submission – EM 1186

14 Awhina Group form submission – EM 0950

Other Māori submitters advocated for an independent whenua Māori board to advise the Ministers when setting levy rates. FOMA wrote:

> We support the advice to the Minister being provided by the Climate Change Commission and also consider that the Independent Whenua Māori Board will also be able to provide advice to the Minister on this matter.[15]

FOMA also supported "a price ceiling where the overall cost would be no more than if agriculture entered the New Zealand Emissions Trading Scheme".[16]

Sector submitters

The Partners reiterated their support for an independent system oversight board, appointed by the Partners, to advise the Ministers on setting levy rates. The Partners opposed the Government's proposal for the Ministers to set levy rates based on the advice of the Climate Change Commission (the Commission). They wanted levy rates to balance the following factors, and for this to be embedded in legislation:

- trajectory of emissions reductions toward emissions targets;
- availability and cost of (current and future) on-farm mitigations;
- social, cultural, and economic impacts on farmers, regional communities, and Māori agribusiness;
- best available scientific, mātauranga Māori, and economic information;
- emissions leakage from production moving offshore;
- impact on food security (both domestically and internationally).

The Partners recommended fixing the levy rate for an initial five years and then shifting to more regular three-yearly reviews after the first five years.

Most sector submitters opposed the Government's modifications to setting levy rates and advocated for establishing either the independent system oversight board recommended by the Partnership, or a similar system, that would enable agricultural representatives to contribute to, or set, levy prices. Sector submitters were highly concerned about the cost of the pricing system and that argued any emissions pricing must not threaten the viability of the sector as a whole or parts of the sector. One submitter wrote:

> If a pricing mechanism is needed to achieve the 10% target by 2050, the rate should be set so it does not result in reductions in food production, does not have a negative impact on the economy and rural communities. It should support the uptake of new technologies for farmers to utilise and the tax should be kept at low level aimed [at] supporting investment in R&D.[17]

Most sector submitters advocated for a fixed price for the first five years, moving to a three-yearly review of the levy rates after that. They wanted consistent prices to enable farm planning, and flexibility within the pricing system to incorporate new technology, research and progress toward goals.

---

15 EM0365

16 EM0365

17 EM1024

Many sector submitters opposed the price being linked to the NZ ETS; they argued that this was inconsistent with the purpose of a split-gas approach and would fail to recognise progress toward emissions reduction targets.

Non-sector submitters

Most non-sector submitters supported the Commission playing a larger role in setting levy rates. They argued that, otherwise, the agriculture sector would interfere to keep prices as low as possible. These submitters were highly concerned about the rate of free allocation and annual rate of reduction. One submitter wrote:

> I oppose the 95% discount with 1% p.a. reduction on the ETS price. The discount is manifestly excessive and the 1% annual reduction is much too slow. While this level of discount may be necessary to assuage industry objection, I have not been persuaded that such a high level of discount provides for the public interest in emissions reduction. While I'd be more comfortable with 95% initial discount and 10% p.a. reduction (or 50% initial discount and 5% p.a. reduction), I'm not persuaded that anything more than a very temporary discount is warranted.[18]

Another submitter wrote:

> The 'polluter pays' principle should be applied fully … The government should also include environmental and civil society groups as partners in this process.[19]

Most non-sector submitters advocated for an annual review period, alongside reductions in the discount relative to the NZ ETS price.

Some non-sector submitters supported the Partnership's proposal and wanted levy prices to consider a greater range of factors. The Wairoa District Council (WDC) wrote:

> WDC is concerned with the proposed approach to price-setting. Price-setting should consider the availability and costs of mitigation options for sheep and beef farmers, and consider impacts on communities and the economy, as well as the environment. It should also consider factors such as the risk of emissions leakage overseas.[20]

A few non-sector submitters supported the Ministers consulting on aligning the levy discount phase out with the rate in the NZ ETS for all sectors of the economy. One of these submitters discussed implications from the 2022 United Nations Climate Change Conference (COP27) on the levy rate. Te Weu Tairāwhiti wrote that the "Government's response to COP27 … may mean higher levies are needed than envisioned in the discussion document".[21]

Pricing synthetic nitrogen fertiliser

The Partnership and the Commission proposed two different options for pricing synthetic nitrogen fertiliser (N-fertiliser) emissions. The consultation document sought feedback on both options.

---

18 SS0410

19 SS0638

20 EM0891

21 EM0803

Sector submitters

The Partners recommended pricing synthetic N-fertiliser at the farm level. They described farm-level pricing as the more effective option compared to the NZ ETS pricing option: "The inclusion of synthetic N-fertiliser within the farm-level pricing system would better support whole-of-farm GHG emissions reduction decision-making." The Partners argued that farm-level pricing would encourage and reward best-practice use. The Partners acknowledged:

> There are slight administrative cost and fairness benefits of an NZ ETS pricing system, these are considered of lesser importance.

Submissions from Horticulture New Zealand and DairyNZ reported results from surveying their own members.

> Over the past year, HortNZ has asked growers this question three times and received over 200 responses, in each survey there was a split view, with slightly more growers preferring Farm Level in all of the surveys. In this most recent survey 41% preferred Farm Level, 23% the ETS and 34% other.[22]

> DairyNZ supports synthetic N-fertiliser being priced at farm-level. In surveying our farmers, 94% supported N-fertiliser being priced at farm-level.[23]

All submitters

Many submitters acknowledged the impacts of synthetic fertiliser production and use, including greenhouse gas emissions, declining freshwater quality and degraded soil quality. Some submitters discussed the increasing use of fertiliser, generally, and the overuse of fertiliser by individual farmers. For example, a submitter who leased land to a farmer in Auckland reported:

> On our small farm that we lease out, lessees often smother crops with synthetic fertiliser and our soils are some of the most fertile in the world ... The stream near our property … is in the worst 25% of all sites assessed by Land, Air, Water Aotearoa in terms of Total Nitrogen, Total Oxidised Nitrogen, Dissolved Inorganic Nitrogen. A majority of the farms in the area are market gardens and synthetic fertiliser has been widely used by most farms in the area for decades. Something needs to be done to reduce runoff into our waterways and groundwater tables.[24]

Many submitters supported capturing synthetic fertiliser through the farm emissions calculator. They argued that it was crucial farmers had visibility over the entire emissions profile of their farms and were provided flexibility to manage farm emissions as a whole system. Some submitters considered that this would encourage on-farm innovation that could potentially be commercialised and exported overseas.

Submissions from the Fertiliser Association of New Zealand[25] and Ballance Agri-Nutrients Limited[26] noted that the use of N-fertiliser is relatively inelastic to price. They stated that a processor-level levy for synthetic fertiliser would have little direct impact on farmer behaviour, as the additional cost of a levy would be obscured by the price-fluctuations that are typical for the fertiliser market.

---

22 EM1021

23 EM0635

24 SS0177

25 EM1014

26 EM0951

Some submitters expressed concerns that this option could lead to perverse incentives, including:

- a fertiliser black market, if some farms (or other sectors) are excluded from the scheme;
- emissions leakage, due to farmers relying on imported feed to make up for reduced pasture growth.

Many submitters supported pricing fertiliser in the NZ ETS. They considered that this would capture more fertiliser emissions than the farm-level option. Submitters argued that this was more equitable across the general economy and within the agriculture sector, as it would capture farms that would be excluded under the farm-level option, such as horticulture and arable farms. Other submitters supported this option because it would involve lower implementation and administration costs.

Other submitters proposed alternatives to an emissions pricing mechanism, including:

- directly regulating the volume of fertiliser produced and imported;
- directly taxing fertiliser production/importation;
- implementing a cap-and-trade scheme (such as the Lake Taupō nitrogen cap-and-trade programme).

Recognising on-farm sequestration

Māori submitters

Most Māori submitters argued that recognising sequestration from only limited types of vegetation was inequitable and would unfairly disadvantage Māori. They urged the Government to reconsider the proposed approach to recognising sequestration and instead recognise sequestration from all the vegetation types identified in the Partnership's proposal, with particular emphasis on rewarding early adopters of emissions reduction measures. They considered this would be equitable. FOMA wrote:

> Unlike the introduction of the ETS when Māori were not granted Carbon Credits for pre-1990 ngahere, Māori expect to have our efforts as kaitiaki, who have sustained the ngahere on our lands to be reflected in any additional sequestration being granted to Māori. Almost 60% of Whenua Māori has trees, mature ngahere or regenerating. FOMA urge the government to adopt the additionality sequestration rate for managed pre-1990 ngahere of 1.83tC/ha/yr as proposed in the [Partnership's] proposal … Furthermore, sequestration must be available to landowners for Māori to avoid inequities. The option of only allowing the business owner (levy payer) to be recognised for sequestration will significantly disadvantage Māori and has potential to denigrate the mana of whenua Māori, which can be addressed by the mechanism of the Māori Collectives.[27]

Similarly, Ātihau-Whanganui Incorporation wrote:

> Ātihau supports recognised vegetation categories in the Partnership's proposal and considers that the Government should adopt these categories as part of the finalised scheme. This would assist in providing some recognition for the ecosystem services that Māori land contributes to Aotearoa through acting as a carbon sink.[28]

---

[27] EM0365

[28] EM0610

Some Māori submitters argued that failing to recognise indigenous vegetation on Māori land would be a violation of te Tiriti o Waitangi, with some adding that they would consider legal action against the Crown if the Government's proposal was implemented.

Sector submitters

The Partners supported a declaration-based approach to on-farm sequestration, including all categories of sequestration put forward by the Partnership's recommendations report. They wanted sequestration to be linked to the emissions calculator. They argued for: trust-based compliance, with random audits and penalties to deter false declarations; any terms and conditions to be commensurate with the reward received; and digital mapping to reduce administration costs.

They supported pre-1990 permanent vegetation and post-1989/post-2008 riparian vegetation being transitioned into the NZ ETS as soon as practical. The Partners also supported a co-investment approach for initial research on new categories of sequestration, to fast-track new categories into the NZ ETS and advocated for a nationwide sequestration strategy.

Most submitters opposed the Government's proposal for recognising on-farm sequestration. They argued that it was inequitable for farmers to be charged for their emissions while the full range of sequestration on farm was not recognised. They urged the Government to implement the Partnership's approach to recognising sequestration on farm. Federated Farmers of New Zealand, Beef + Lamb New Zealand and DairyNZ noted:

> All sequestration that can be measured and is additive should be counted. We stand by what was proposed by the He Waka Eke Noa partnership on sequestration.[29]

Many submitters noted that, cumulatively, riparian and other on-farm plantings were substantial and additionally offered significant biodiversity and environmental benefits.

Many submitters stated that the modifications would disincentivise planting native bush and continue the widespread conversion of farmland to monoculture exotics. These submitters wanted the pricing system to explicitly consider wider environmental goals. One submitter wrote:

> We think it is important that any recognition of sequestration is tied to other ecological impacts, such as the government's suggestion of overlap with biodiversity incentives. There is a need to ensure that this pricing mechanism, as well as the existing ETS system do not encourage permanent pine, or other exotic species being planted for the purpose of carbon farming.[30]

Pāmu, similarly, wrote:

> Whilst Pāmu recognise the complexity and cost of including a wider range of sequestration categories, there are benefits from their inclusion. Benefits include further incentivising farmers to take action toward meeting broader national environmental goals (such as Biodiversity, freshwater).[31]

---

29 EM0635

30 EM0600

31 EM1120

Some submitters were unsupportive of the Government's proposal to require sequestration to be additional, and therefore to not reward already planted vegetation. A few submitters supported recognition of all vegetation, regardless of when it had been planted. One submitter wrote:

> [The Partnership's] proposal that farmers be allowed to offset their GHG emissions with the native bush on their farms as long as stock was excluded looked to me like a good, easy way to do that. The revised recommendation that you can only claim additionality for your bush won't make it worth anyone's while to fence it off. At best, it will maintain the status quo, which is allowing the collapse of our native ecosystems. At worst, it will push farmers to clear their 'worthless' bush and replace it with nice profitable pine trees.[32]

Many submitters argued that the sequestration contracts were too complicated and costly. They described the Government's modifications as demonstrating a lack of trust in the sector. Some advocated for sequestration being included within the levy calculation and opposed a rebate system. The NZ Deer Farmers' Association (NZDFA) wrote:

> NZDFA further emphasises that sequestration payments are to be calculated and applied at the same time as emission levies, i.e. any sequestration payment is subtracted from the emissions levies at the farm gate. This is administratively efficient and is preferable to any later rebate system.[33]

Many submitters opposed stock exclusions within the contracts for recognising sequestration. They argued that fencing would be expensive and therefore exclude significant on-farm sequestration from being recognised. A joint Wairoa community submission stated:

> I do not agree with the proposals for on-farm vegetation to have stock excluded and being part of a contract-based system. This does not change the sequestration that is happening within the farm and would be a costly and complicated process. It is likely that the cost to exclude stock would outweigh any benefits.[34]

Some submitters argued that indigenous vegetation should be incentivised over exotic plantings. They considered that there was appetite within the sector to establish more native forest, but funding was a critical issue delaying action. Some submitters argued that excluding indigenous vegetation disadvantaged Māori. Te Weu Tairāwhiti wrote:

> These exclusions particularly affect Māori because of the marginal nature of much Māori land and because Māori pastoral farms contain proportionately higher scrub and regenerating bush than other farmland.[35]

Non-sector submitters

Some, mostly non-sector submitters, argued that farmers should be responsible for proving their vegetation meets requirements, and that the Government should not accommodate the sector over other sectors of the economy. Some of these submitters advocated for sequestration being handled within the NZ ETS. One submitter wrote:

---

32 SS0156

33 EM0750

34 EM0811

35 EM0803

> I think the sequestration is best handled within the ETS and the most appropriate way forward is to expand the range of eligible biological categories where meaningful sequestration occurs when measurement is sufficient to support NZU quantification.[36]

A few submitters were concerned that the contracts were short term. One submitter wrote:

> I do not support the proposal that after a sequestration contract ends, there should be no ongoing liability requiring the vegetation to be maintained as it was for the duration of the contract. I feel that this approach lacks sufficient longevity to ensure good biodiversity outcomes and provide consumer confidence in this scheme.[37]

Governance and implementation

All submitters

Submitters' views on the governance and implementation of the pricing system were polarised. Most sector submitters opposed the Government's modifications and argued for either returning to the Partnership's proposal or delaying/abandoning the implementation of any pricing system. Most Māori submitters considered that the Government had not sufficiently engaged with Māori. Most non-sector submitters argued that the pricing system was long overdue and advocated for iwi and Māori playing a larger role in governing the pricing system.

Māori submitters

Most Māori submitters stated that the Government had insufficiently engaged with iwi and Māori during the consultation period and urged the Government to postpone implementing any pricing proposal until genuine engagement with Māori was carried out. Some submitters added that this engagement with Māori would need to be properly resourced to enable participation.

Most Māori submitters advocated for increased Māori representation within the governance of the pricing scheme and, more broadly, in all significant policy matters. They argued that the Government must engage with iwi and Māori as Treaty partners, not as stakeholders. Waikato-Tainui noted:

> Iwi must be actively and meaningfully involved for the co-design of any policies, particularly those that have an effect on the management of our environment. Failing to do so is a breach of the Te Tiriti Partnership generally, and of the Waikato-Tainui Settlements more specifically.[38]

---

36 SS409

37 EM1192

38 EM Waikato Tainui

Te Rūnanga o Ngāi Tahu stated:

> Te Rūnanga would expect that iwi and Māori will be involved in the further design and implementation of the system, as Treaty partners rather than as stakeholders.
>
> The Cabinet Office's Te Tiriti o Waitangi / Treaty of Waitangi Guidance (CO(19)5)2) sets out key questions for policy-makers to consider, and specifically asks policy-makers to consider how Māori can be included in design/implementation.[39]

Most Māori submitters argued that the Government and the consultation document did not sufficiently address or understand how the proposal would disadvantage Māori. Some of these submitters advocated for urgent modelling to better understand these potential impacts. Ngāti Hauā Iwi Trust wrote:

> It is unacceptable to us that the Consultation Document states the proposed system is likely to disadvantage Māori land owners but provides no adequate solutions.[40]

Many Māori submitters noted that FOMA do not represent them or all Māori. They argued that it was crucial the Government engages more broadly.

Many Māori submitters argued that the proposal did not incorporate a te ao Māori view or allow for cultural considerations to be included within the overall system. FOMA supported a pricing system that recognises a te ao Māori view of te taiao, as the entire, interdependent environmental system that sustains life.

Sector submitters

The Partners opposed the Government's proposal, which they considered to have inappropriately shifted the overall balance of the pricing system. They argued that the proposal threatened the viability of the agriculture sector and failed to provide for a 'just transition' to a low-emissions economy. In some areas, the Partners urged the Government to adopt the Partnership's proposal, while, in other areas, they recommended additional action.

Most sector submitters opposed the Government's modifications to the proposal. They described the proposal as being fundamentally different to what the Partnership proposed. Federated Farmers of New Zealand argued that the Government's proposal was a rejection of the Partnership's recommendations report. Many submitters argued that the Government's modifications undermined the intention of the Partnership's proposal to create behaviour change and enable technical advances.

Most sector submitters argued that the Government should prioritise developing a complete scheme that is workable for farmers and that the Government should hold itself accountable for delivering the scheme on time. They argued that implementing a temporary pricing system would create uncertainty and distrust within the sector.

A few submitters argued for more direct involvement from farmers, rather than industry representative groups.

---

[39] EM Te Rūnanga o Ngāi Tahu

[40] EM0745

Non-sector submitters

Most non-sector submitters opposed the independent system oversight board proposed by the Partnership. They supported the Commission's role in the pricing system or advocated for the Commission to play a more significant role. One submitter wrote that "the 'system oversight body' is not a concept I trust. It is leaving the fox in charge of the henhouse".[41]

Many non-sector submitters argued for iwi and Māori to play a larger role in the governance and implementation of the pricing system. They stated that this was required for the Government to meet its te Tiriti obligations. Some described the need for Māori to be given the same space as industry. Some non-sector submitters opposed the Partnership process and the Government's proposal. Greenpeace wrote:

> Permitting New Zealand's most polluting industry to write its own emissions management plan as has occurred with He Waka Eke Noa and the "Government's" emissions pricing scheme is unacceptable special treatment … It is important that a transition to sustainable and low emissions agriculture is co-designed with Māori and contributes to overcoming, rather than entrenching, past injustices.[42]

Another submitter wrote: 'frankly, we should be giving Māori are [sic] far greater say in this process as they have traditionally farmed in sustainable ways that are better than current practices'.[43]

Te Weu Tairāwhiti argued that further analysis and engagement was needed on the following issues:

- governance – the appropriate structure, representative composition, and process for appointing the independent whenua Māori board; and
- grassroots engagement and feedback – mechanisms to ensure the independent whenua Māori board has access to feedback from landowners and affected communities (not just FOMA and iwi); and how these same groups can be supported in devising and sharing Māori-led solutions around transitioning to low-emissions land use that still contribute to people's wellbeing and honour Māori values.[44]

Audit, verification, and compliance

All submitters

As mentioned under the recognising on-farm sequestration section of this report, the Partners supported trust-based compliance, which uses random audits and penalties to deter false declarations.

The Partners highlighted that compliance costs from the pricing system would increase the overall compliance burden on farmers.

Most submitters advocated for a simple audit, verification, and compliance system for farmers. They wanted the system to be easy to use and, for auditing process, to reflect the size of the

41 SS0084

42 EM0378

43 SS0266

44 EM0803

farming operation. Some submitters wanted the verification process to recognise and become easier for farms that reduce their emissions. One submitter wrote:

> Ensure that those farmers and growers who are making changes and really trying to reduce their emissions are rewarded for their hard work and effort. Reduce their auditing cycle to every 3–5 years. Those farmers who are continually non-compliant and make little effort to reduce emissions and make changes should be audited every 12 months.[45]

Most submitters argued for minimising the costs of the system and streamlining whole-of-farm compliance requirements. They argued that this was essential to the pricing system achieving its goals. Some advocated for integrating audit and verification process with existing farm-management and reporting systems, such as Overseer. FOMA wrote:

> Administration costs of the system should be minimised to maximise the investment back to landowners and to R&D to achieve the emission reductions necessary as quickly as possible. This requires looking at all existing systems and processes to avoid duplication.[46]

In addition, Pāmu urged the Government to consider acceptable standards, whereby farmers could become pre-verified. Pāmu wrote:

> Pāmu supports the reference to using existing audit programs and encourages the Government to consider creating a list of standards that would be accepted under the Proposal, to enable further administrative efficiency for farmers. For example, the Toitū 'carbon reduce farm certification' is a robust standard that provides a third party verification of, and incorporates all, the data currently required under this Proposal. In situations where a farmer already has recognised third party verification the data provided under the Proposal should be accepted as 'pre verified' and need no further auditing.[47]

Some submitters, mostly non-sector submitters, argued for more resources to be allocated to independent auditors to carry out their functions and for increased compliance requirements for farmers. One submitter wrote:

> Mak[e] the auditing more frequent and widespread; I recognise it has been stated "Given the large number of participants (around 23,000), they cannot all be audited in detail" however I think this needs to be re-examined.[48]

Some submitters requested more information on what the auditing and verification processes would look like for them. Chartered Accountants Australia and New Zealand wrote:

> Further information is needed regarding the verification processes, including who would be responsible for assessing payment system use and conducting on-farm visits and the associated costs.[49]

---

45 SS0496

46 EM0365

47 EM1120

48 SS0667

49 SS0964

Part three: Equity and impacts

Economy and trade

Sector submitters

The Partners considered that:

> By removing key aspects of the interconnected recommendations, the government proposals do not adequately balance and manage the tensions that exist in a 'whole of sector approach' to emissions pricing and, therefore, present strong risks to the viability of the sector.

They also noted that:

> Government modelling shows that a large share of sheep and beef land will switch toward scrub (500,000-1m ha) but does not differentiate between profitability and productivity reductions resulting from whole-farm losses from the sector and reductions occurring on those farms remaining in the sector. This means we are unable to ascertain the impacts at farm scale and compare the results to the He Waka Eke Noa modelling.

And:

> The modelling does not consider flow-on effects of land-use change on rural communities that could result in further land-use change. For example, several farm sales to forestry in a community could mean the closure of rural schools and small businesses. This, in turn, could cause other farmers to sell up and leave the area/sector.

The Partners were concerned that various modelling (by the Partnership, with Government input and peer review, alongside further modelling by Beef + Lamb New Zealand and case studies by Deer Industry New Zealand) showed that a price on emissions would unduly impact profit and production, which the Partners considered to be unacceptable. The Partners noted that the levy was most likely to risk the viability of drystock farming and that the modelling:

> …indicate[s] that the impact of this would be a larger number of farms – mainly sheep, beef, and deer farmers although potentially also in the dairy sector if market returns reduce and margins lessen or mitigation technologies are delayed – becoming unviable due to emissions pricing.

The Partners noted that, as the viability of these farms is tested, there will be a "strong existing pressure of current ETS forestry settings that incentivise blanket afforestation of productive farms with exotic and monoculture pine trees".

Most sector submitters were concerned that the proposals would negatively impact their profitability and production. They often raised it as an equity issue. Most sheep and beef farmers were concerned that the proposals would provide the dairy sector with preferential treatment. One submitter summarised the sheep and beef industry's restricted options for emissions reductions in comparison with the dairy industry as follows:

> There needs to be more fairness provided to the Sheep & Beef industry in this matter. Dairy farms handle their cows each day making it more feasible for them to provide feed additives and also with the larger component they utilize of synthetic nitrogen allowing for nitrogen inhibitors. This leaves the Sheep & Beef industry purely reliant on uptake of low emitting livestock.[50]

Most sector submitters shared the Partners' concern that pine trees could take over a sizeable proportion of Aotearoa New Zealand's productive farmland.

Some sector submitters were concerned that plantation forest would come to dominate Aotearoa New Zealand's landscape to such an extent that it would negatively impact tourism, with one submitter stating that "New Zealand's sheep and beef farms are what makes our country beautiful".[51]

Non-sector submitters

Many non-sector submitters raised concerns that the levy would effectively be a subsidy for the agriculture sector:

> Failure to properly price agricultural emissions amounts to a massive subsidy, worth over $3 billion a year at current carbon prices. This subsidy is paid by all of us, since the cost of meeting carbon emissions budgets through the Emissions Trading Scheme (ETS) is paid through the price of fuel and other products. Consumers in Aotearoa are effectively subsidising our largest export industry.[52]

Of these submitters, many questioned the levy providing an equivalent 95 per cent free allocation of units in the NZ ETS – both in terms of its effectiveness in driving behaviour change and providing fair treatment when compared with other sectors:

> Other high emissions industries that are exposed to global trade are also effectively subsidised with free ETS unit allocations of up to 90%, reducing by 1% each year. In contrast, government proposals would subsidise the cost of agricultural emissions by at least 95%.
>
> There is no justification for subsidising agriculture, largely for export, at a higher rate than other industries. Rather than subsidising pollution, our government should be actively leading all industries, including agriculture, through a just transition to a renewable and low emissions economy.
>
> Agriculture should pay the full price of their climate pollution (as should all industries).[53]

A few non-sector submitters considered that farmers will need to respond to changes in future market demands alongside emissions pricing mechanisms and other climate change policies. These submitters noted the shifting market/consumer demands for plant-based food and that major food producing companies are investing in plant-based protein products.

---

50 SS0154

51 EM1164

52 SS0316

53 SS0316

Emissions leakage

All submitters

Most submitters were concerned about the proposals causing emissions leakage:

> New Zealand is the first country looking to put a price on agricultural emissions despite being world leaders in emissions-efficient meat and dairy production. The Proposal acknowledges that emission leakage from New Zealand's drystock and dairy sectors will have a negative international impact on global warming. The Government needs to consider this in a global sense and acknowledge that putting New Zealand's agricultural sector at risk makes no sense from an environmental, economic, or social perspective.[54]

A number of submitters questioned the use of certain data and models by the Government in the assessment of emissions leakage. The Government have heard this concern, especially in the context of fear about lost production; however, the data and models used in this process are internationally reputable and peer reviewed, while also taking into account Aotearoa New Zealand's unique production.

As 'net global increase' was referenced by many submitters, it is also worth noting that, although the consultation document does demonstrate that emissions leakage may occur, the overall impact on global emissions is a net reduction, not a net increase.

Impact on rural communities

Sector submitters

The Partners noted that the impact of the levy would not be felt evenly across the sector, due to differences in farm profitability, but that the decisions taken by each farm "aggregate up to community impacts":

> We know there is a very wide distribution of farm profitability even within sub-sectors. We also know their access to mitigation technologies and sequestration is not uniform across the sector. This means any transitional support/relief must be appropriately targeted.
>
> Individual farming decisions aggregate up to community impacts. There could be a risk of avoidable severe impacts on rural communities in the short term while work takes places to commercialise effective mitigation technologies.

The Partners also raised concerns about the impact of the levy on mental health in rural communities:

> GHG pricing is being imposed on top of mounting costs of compliance for land users. Costs associated with compliance with freshwater rules and constraints caused by emerging biodiversity regulation risk exacerbating financial stresses and mental health challenges in rural communities.

Most sector submitters expressed concern that the proposals would adversely affect or threaten the viability of rural communities. These submissions often noted that the levy would reduce the number of jobs in rural communities, causing farm workers to leave, which, in turn, would lead to the closure of schools and basic amenities, and then to further job losses.

---

[54] Beef + Lamb New Zealand form submission [Mel Moore, received Thu 17/11/22 at 9.01am]

A sector submitter noted that some young farmers are considering leaving the industry:

> I talk to farmers all over the country and I'm very worried that some of the top performers, and importantly, young farmers who have high debt (but a valuable asset) are seriously considering exiting the industry and investing elsewhere. Our best farmers are also very good businesspeople, but you can only push them so far until they decide an industry is not worth being part of.
>
> We risk a net reduction in farm performance, export earnings and quality of management (including environmental outcomes) because the people left behind are there as a result of inertia and many of the best people have exited the industry, including offshore.[55]

Like the Partners, many sector submitters were concerned about the impact of the proposals on the mental health of rural people. These submitters often noted that rural communities are already disproportionately affected by depression and suicide. A rural mental-health professional commented:

> In Aotearoa, rural people already suffer from much higher rates of depression and suicide than the general population. The suicide rate is around 2.2 rural people against the general population. Rural people suffer from a lack of support services, and access to community initiatives that support mental health in urban populations. In recent years, societal changes such as increases in costs, new and more agricultural requirements, and the perception from urban people that farmers are rich, greedy or anti-environment, have created a perfect storm that has been detrimental to the mental health of rural people.[56]

Impact on Māori

Sector submitters

The Partners recommended that price setting be managed to mitigate and avoid the impact and inequities faced by whenua Māori:

> Price setting must be designed to incentivise changes required to achieve lower emissions while limiting unintended detrimental consequences at a sector- and sub-sector level. The criteria must consider, support and resource Māori agribusiness to lead and manage their own transition and adaptation, and give recognition to Whenua Māori that may be constrained by regulations, policies or legal structures. This approach to price setting will highlight, recognise and seek to mitigate and avoid the impact and inequities faced by Whenua Māori, and must include recognition of additional sequestration on Whenua Māori.

Māori submitters

Most Māori submitters raised concerns that the proposals were not equitable for Māori. Many Māori submitters noted that Māori land's complex ownership structures must be considered in the development of policies relating to climate change and emissions pricing. A form submission supported by a number of Māori agribusinesses noted:

> Māori freehold land is not akin to General Title freehold land – it holds a collective interest across multiple owners, over multiple generations. The operational drivers for whenua Māori are specifically for the health, wellbeing, and development of the land and its

[55] SS0246

[56] SS0242

> people. It ought not to be treated as if it were General Title freehold land. Rather the unique and particular contribution whenua Māori makes to the community, the environment, and the challenges of New Zealand society should be fully recognised.

Many Māori submitters noted that Māori would be disproportionately impacted because of the greater proportion of Māori landowners operating drystock farms with substantial areas of 'unrecognised native forest' and/or undeveloped land.

Many Māori submitters noted that these issues were discussed in the consultation document without providing potential remedies:

> But it isn't equitable and you say it yourself – "An emissions-pricing system is likely to disproportionately disadvantage Māori land owners, with flow-on effects for Māori more broadly".[57]

The Ngāti Hauā Iwi Trust stated that:

> We do not believe the proposed system for pricing agriculture is equitable. It is unacceptable to us that the Consultation Document states the proposed system is likely to disadvantage Māori land owners but provides no adequate solutions. Ngāti Hauā sees that the proposed approach is inequitable and will exacerbate the current inequities faced by Māori in and outside the agricultural sector.[58]

Some Māori submitters noted that the proposals could negatively impact rural communities and have significant impacts on their people's mental health. One submitter noted that "Māori tāne already are disproportionately represented in these statistics".[59]

A few Māori submitters raised concerns that the proposals could devalue assets received as Treaty settlements. Some Māori submitters were also concerned about the role that councils could have in restricting land use decisions. This included the Office of the Māori Climate Commissioner, which noted:

> We are not prepared to countenance a system that would allow Pakeha councils to dictate to Māori landowners what we do with our land and prevent us from fighting climate change. We will not go begging to Councils to plead for what is already our right.
>
> We did not cede control over our lands in Te Tiriti o Waitangi and there is no legal or moral justification for Councils to decide if we plant forests on it or not. We utterly reject any changes that would give Councils more power to deny us mana over our whenua.
>
> How did you officials come to the conclusion that Councils deciding what we do with our land could be an option? Why is the only option provided in this consultation is that planting choice is put in the hands of Councils, dominated by Pakeha farmers?[60]

---

57 SS0150

58 EM0745

59 Beef + Lamb New Zealand form submission [Wayne Jensen, received Thu 17/11/22 8.39pm]

60 Office of the Māori Climate Commissioner

Most Māori submitters considered ongoing engagement and partnership between the Crown and tangata whenua to be essential:

> The Government must undertake deep and genuine engagement with tangata whenua regarding potential impacts on Māori interests of agricultural emissions pricing. This includes consultation on design of specific elements, such as a cap and trade market mechanism for methane. The Crown must honour Te Tiriti o Waitangi throughout both development and implementation.[61]

All submitters

Some submitters suggested further support that could be made available to Māori landowners:

> Māori landowners could be further supported with extension that is tailored to their culture and history and land ownership complexity.
>
> Māori landowners who may have a net credit emission levy due to large areas of carbon sequestration, should be funded outside of the farmer levies and consideration given to a higher sequestration rate. This would further support the large area of land Māori have that is undeveloped due to historic grievances and inequity.[62]

Some non-Māori sector submitters wanted all sector members to have access to the same type of collective emissions reporting that would be available to Māori agribusiness:

> We believe that all farmers and growers should be able to report and pay for emissions collectively. The government's proposal limits the ability to streamline farm businesses with respect to emissions reductions and pricing. We want to see an implementation pathway for all farmers being able to enter a collective over time.[63]

Food supply

Sector submitters

Most sector submitters considered that the proposals demonstrated a lack of recognition for the agriculture sector's contribution to the food supply of both Aotearoa New Zealand and the world, and that the levy could threaten food production. Sheep and beef submitters sometimes noted that the levy was estimated to decrease food production in the red-meat sector by significant amounts.

Non-sector submitters

Conversely, a few non-sector submitters rejected concerns about the levy's impact on food supply. One submitter questioned the value of Aotearoa New Zealand's dairy products:

> We claim to feed the world, or at least a fair chunk of it. … While diversity across our horticultural sectors is dangerously low. New Zealanders pay immense prises for food that we grow here and bare [sic] the brunt of environmental consequences for the production of said food.[64]

---

61 SS1247

62 SS0715

63 SS0907

64 SS0086

Other submitters noted that "higher prices for milk and meat products will lead to a tendency toward more plant based diets or plant protein alternatives in the diet"[65] and Carbon Critical commented that:

> If the scheme is well executed then the mid-to long-term impact will be: the meat and dairy industry will mostly die out. These products will mostly become luxuries that only the rich can afford to eat occasionally. Everyone else will need to get their protein from other sources.[66]

Climate and environment

Sector submitters

Most sector submitters raised concerns about the negative environmental impacts of additional pine forests being planted due to the proposals. Common environmental concerns about pine forests were:

- proliferation of wilding pines;
- fires;
- increase in pest animals (e.g. deer, pigs, goats);
- increase in weeds (e.g. gorse, pampas, blackberry);
- reduced water quality.

Some sector submitters raised concerns that the cost of the levy would reduce the amount they could spend on things that result in good environmental outcomes:

> Two years ago I entered the Balance [sic] farm environment awards and was judged good enough to go through to the Otago final. I have a very strong sense of stewardship for the land, and I am investing heavily in getting good environmental outcomes for my property. A tax on emissions will draw money away from the work I am doing.[67]

Non-sector submitters

Some non-sector submitters considered that the proposals could have a range of environmental co-benefits, including increased water quality and biodiversity.

However, other non-sector submitters considered that the proposals would be too weak to result in any significant climate or environmental benefits.

---

65 SS0496

66 SS0490

67 EM0097

Equity

Sector submitters

Many sector submitters argued that it was inequitable for Aotearoa New Zealand to take action while other countries with much larger emissions profiles either seemingly took little action or were actively increasing their emissions.

Non-sector submitters

However, some non-sector submitters disagreed with this perspective and considered that Aotearoa New Zealand must play its part and/or rectify its high per-capita emissions profile:

> Often it is stated that NZ has no effect on the world climate, and that the problem is in China or somewhere else. China can be divided up into small areas, or suburbs or streets and each one of these will have insignificant effect on the world climate or anything else. Our contribution per capita is high and we need to face this, rather than blaming someone else … So like everyone else in NZ, the farmers must join in the effort.[68]

A few submitters noted that they considered it equitable for developed countries such as Aotearoa New Zealand to start taking action now and invest more in emissions reductions:

> I do think its equitable in the sense that the industrialised world needs to start taking action to address climate change – we have had our fair share of environmental destruction in the name of economic growth, and it's time that the real cost of environmental impact is factored into our economy.[69]

Some of these submitters considered that investment was a key aspect of helping less developed countries to achieve a just and sustainable transition:

> They say that developing nations unhindered by current regulations will "take up the slack" with higher polluting herds. The Brooking Institute writes, that starting from a very low base the "least developed countries need a just sustainable transition." Wealthy governments and other donors need to invest more to reduce agriculture's carbon emissions.[70]

Intergenerational equity

Some submitters also remarked on the need for equity considerations to include consideration of future generations:

> I just want to give support to any changes which assist in making this country livable for my grandchildren. The matter as I see it is urgent. The government needs to have the backbone to implement measures which will enable sustainable food production and measures should not just hurt farmers but impact on all of us.[71]

Some iwi/Māori submitters raised concerns about intergenerational equity, often noting that changes in land use to forestry would only provide income to one generation and leave future generations with deforestation emissions liabilities in the event that they decided to change

---

68 SS1042

69 SS0261

70 SS0489

71 SS0075

the land use again. There was concern that this would effectively lock significant amounts of land into forestry. These submitters often recommended that policy should take an intergenerational approach that incorporated a "te ao Māori view of Te Taiao (the entire interdependent system of the environment that sustains life)".[72]

Equity with other sectors

Some non-sector submitters stressed the importance of achieving equity across all sectors of the economy. A few of these submitters considered that politics and lobby groups were preventing this:

> Any scheme purporting to be sustainable must be: Equitable between all sectors and intergenerationally. It seems to me that this equity is lacking or is politically difficult (powerful lobbyists).[73]

And:

> As a small business owner outside agriculture and heavy polluting industries, I expect to pay all the costs of doing business. These include paying my staff fairly, paying suppliers fairly, and either not polluting the commons or paying for this to be cleaned up. I am incensed that heavy polluting industries including agriculture are being given a free pass, and that the rest of us in New Zealand are having to do and pay extra in order to meet our obligations under COP22.[74]

And:

> The system sets different rates and incentives for only agriculture. Industrial producers have to pay under the ETS and largely only have a financial argument to limit emissions. Farmers are getting a much better turn of things with entire advisory board and consultation just for them. They were able to have much more say in a system through He Waka Eke Noa. So whilst i can see that the system does support the agriculture sector fairly it is not equitable for all New Zealand or with other sectors as farmers are still incentivised over secondary or tertiary production with respect.[75]

Some non-sector submitters considered the proposals were too beneficial to the agriculture sector:

> Farmers are being subsidized for their delaying tactics. They should join everyone else in eliminating emissions.[76]

And:

> I think farmers are still getting off lightly and the levy money is getting cycled into their own remediations.[77]

Some sector submitters considered the proposals to be inequitable due to a lack of recognition for those who have already done work to effect good climate and environmental outcomes:

---

72 EM0365

73 Beef +Lamb New Zealand form submission [Philip Lissaman, received Fri 18/11/22 at 11.28pm]

74 SS0780

75 SS0113

76 SS0385

77 SS0438

> I generally agree that many in the agriculture sector could do more to reduce emissions, what I am disappointed in is that those of us who have understood this for some time and have been adapting our farming systems are not being recognised.[78]

Other equity comments

Some submitters raised concerns about the impact of the proposals on people on lower incomes who are most affected by cost-of-living increases. A sector submitter commented that the proposal would not be "equitable for lower income New Zealanders who would bear the additional cost impact".[79]

A few submitters considered the proposals to be equitable:

> I think it is fair and equitable because it allows for partnership and consultation, it provides incentives as well as levies (carrots and sticks), it recognises the differences within the agricultural sector, e.g. Māori ownership, sheep and beef and dairy. It also allows for readjustment when necessary and future research and development.[80]

[78] SS0234

[79] Beef + Lamb New Zealand form submission [Philip Lissaman, received Fri 18/11/22 at 11.28pm]

[80] SS0110

Part four: Revenue and transitional support

Transitional support

All submitters

Submitters generally agreed that easy-to-access and equitable transitional support for farmers should be made available. They highlighted that education, guidance, and funding would be required as part of this package**.** They recommended that it be provided to those who need more assistance such as:

- farmers with a low level of technology uptake;
- farmers without access to mitigations or sequestration;
- those who will be disproportionately impacted (such as rural communities, farmers in the sheep, deer, and beef sector, and Māori).

Māori submitters

Many Māori bodies were concerned about the lack of Māori representation in the pricing proposal. They considered that there must be deep and genuine engagement with tāngata whenua about how pricing agricultural emissions might impact Māori interests. They suggested that different solutions, timeframes, transition arrangements and tangible support might be required to enable the exercise of rangatiratanga, kaitiakitanga, and manaakitanga by Māori landowners. For instance, a reduced levy for Māori, delaying implementation by 10 years or having a permanent exemption. They also suggested that there should be a co-designed transitional support arrangement, that Māori should be partnered with in the design and implementation of the system, and that further attention should be paid to the economic and social impacts on the pricing system for Māori. This is referenced in the governance and implementation section. A form submission supported by a number of Māori agribusinesses stated:

> The proposed pricing options do not provide specific mitigation practices, tools and technologies that respond to a whole-of-whenua approach (kotahitanga) toward land development (mana tangata), and environmental sustainability (kaitiakitanga). The proposed pricing options do not uphold the He Waka Eke Noa agreement with Māori.[81]

Sector submitters

The Partners highlighted that transitional support must be targeted toward making mitigation technologies and sequestration accessible across the whole sector, so that there is a uniform approach.

The Partners wanted to ensure that any levy relief is targeted at those farms that need support to transition to lower-emissions farming and remain viable. Therefore, the transitional levy relief must be appropriately targeted to farms that meet agreed criteria and not be a shelter

[81] EM0498

for farms that are unprofitable or unsustainable. They recommended that a farm should be eligible if it fits into one of the following criteria:

- access to sequestration (both NZ ETS and the Partnership's recommended system) is severely restricted by national and local-body regulation;
- there is no access to, or ability to implement, effective mitigation technologies; or
- where emissions pricing is having a severe impact on the viability of otherwise viable farming operations.

The Partners acknowledged that further exploration is needed into a mechanism that identifies groups of farms that meet the agreed criteria or and have similar characteristics.

Many sector submitters sought clarity on the Government's definition of 'transition'. They were also concerned about the current lack of mitigations and a lack of research and development focus on mitigations, and that the proposed support and reward systems would mean early adopters' past efforts will go unnoticed. Meanwhile, other sector submitters were hesitant, as they stated that monetary incentives will not be enough to deliver sufficient emissions reductions.

Some sector submitters recommended that farmers should be transitioned toward regenerative farming and provided with the right education, upskilling, easy-to-understand guidance, and technology that enables them to do so. They proposed recognising farmers who already have implemented good practice and providing the resources for them to upskill other farmers. Furthermore, some noted the need to balance transitional support with a 'just transition' approach, like that which the Ministry of Business, Innovation and Employment has implemented in Taranaki. Some industry bodies described implementation as daunting for farmers. They argued that farmers must know what the reporting measures will be in advance and should be provided mental-health support.

Revenue recycling

All submitters

Most submitters echoed the Partners' sentiment that levies should remain within the sector, as this will support farmers to implement new sustainable and regenerative practices. There was consensus that any revenue recycling should not create administrative burden for farmers. Submitters had varying views on whether monetary aid should be apportioned for Māori or not.

Māori submitters

Many Māori submitters advocated that a portion of the revenue should be ringfenced to help Māori transition and should be administered by Māori, for Māori. Some specified that there should be an incentive payment, as this provides greater simplicity and certainty for how and when incentive payments will be received. These payments would be designed to help Māori to change farming practices and enable farmers to adopt new technologies. One Māori submitter wrote:

> Māori landowners, due to the unique characteristics of their land, will suffer from levies or, when leasing, suffer from higher compliance costs for already economically volatile assets. We also see the disincentivising of Māori developing and farming their lands; this will worsen the gap between Māori and Pākehā farmers and landowners as well as Māori and their whenua.[82]

Sector submitters

The Partners advocated for all revenue to be recycled back into the primary sector, to contribute to administrative costs as well as research and development. They argued that this would support further emissions reductions and lower-emissions food and fibre production. They recommended establishing a "System Oversight Board" that would include expertise from, and representatives of, the primary sector, alongside an "Independent Māori Board" to set the strategy for use of levy revenue.

Most submitters argued that any revenue should be reinvested into sector-specific research and development, with a particular focus on technology, satellite imagery to help inform the agricultural emissions calculation, education, and other mechanisms that enable regenerative farming practices. A sector submitter stated:

> Revenue recycling is important as much of the technology for reducing on-farm emissions does not currently exist and requires funding. Availability of funding through revenue recycling would help further drive investment in associated research and development within the sector.[83]

Most submitters also advocated for the funding of easy-to-implement mitigation strategies and technologies that are tailored to all farms, especially sheep and beef farms, through a levy. Another sector submitter considered:

> Farmers should be able to form collectives to measure, manage, and report their emissions in an efficient way. Government should enable the use of collectives for all farmers to help deliver on the Government's emissions reduction plan for the agriculture sector.[84]

Some submitters argued that any revenue recycling should not collect a surplus and that the process could easily be politicised, leading to negative impacts on the sector. Many were also concerned that the proposal would place an excessive administrative burden on farmers. Many advocated that revenue be recycled to create a collective body that alleviates administrative burden and cost.

Incentivising on-farm emissions reductions

All submitters

Submitters had mixed views on how to incentivise on-farm emissions reductions. Some submitters argued that it would be too costly, complex, and inefficient to pay incentives as rebates. They proposed that the focus should be on enabling farmers to uptake new technologies on farm or drive best-practice farming. Other submitters noted that this is an opportunity to incentivise rather than penalise.

---

82 EM0745

83 EM0951

84 EM0635

Māori submitters

Māori submitters suggested a review of the NZ ETS forestry settings as part of Aotearoa New Zealand's sequestration strategy. They also suggested that the sequestration strategy should focus on the following:

- nature-based solutions that are mindful of the broader context of environmental policy, such as linking freshwater and indigenous-biodiversity policy, as well as of the broader implications of carbon sequestration;
- sustainable land use;
- resilient and thriving rural communities;
- maintaining and growing food and fibre exports;
- current barriers and incentives for integrated land management;
- exploring the risks, interconnections, and opportunities between sequestration within the pricing system (farm-level offsetting), the NZ ETS (general offsetting) and the voluntary carbon market (general offsetting and insetting).

In addition to this, some Māori submitters also advocate for a mātauranga Māori-based approach. They specified:

> The centre for climate solutions must embed within its decision-making framework a Mātauranga Māori, indigenous view from the start – not to be used as an overlay … Our tupuna were bastions of sustainable methods, and we can be too – it is important that the Government recognises this, our mātauranga, and our mana to do so, working with us to create a system that works.[85]

Sector submitters

The Partners advocated for a mechanism that incentivises actions, such as practices and technologies, that reduce emissions. They proposed that the incentive be a direct discount to the levy bill, rather than a separate rebate system. The Partners also recommended that the independent system oversight board work closely with the Independent whenua Māori board and sector bodies to provide advice to Ministers on the quantum of incentive discounts used to incentivise the adoption of mitigation technologies.

Most sector submitters suggested that any calculations need to be accurate prior to implementation. They also recommended that guidance in the regulatory framework should indicate that, from 2025, the level of incentive payments will be pegged to a reducing portion of annual, gross levy payments, with the intention of phasing them out by a specified date.

Some suggested that dairy, beef, and sheep farmers be given different incentives that are tailored to their particular situations: for instance, a higher levy for those emitting more than average would incentivise reductions[86]. Few submitters recommended using Beef + Lamb New Zealand's farm-class system to calculate average-kilograms-per-hectare of methane. A sector submitter wrote:

---

[85] EM0745

[86] This was considered as part of the 'price exposure' work carried out within the Partnership; it was not progressed due to equity issues that it created.

> The incentive discount should be associated with the cost of implementing the approved action and the emissions reductions associated to promote uptake of emission reduction activities. Alliance does not support the use of incentive payments to drive land-use change. Incentive payments should be focused on enabling farmers to uptake new technologies on-farm to decrease on-farm emissions while maintaining productivity.[87]

Non-sector submitters

Similarly to Māori submitters, many non-sector submitters advocated for nature-based solutions. This included credit against an emissions levy for certain activities: for example, stock exclusion, pest control, native vegetation enhancement/establishment, wetland restoration, soil conservation planting, retirement of 'sensitive' land areas, and minimum tillage. They recommended that any incentives be ongoing, cover additional costs, and aid farmers to transition from running ruminant livestock toward growing plants.

Some non-sector submitters suggested that already disadvantaged communities who are disproportionately impacted by pricing agricultural emissions – such as especially remote communities in the Chatham Islands – be exempt from the pricing system. Few recommended a systems-thinking approach and others warned that incentive payments will only be sustainable if they are not funded from levies on other farmers within the system.

Shortfall

All submitters

Views were split on whether or not the agriculture sector should pay for any monetary shortfall if the price of emissions is too low. There was a consensus that a levy should not be used to fund any shortfall, as this would reduce the amount of funding available for emissions reduction programmes, leaving the sector worse off in the long term. One submitter explained:

> The aim is to reduce emissions not penalise the sector. A positive approach needs to be taken that is focused on equity and collective action.[88]

Sector and Māori submitters

Many organisations – including Fonterra, Awhina Group, Ātihau-Whanganui Incorporation, Westpac, Proprietors of Pokapu Incorporation and Wi Pere Trust – asserted that there should be no shortfall if the levy is calculated and designed accurately, though these submissions did not take into account the uncertainty of predicting the impacts of a price. Some of these submitters also asserted that farmers will be hit harder by climate change, so any shortfall will further penalise the sector, rather than incentivise innovation and regenerative thinking. A Māori representative group explained:

> If there are shortfalls in its emissions reductions then the design of the system is inadequate, and changes are required. Such changes should be made prior to the implementation of a charging system being put in place.[89]

---

87 EM0987

88 SS0653

89 EM0610

Some sector and Māori submitters argued that further work is needed to explain the definition of 'shortfall' and that equity, especially to vulnerable communities and groups, should be considered in this definition. They advised that any shortfall should not be paid out from the levy revenue. They also specified that any shortfall should only be paid by the sector if it is the direct fault of the sector, rather than the fault of the administrative body.

They noted that prior to any shortfall responsibility allocation, the targets set must be achievable, reasonable and realistic. Sector and Māori submitters also recommended that any requirement for the sector to fund any shortfall be equivalent to the mitigation technologies available as well as sequestration taken into account. They advocated for a 'tools before rules' approach, which requires that mitigation tools be implemented ahead of rules that penalise farmers. Due to the current lack of viable mitigation tools, any shortfall of emissions pricing should not be implemented prior to 2030. A few sector submitters reasoned:

> It is unclear exactly how a shortfall is being defined in the consultation document, however deploying levy funding to purchase international mitigations to meet New Zealand's NDC would not help deliver emissions reductions in the agriculture sector and would therefore undermine the principle of the levy. This would also exacerbate carbon leakage and worsen the issue globally.[90]

Some sector and Māori submitters argued that the burden of paying for any shortfall in emissions reduction should be distributed equally across all sectors that pollute, including, but not limited to, the agriculture sector.

Non-sector submitters

Many non-sector submitters agreed that the agriculture sector should make up any shortfall of emissions pricing; this would help hold the sector to account and add another incentive for genuine emissions reduction. Some also recommended that, should the sector cover any shortfall, there should be transparency over how much is covered by taxpayers and how much of any shortfall will be subsidised by the agriculture sector.

[90] EM0614

Part five: Alternative pricing options and other mechanisms

Interim processor-level levy

Māori submitters

Most Māori submitters did not support an interim processor-level levy. Concerns were raised that this approach would add cost and complexity, and be an inefficient use of resources at both government and farm level. Māori submitters also commented that a processor-level levy would provide no incentive to reduce emissions, due to the use of an industry-level emissions intensity factor. For example, Te Rūnanga o Ngāi Tahu stated:

> Having a scheme in place is good, but it needs to reward positive initiatives at farm rather than industry level. The processor-level hybrid will not motivate, nor drive substantial emissions behaviour change in the near term and marginalises the industry.[91]

Concerns were also expressed that an interim approach may mean that "Māori will never get out of such a levy system"[92] and that there would be "endless criteria required to be met"[93]. Rather, Māori submitters stated it would be best to delay implementation, or have a staged approach if the preferred system is not ready.

Sector submitters

The Partners did not support an interim processor-level levy, arguing that the development of an interim system could detract from the development of the long-term, farm-level system, and alienate the farming community (which the Partners noted had previously indicated overwhelming opposition to such an approach). They also stated that processor-level pricing, without farm-level incentives, would be largely ineffective at reducing emissions, and consequently, the likelihood of meeting emissions reduction targets would be reduced. The Partners, instead, suggested starting with a simplified farm-level levy, with pricing of emissions from June 2025, and transitioning to a full farm-level levy in 2027. The Partners set out further details on the key features of their proposed transitional levy in their submission.

Sector submitters were generally opposed to an interim processor-level levy, noting that such an approach would create significant uncertainty for farmers, would act as a "blunt tax on production"[94], and would be inequitable, due to placing the payment burden on only the farmers that slaughter stock. For example, one submitter noted:

> This backstop creates significant uncertainty for farmers about what kind of system is being established … Farmers should not have to start with one system and then have to pick up another one a few years later, this will create a process that is confusing and costly.[95]

---

91 EM Te Rūnanga o Ngāi Tahu

92 SS1310

93 SS1310

94 SS0873

95 SS0728

All submitters

Other submitters noted that greater long-term certainty was needed to encourage the necessary investment in technology and innovation. Ballance Agri-Nutrients Limited submitted:

> Innovation will play a key part in facilitating emissions reductions. Longer-term certainty of policy and pricing are vital in order to encourage investment in new and emerging technologies. From our experience in innovation development, it can take 5 to 10 years to get a new product or technology from concept to market ready. Indications of changing policy landscape, such as an interim levy, will most likely quash investment appetite for companies and investors.[96]

Many submitters who were opposed to the interim processor-level levy suggested that the Government should instead focus on the development of a farm-level system and extend the timeframes for implementation if such a system was not ready by 2025. There was an emphasis by some submitters on the Government being accountable for implementing its proposed approach according to the timeframes the Government set for doing so.

Those submitters supporting an interim processor-level levy generally noted that it was better to move forward with this approach rather than further delaying a price signal on agricultural emissions. One submitter stated:

> We cannot wait forever for perfection. We need to start implementing emission reductions or it will be too late for humankind.[97]

Supporters also noted that the interim processor-level levy was relatively straightforward and implementable, given that agricultural processors already record and report annual emission information to the Environmental Protection Agency.

Some submitters suggested potential modifications or alternatives to the proposed interim processor-level levy, including:

- providing a clear timeline regarding when the system will transition to farm-level pricing;
- backdating credit for carbon sequestration if such a system is not implemented by 2025;
- using a simple processor-level levy only for the purpose of collecting funds for research and development;
- allowing farmers that do not have access to mitigations or sequestration to apply for transitional levy relief;
- pricing fertiliser emissions only until a farm-level system is up and running;
- Inland Revenue Department calculating emissions based on monthly stock reconciliation accounts.

[96] EM0951

[97] SS0899

Tradeable methane quotas

All submitters

There was a balance of support and opposition for the concept of tradeable methane quotas (TMQs). Supporters of this approach generally noted the advantages of managing emissions quantity rather than prices, and considered the approach to have less risk of political interference. For example, the Organics Association of New Zealand (drawing on messaging developed by the Green Party) noted:

> OANZ supports working toward a system to manage the total volume of methane rather than the price. This is to guarantee cuts to gross emissions and a fair pricing mechanism. This would be achieved by the Government committing to implementing tradeable methane quotas with a sinking cap by 2026. Under this scheme, the cap would be linked to the targets in the ZeroCarbon [sic] Act, and the price of emissions would be set by the market for a fair scheme free from political interference.[98]

The McGuinness Institute submitted:

> The benefits of tradeable methane quotas are that they are volume rather than price-based, more easily aligned with domestic emission reduction targets and more responsive than a levy; the price is set by the market and avoids the need for price setting, which could be subject to political influence (which is proving to be very contentious). The Institute believes that for these reasons, this is the fairest option for all.[99]

Some submitters advocated for a more rapid transition to TMQs:

> This is about urgency, and I believe that TMQs would achieve a more certain reduction in Methane within the very constrained time that we have available. In this case, urgency trumps complexity. We just have to do it.[100]

Sector submitters

Sector submitters were generally opposed to the idea of TMQs. They expressed concerns about the complexity of such a scheme and inequal impacts within the farming sector. One submitter stated:

> No we don't want tradable methane quotas. This option really impacts large vs small scale and is also unfair within the sector eg sheep & beef vs dairy (in terms of pricing impact on profit). Requires an extra area of expertise in manner of trading for the farm, or the inclusion of extra rural professionals at the time and monetary expense of the farmer. Large scale farmers will have the ability to encompass these costs more than the small family run farms.[101]

Similarly, another sector submitter stated:

> A cap-and-trade pricing framework is untenable across the many types of farm systems and will lead to very distortive outcomes. It will be administratively cumbersome with high costs. It will favour intensive farming and corporate farming who have greater wherewithal to participate in the trade. This option should be ruled out.[102]

---

98 SS1251

99 EM0730

100 SS1392

101 SS1005

102 EM1020

A number of submitters also expressed concern that a methane trading mechanism would create opportunities for manipulation or interference from traders.

Some submitters suggested alternatives or improvements to TMQs, including:

- sub-sector quota allocations to help resolve some (but not all) of the intra-sector inequities;
- using a market maker to ensure sufficient liquidity for the efficient operation of a secondary market;
- using 'permanent methane offsets', whereby farmers would be allocated a right to emit a fixed amount of methane in perpetuity (similar to a fishing quota). This property right would then be tradeable between farmers, with the government able to buy and 'extinguish' quotas from the market to reduce emissions in line with emissions reduction targets;
- simply using the existing quota system – the NZ ETS – to regulate methane emissions.

He Waka Eke Noa pricing system

Sector submitters

The Partners commented extensively on the Government proposal's departure from the Partnership's recommendations. At a high level, the Partners stated:

> Government proposals for agricultural emissions pricing as they stand are not acceptable to He Waka Eke Noa primary sector and Māori agribusiness Partners (the Partners), nor the farmers and growers they represent. The He Waka Eke Noa proposed system, recommended by Partners in May this year, was carefully constructed. It included balancing elements that in combination created an innovative approach to emissions pricing that would reduce emissions while maintaining a viable and productive primary sector and protecting New Zealand's export revenue. The government proposals have shifted the overall balance and as a result do not offer any assurance that the pricing system will not threaten the viability of the New Zealand agriculture sector and provide for a 'just transition' to a low-emissions economy.

The Partners set out in detail their concerns with, and recommendations concerning, key elements of the Government's proposal. The following is a high-level summary of the Partners' position on each of these elements.

- **Price settings, governance, and transitional arrangements** – Price setting should involve consideration of a broad range of specified factors. Levy rates should be set by the Ministers with advice from an independent system oversight board, an independent whenua Māori board, and the Commission. Levy rates should be set at the level required to incentivise emissions reductions, while maintaining the viability of the primary sector (with a five-year cap). A transitional levy relief system should be adopted. There should be annual monitoring of emissions at a sub-sector level. Incentive payments should be discounted off the levy bill. An urgent review of NZ ETS forestry settings should be undertaken.
- **Price of nitrous oxide** – Price should not be linked to the NZ ETS, but should be fixed until 2030 at a level sufficient to cover sequestration, incentive discounts, research and development, and administration costs, with a price ceiling applied.

- **Sequestration** – A declaration-based approach linked to the emissions payment system (calculator) should be used for sequestration, using the same categories that were put forward in the Partnership's recommendations report, from 2025.
- **Nitrous oxide slope** – Slope should be included in the methodology for calculating nitrous oxide emissions.
- **Point of obligation for synthetic nitrogen fertiliser emissions** – Synthetic nitrogen fertiliser should be priced at the farm level.
- **Organic fertiliser** – External applications of organic nitrogen fertiliser and lime should continue to be excluded from the farm-level pricing system.
- **Collectives** – All farmers and growers should be able to be part of a collective to report and pay for their emissions.
- **Interim processor-level levy** – A simplified farm-level system, delayed if necessary, would provide greater benefits and opportunities than starting with a processor-level system.
- **Revenue recycling** – All levies should be invested back into the primary sector for research and development to support further emissions reductions and to cover appropriate administration costs.
- **Establishment and operation cost recovery** – Administration costs should be split between the government and farmers and growers.
- **Government-led modelling on sectoral impacts and emissions leakage** – The Government's modelling of impacts and emissions leakage has significant anomalies that make it very difficult to understand the impact of the Government proposals.

The consultation process also received alternative system proposals from other groups within the sector, such as the submission from "He Waka Adrift" (a group of individuals associated with the agriculture sector who do not agree with their representatives' engagement with the Government on the Partnership).

All submitters

Many other submitters referenced the Partnership's proposal, with most of those who did advocating for either a complete adoption of the proposal or much closer alignment of the Government proposal to that of the Partnership. Submitters referred to the significant effort and cooperation that had been put into the development of the Partnership's proposal and the 'balance' inherent in that package. DairyNZ submitted:

> Overall, the Government's proposal has failed to understand key elements of the [Partnership] recommendations, and how they work together to drive change without widespread detrimental impacts to farming. DairyNZ strongly recommends the Government set aside its proposal and fully adopt the [Partnership] recommendations. The industry took almost three years to devise and think about how all the elements work together and how the industry could drive meaningful change. The current Government proposal creates imbalance, uses price to drive change and will have severe impacts on the most GHG efficient producers of dairy in the world.[103]

[103] EM0635

Ballance Agri-Nutrients Limited submitted:

> Ballance supports the He Waka Eke Noa recommendations. These recommendations have been developed by a wide range of agricultural specialists who have in-depth knowledge of the sector, the practical challenges of implementing policy and regulation within the sector and understanding of policy impacts as well as any potential unintended consequences. We strongly recommend that government continues to work closely with the Agricultural Sector to develop a practicable and efficient solution.[104]

Some submitters considered that the Partnership's proposal would result in fairer treatment as between different farm types. One submitter commented:

> The Partnership's model recognised much more of the difference between farms. Govt's proposal has simplified things far too much. Farms that are very different will be treated as exactly the same. So it looks just like another tax.[105]

A few submitters objected to the Government's characterisation of its proposal as a modified version of the split-gas tax proposed by the Partnership, describing the Government's proposal as inconsistent with the Partnership's proposal.

A few submitters supported the Government's changes to the Partnership's proposal. One submitter stated:

> I agree with everything MfE is proposing. They have taken into account the feedback from He Waka Eke Noa, and the only things that have been changed are things that I consider to be incredibly reasonable (e.g. to increase transparency/accountability).[106]

Some submitters raised concerns about the mandate held by the Partnership, citing the group's limited engagement with farmers and the fact that those farmers consulted did not have access to sufficient information to adequately engage.

Policy interactions

Māori submitters

Most Māori submitters urged the Government to take a more holistic approach to addressing emissions and the environment more broadly. They argued that any pricing system should consider other policy aspirations, as well as be integrated with existing biodiversity and environmental reporting methods.

Many Māori submitters highlighted that existing climate change policies were developed based on a Western world view and suggested embedding a Māori view within decision making frameworks. Ngāti Hauā Iwi Trust wrote:

> Our tupuna were bastions of sustainable methods, and we can be too – it is important that the Government recognises this, our mātauranga, and our mana to do so, working with us to create a system that works.

---

[104] EM0951

[105] CN0009

[106] SS1173

Sector submitters

The Partners' joint submission included 10 recommendations, including an Aotearoa New Zealand sequestration strategy with a focus on:

- sustainable land use ("right-activity right-place");
- resilient and thriving rural communities;
- maintaining and growing food and fibre exports;
- nature-based solutions (linking freshwater and indigenous biodiversity policy);
- current barriers and incentives for integrated land management;
- exploring the risks, interconnections, and opportunities between sequestration within the pricing system (farm-level offsetting), the NZ ETS (general offsetting) and the voluntary carbon market (general offsetting and insetting).

Farmers said the quantity and pace of recent consultations on proposed agriculture policies was overwhelming and causing confusion, particularly around the NZ ETS, Three Waters, resource management system reforms, the National Policy Statement for Freshwater Management 2020 and the farm-level pricing system. One submitter expressed concern that this would lead to "death by a thousand cuts" for farmers and rural communities.

Industry bodies and farmers suggested a holistic approach to policy decisions regarding land, water, biodiversity and climate change. The NZ Deer Farmers' Association suggested a system that recognised the holistic nature of farming, "where emissions are managed alongside freshwater quality, indigenous biodiversity, animal health and welfare, social wellbeing and profitable food production. In other words, the holistic nature of farming".

All submitters

Many submitters felt that they did not have enough time to understand how the proposals in the consultation document fit with existing policies. They felt that policies were too often developed in isolation, leading to unintended impacts. For example, the Hawke's Bay Regional Council (HBRC) raised concerns about the impact of the proposed pricing system on land-use change:

> HBRC is concerned that the introduction of the package of policies proposed to reduce agriculture greenhouses gases is not aligned to this new approach to resource management planning and, along with ETS settings for forestry, risks accelerating large scale land-use change before community-led planning has been given an opportunity to be undertaken. This is a disconnect in the Government's proposed approach on agriculture GHGs, which fails to leverage the Government's own resource management reforms currently underway.

Other submitters suggested implementing policies to incentivise farmers to transition from running livestock to horticulture. Submitters that supported the proposed pricing system commonly suggested removing goods and services tax on fruit and vegetables, and one submitter suggested incentivising "precision fermentation of protein, oils and other foods".

A range of submitters opposed policies that incentivised conversion of productive land into forestry. The Timaru District Council expressed concern about the impact of afforestation of productive farms with a monoculture of pine trees:

> …it poses a significant risk to our national biodiversity and, in the long run, is economically detrimental. In regard to biodiversity, conifers (such as pines) acidify the soil, take a significant amount of water from the soil to the detriment of other species, and, if not properly maintained, create a large fire risk. Economically, conifer forestry reduces local employment as it requires far less intensive labour and only creates a one-off economic benefit when harvested.

Submitters made a range of suggestions for complementary policies, including:

- retiring land to widen rivers and create wetlands;
- aligning policy implementation with the development of regional spatial strategies;
- entering free trade agreements for meat and milk exports;
- banning imports of ruminant feeds;
- charging a landfill tax to reduce waste;
- protecting local industries from unfair competition through a carbon levy on imports of products that are subject to the pricing scheme;
- eliminating pests to protect riparian and indigenous forests and encourage biodiversity.

Appendix A: Consultation questions

As part of the consultation document, the Ministry for the Environment and the Ministry for Primary Industries asked the following questions:

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

2. Are tradable methane quotas an option the Government should consider further in the future? Why?

3. Which option do you prefer for pricing agriculture emissions by 2025 and why?:
   - a farm-level levy system including fertiliser; or
   - a farm-level levy system and fertiliser in the NZ ETS; or
   - processor level NZ ETS.

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

5. Do you support the proposed approach to setting levy prices? Why, and what improvements should be considered?

6. Do you support the proposed approach to revenue recycling? Why, and what improvements should be considered?

7. Do you support the proposed approach for incentive payments to encourage additional emissions reductions? Why, and what improvements should be considered?

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

9. Do you support the introduction of an interim processor level levy in 2025 if the farm level system is not ready? If not, what alternative would you propose to ensure agricultural pricing starts in 2025?

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

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

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

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

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

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

Appendix B: Closed-answer questions

This section provides the numbers of respondents and percentages for responses to the closed-answer questions in the online survey.

Question 1: Do you think modifications are required to the proposed farm-level levy system to ensure it delivers sufficient reductions in gross emissions from the agriculture sector?		
Yes	863	61%
No	171	12%
Not answered	381	27%

Question 2: Are tradeable methane quotas an option the Government should consider further in the future?		
Yes	399	28%
No	655	46%
Not answered	361	26%

Question 3: Which option do you prefer for pricing agricultural emissions by 2025?		
A farm-level levy system including fertiliser	478	34%
A farm-level levy system and fertiliser in the New Zealand Emissions Trading Scheme (NZ ETS)	316	22%
A processor-level NZ ETS	108	8%
Not answered	513	36%

Question 4: Do you support the proposed approach for reporting of emissions?		
Yes	397	28%
No	548	39%
Not answered	470	33%

Question 5: Do you support the proposed approach to setting levy prices?		
Yes	219	15%
No	755	53%
Not answered	441	31%

Question 6: Do you support the proposed approach to revenue recycling?		
Yes	487	34%
No	466	33%
Not answered	462	33%

Question 7: Do you support the proposed approach for incentive payments to encourage additional emissions reductions?		
Yes	449	32%
No	504	36%
Not answered	462	33%

Question 8: Do you support the proposed approach for recognising carbon sequestration from riparian plantings and management of indigenous vegetation, both in the short and long term?		
Yes, support short term	48	3%
Yes, support long term	75	5%
Yes, support both	468	33%
No, none of the above	456	32%
Not answered	368	26%

Question 9: Do you support the introduction of an interim processor-level levy in 2025 if the farm-level system is not ready?		
Yes	336	34%
No	680	48%
Not answered	499	28%

Question 10: Do you think the proposed system for pricing agricultural emissions is equitable, both within the agriculture sector and across other sectors, and across Aotearoa New Zealand generally?		
Within the agriculture sector	80	6%
Across other sectors	36	3%
Across New Zealand generally	144	10%
None of the above	737	52%
Not answered	468	26%

Question 11: In principle, do you think the agricultural sector should pay for any shortfall in its emissions reductions?		
Yes	340	24%
No	609	43%
Not answered	466	33%

Question 14: Do you support the proposed approach for verification, compliance and enforcement?		
Yes	302	21%
No	502	35%
Not answered	611	43%

Appendix Seven. Implementation agency functions

Some components of functions within the system will be assigned amongst the implementation agencies (MPI, MfE, and IR) as appropriate. That is:

1. MPI and MfE are jointly responsible for:
    1.1. governance and system stewardship;
    1.2. system policy settings;
    1.3. emissions calculation methodology; and,
    1.4. system reporting and publishing.
2. MPI is responsible for:
    2.1. administration of the operational functions of the system;
    2.2. implementing and then managing the emissions and levy calculation service, and support administrative ICT system capabilities;
    2.3. supporting participant emissions calculation;
    2.4. administration of revenue recycling funding;
    2.5. operational policy settings; and
    2.6. extension and education services.
3. MPI and IR will be jointly responsible for:
    3.1. participant registration and relationship management respectively for the emissions calculation and levy payment systems;
    3.2. data interoperability for levy assessment, payment invoicing; and
    3.3. compliance, monitoring and enforcement, including auditing functions.
4. IR would be responsible for:
    4.1. the levy payment assessment and collection functions; and
    4.2. collect penalties identified by MPI enforcement processes.