

In-Confidence

Office of the Minister of Climate Change
Office of the Minister of Agriculture

Cabinet Economic Development Committee

Consultation on Government's proposed pricing system for agricultural emissions

Proposal

- 1 This paper seeks Cabinet's agreement to publicly consult on a system to price agricultural emissions by 2025, as an alternative to the New Zealand Emissions Trading Scheme (NZ ETS).

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].
- 3 Reductions in agricultural emissions are required to slow the rate at which Aotearoa New Zealand contributes to climate change. The amount that agricultural emissions need to reduce by is expressed via:
 - 3.1 Aotearoa New Zealand's Nationally Determined Contributions (NDC) set under the Paris Agreement¹;
 - 3.2 the domestic emission reduction targets laid out in the Climate Change Response Act 2002 (CCRA)²; and
 - 3.3 the agricultural sub-budgets set in the domestic emissions budgets recently agreed by Cabinet [CAB-22-MIN-0152].
- 4 Emissions pricing has been the primary policy for reducing emissions in every sector of the economy, except agriculture, since 2008. Pricing agricultural emissions by 1 January 2025 is a key action in the Government's Emissions Reduction Plan released in May 2022.
- 5 The mechanism chosen for pricing agricultural emissions will need to align with the Crown's obligations under the Treaty of Waitangi and the

¹ Aotearoa New Zealand has committed to an updated NDC under the Paris Agreement of a 50 percent reduction of net emissions below our gross 2005 level by 2030. NDC1 does not distinguish between greenhouse gases

² The CCRA contains the following domestic emission reduction targets:

- Net zero greenhouse gas emissions (other than biogenic methane) by 2050;
- Reduction of biogenic methane by 10 percent below 2017 levels by 2030; and 24 – 47 percent by 2050.

Government's wider environmental and economic priorities. This includes the Essential Freshwater package and the primary sector roadmap, Fit for a Better World.

- 6 Achieving the purpose and goals of the CCRA (as amended by the "Zero Carbon Act") is a key area of cooperation between the Labour and Green Parties.

Executive Summary

- 7 Pricing agricultural emissions by 2025 is a fundamental part of the Government's climate change response. It will contribute to the emissions reductions needed to meet Aotearoa New Zealand's NDC, emissions targets and emissions budgets.
- 8 Other sectors of the economy have progressively faced an emissions price through the NZ ETS since 2008.
- 9 The Government and sector are both committed to pricing agricultural emissions to ensure their reduction from 2025. This agreement is a significant milestone for Aotearoa New Zealand and the international response to the climate crisis. There is a strong consensus on the need for action and on much of the detail between the Government and the Sector Partnership.
- 10 Aotearoa New Zealand's agricultural sector will be the first to respond to this challenge. The previous Government's decision to defer this discussion has lost time and made the transition harder.
- 11 A split-gas farm-level pricing system that is enhanced over time will:
 - 11.1 support agricultural emissions reductions that meets our targets;
 - 11.2 strengthen our export brand and supports a viable and strong agricultural sector; and
 - 11.3 create a low emissions, climate resilient and high wage economy more than the NZ ETS.
- 12 Customers around the world are demanding higher levels of sustainability in the products they buy, so there is the potential for real competitive advantage if we can get this right and continue moving to sustainable farming systems that are ready to respond to a warming world.
- 13 Farm-level pricing puts emissions at the forefront of investment decisions and other important farm business considerations. It also gives farmers and growers the autonomy and flexibility to determine the most efficient, cost-effective mitigation practices for their farms. Farm-level pricing puts emissions at the forefront of investment decisions and other important farm business considerations. It also gives farmers and growers the autonomy and flexibility to determine the most efficient, cost-effective mitigation practices for their farms.

- 14 The Interim Climate Change Committee (Interim Committee), the Climate Change Commission (the Commission), and the He Waka Eke Noa – Primary Sector Climate Action Partnership (the Partnership) all concluded that a farm-level emissions pricing system, outside of the NZ ETS, would be the best approach to incentivise farmers to reduce agricultural emissions.
- 15 This paper seeks agreement to consult on a framework for pricing agricultural emissions. This framework builds on the Partnership's recommendations and advice from the Commission, and is informed by public consultation and expert advice over the past few years.
- 16 The proposals include:
 - 16.1 a core split-gas farm-level pricing and incentive system to commence in 2025 with enhancements to improve effectiveness built in over time;
 - 16.2 an interim processor levy as a transitional step if the farm-level pricing system is not ready in 2025;
 - 16.3 options for how emissions from the application of synthetic nitrogen fertiliser could be priced (within the farm-level pricing system or via the NZ ETS);
 - 16.4 recognition for sequestration from riparian margins and management of indigenous vegetation as an adjacent contractual system, with the long-term goal of integration of new vegetation categories into the NZ ETS; and
 - 16.5 a post-implementation review in 2030.
- 17 The proposals incorporate key elements of the Partnership's recommendations. This includes split-gas farm-level pricing using incentives as a proxy for assistance. However, we propose changes to the price settings, oversight of the pricing system, emissions reporting, and sequestration components.
- 18 We propose to consult on the following key design elements:
 - 18.1 farm business owners above a set fertiliser use or stock number threshold have the legal responsibility to report emissions annually using a single calculation engine and simple reporting method;
 - 18.2 separate levy prices are set for long-lived gases and methane;
 - 18.3 long-lived gas prices are set annually and linked to the New Zealand Unit (NZU) price, discounted and phased down over time;
 - 18.4 biogenic methane levy prices are reviewed periodically, based on progress against emissions targets and advice from the Commission;
 - 18.5 incentive payments are funded through revenue raised and available for a range of mitigation technologies and practices to reduce emissions. These incentives will act as a proxy for assistance and

provide an opportunity to offset liabilities owed through the pricing system. Detailed reporting and a wider range of mitigations will be introduced over time;

- 18.6 any revenue raised from the pricing system, once incentive payments are netted off, would be used for administration, and remaining funds would be subject to the revenue recycling strategy;
 - 18.7 a proposed pathway for how sequestration from on-farm vegetation could be recognised in 2025 and in the medium to long term via the NZ ETS;
 - 18.8 an advisory body (or bodies) is in place consisting of Māori and sector representatives to advise on the use of system revenue and funding to support Māori landowners and agribusinesses. Ministers will be accountable for how the revenue is spent.
- 19 A summary of operational requirements for the pricing system is also included for consultation. These include cost recovery, audit and verification, and penalties and offences.
- 20 The Minister of Climate Change has concerns that the proposal:
- 20.1 does not provide sufficient certainty that Aotearoa New Zealand will achieve its climate change targets;
 - 20.2 is not consistent or equitable with the approach taken to emissions pricing for all other sectors;
 - 20.3 creates risks that emissions reduction targets will be traded off against other considerations when price-setting decisions are made.
- 21 The Minister of Climate Change is seeking Cabinet's direction about whether consultation on a methane market should also occur, where:
- 21.1 under this alternative pricing system, total allowable methane emissions would be set annually with reference to the methane target;
 - 21.2 farmers would calculate their methane emissions and surrender equivalent Methane Units, received via auction, free allocation, or by purchasing from a secondary market;
 - 21.3 other features of the key design elements of the farm-level pricing system could remain the same.
- 22 In addition, the Minister of Climate Change proposes a mechanism for the agricultural sector to contribute to the cost of abatement in the event its emissions do not meet targets.
- 23 The Minister of Agriculture notes that a simple farm-level pricing system should achieve the Government's goals of an effective, practical and equitable system to reduce our greenhouse gas emissions, subject to regular price adjustments.

- 24 Subject to Cabinet agreement, the appended discussion document will be released for public consultation between October and November 2022 for a period of six weeks.
- 25 In December, we will publish the CCRA section 215 report that outlines a system to put a price on emissions from agricultural activities as an alternative to the NZ ETS. This report will provide direction on policy design and, together with consultation responses, will inform final advice to Cabinet.
- 26 We will report back to Cabinet no later than February 2023 seeking agreement to draft the necessary legislation to implement the agricultural pricing system.

Background

Developing a pricing mechanism for agricultural emissions started in 2019

- 27 The analysis presented in this Cabinet paper incorporates advice and decisions on agricultural emissions pricing since 2019. This includes:
- 27.1 recommendations from the Interim Committee in 2019 to price agricultural emissions in the NZ ETS at a processor level in the interim and transition to a farm-level levy system in 2025 [ENV-18-MIN-0042 and CAB-19-MIN-5042 refers];
 - 27.2 Cabinet disagreeing with the Interim Committee's recommendation and instead agreeing to establish a formal sector-government agreement (the Partnership) to support the transition to farm-level emissions pricing from 2025 [CAB-19-MIN-0480 refers];
 - 27.3 amending the CCRA to legislate agricultural emissions pricing via the NZ ETS as the regulatory backstop in the event farm-level pricing in 2025 was not feasible [CAB-19-MIN-0480 refers];
 - 27.4 advice from the Commission in 2022 on assistance³ (free allocation) and assessing progress towards agricultural emissions pricing⁴;
 - 27.5 recommendations delivered to Government in May 2022 from the Partnership for farm-level pricing as an alternative to agriculture entering the NZ ETS [CAB-22-MIN-0215 refers].

The He Waka Eke Noa – Primary Sector Climate Action Partnership has recommended a preferred agricultural emissions pricing system

- 28 The Partnership, made up of 13 partners from government, the primary sector and the Federation of Māori Authorities, was established to support the

³ Climate Change Commission|He Pou a Rangi. May 2022. *Agricultural Assistance* Retrieved from <https://www.climatecommission.govt.nz/our-work/advice-to-government-topic/agricultural-emissions/ag> (Accessed 15 September 2022)

⁴ Climate Change Commission|He Pou a Rangi. June 2022. *Agricultural Progress Assessment* Retrieved from <https://www.climatecommission.govt.nz/our-work/advice-to-government-topic/agricultural-emissions/agricultural-progress-assessment/> (Accessed 15 September 2022)

transition to farm-level emissions pricing from 2025 through a five-year work programme.

- 29 The Partnership recommended that a farm-level split-gas levy system is implemented, where farmers would:
- 29.1 report on and pay for their emissions annually;
 - 29.2 pay one levy price for their short-lived greenhouse gas emissions (methane from livestock);
 - 29.3 pay a separate levy price for long-lived greenhouse gas emissions (nitrous oxide from livestock and synthetic fertiliser and carbon dioxide from urea);
 - 29.4 receive an incentive payment for uptake of approved actions that reduce emissions, such as use of a methane inhibitor;
 - 29.5 receive a payment or credit for on-farm sequestration, including vegetation which is not eligible for registration in the NZ ETS.
- 30 Under the Partnership's proposal, revenue raised from agricultural emissions pricing would be ringfenced to fund incentive payments and sequestration, as well as some of the administration costs of this system and support further research and development.
- 31 The Partnership concluded that it would not be possible to implement a full farm-level system by 2025. They therefore proposed to start with a simplified farm-level system in 2025 that would transition to a more comprehensive level system in 2027. This includes more detailed reporting of emissions, and recognition of a wider range of sequestration and approved mitigation actions.

The Climate Change Commission has provided advice on agricultural emissions pricing

- 32 The Commission reviewed the progress of the Partnership towards milestones set out in the CCRA and also assessed farmer readiness and barriers to comply with agricultural emissions pricing.
- 33 The Commission indicated that even the Partnership's recommendations for a simplified farm-level system could not be practically implemented by 1 January 2025⁵. However, they did find that progress toward the primary sector commitments was sufficient to prepare for a more basic form of a farm-level system by 1 January 2025.
- 34 The Commission recommended not including sequestration in a farm-level emissions pricing system due to inter-sector equity issues and to reduce the complexity of farm-level pricing and⁶. It also raised questions about

⁵ Climate Change Commission|He Pou a Rangi. June 2022. *Agricultural Progress Assessment* Retrieved from <https://www.climatecommission.govt.nz/our-work/advice-to-government-topic/agricultural-emissions/agricultural-progress-assessment/> (Accessed 15 September 2022)

⁶ Ibid

implications for meeting emissions budgets if types of sequestration are counted and rewarded on-farm but not in formal emissions accounting.

- 35 The Commission also recommended pricing synthetic nitrogen fertiliser at the processor-level through the NZ ETS to achieve a more broad, equitable, and cost-effective coverage of emissions from synthetic nitrogen use⁷.
- 36 The Commission also advised that the Government preserve full marginal prices for emissions (using free allocation):
- 36.1 the Commission concluded that a detailed farm-level system with a full marginal price incentive on emissions would most effectively incentivise on-farm emissions reductions;
- 36.2 they recognised that this was not possible in 2025, and that the Partnership's proposal for a simple farm-level pricing system with incentives would be appropriate in the short term to help incentivise actions other than reducing output and land-use change⁸.

The Government needs to consider the Partnership and the Commission's advice before publishing a report outlining an alternative agricultural emissions pricing system to the NZ ETS by the end of 2022

- 37 The CCRA currently legislates the NZ ETS as the default pricing mechanism for agricultural emissions. Without a decision on an alternative farm-level pricing system and legislative change, agricultural emissions would need to be paid for via the NZ ETS from 1 January 2025.
- 38 The CCRA sets out an obligation for the Ministers of Climate Change and Agriculture to prepare and make publicly available a report that outlines a system to put a price on emissions from agricultural activities as an alternative to the NZ ETS.
- 39 The report must consider certain matters, including advice provided by the Commission on assistance, as detailed in section 215 of the CCRA. This report will inform Cabinet decisions and must be made public by 31 December 2022. Therefore;
- 39.1 we are using the attached discussion document (Appendix One) to serve as a draft of the alternative system design before the final report is prepared;
- 39.2 the section 215 report will provide direction on policy design in some key areas, based on officials' ongoing policy advice to Ministers alongside the consultation;
- 39.3 the section 215 report and analysis of consultation responses will inform final advice to Cabinet in February 2023.

⁷ Ibid

⁸ Ibid

- 40 Due to the challenges in meeting the statutory timeline in December we are seeking agreement from Cabinet to delegate authority to approve publishing the final report to the Ministers of Climate Change and Agriculture and the Prime Minister. We are now seeking Cabinet's agreement to consult on an alternative agricultural pricing framework to the NZ ETS. This framework incorporates elements of both the Partnership's recommendations and the Commission's advice, as well as suggested amendments to better meet the objectives of reducing agricultural emissions in Aotearoa New Zealand.

Decision-making principles

- 41 The general principles for agricultural emissions pricing, as recommended by the Commission and adopted by Ministers⁹, are:
- 41.1 Practical: able to start pricing emissions from 1 January 2025 in a way that encourages active participation and can be enforced.
 - 41.2 Broadly supported: has sufficient buy-in from the sector and is seen as reasonable by New Zealanders, and has political durability;
 - 41.3 Efficient: avoids unnecessary administration and aligns with existing systems and processes as far as possible. If emissions pricing were used to raise revenue to fund a broader set of emissions activities, it should be considered against other forms of revenue raising.
 - 41.4 Equitable: acknowledges the varied circumstances facing different agricultural activities and participants, and the implications for the broader economy and future generations. This includes recognising the land tenure restrictions and specific challenges faced on Māori collectively-owned land, as well as the broader impacts on iwi / Māori.
 - 41.5 Effective: creates clear long-term incentives through independent pricing features that support investments and changes to deliver emissions reductions in line with meeting statutory targets. Methods of calculating emissions must be able to capture changes on farm that result in emissions reductions. Policy seeks to avoid emissions reductions in Aotearoa New Zealand resulting in increased global emissions.
 - 41.6 Comprehensive: recognises and encourages, where possible, emissions reductions which count towards meeting domestic and international targets from changes to farm management practices, production and land use.
 - 41.7 Well-aligned: creates a system that supports and is actively aligned with other climate policies, non-climate environmental policies, and other social and economic policies. Does not duplicate, undermine, or conflict with, the incentives for emissions reductions created by the NZ

⁹ Climate Change Commission | He Pou a Rangi. June 2022. *Agricultural Progress Assessment* Retrieved from <https://www.climatecommission.govt.nz/our-work/advice-to-government-topic/agricultural-emissions/agricultural-progress-assessment/> (Accessed 15 September 2022)

ETS. Reinforces co-benefits and avoids perverse outcomes that may undermine the intent of the system.

41.8 Adaptable: performance should be monitored and evaluated so that the policy can be adjusted to ensure it continues to meet its objectives. The policy is adaptable to take account of future changes in domestic targets, international context and developments in mitigation options for agricultural emissions.

41.9 Transparent: puts clear and predictable processes in place for how decisions to adjust the policy will be made.

42 For the purposes of the Regulatory Impact Statement, officials used the following criteria¹⁰:

42.1 Effective – in incentivising emissions reductions which contribute to achievement of our emissions reduction targets.

42.2 Practical – in being able to be implemented within statutory timeframes and established, operated, and modified in a cost-effective manner.

42.3 Equitable – within the agricultural sector; between the agricultural sector, other industries and the broader economy; and in terms of the impact on Māori agribusiness and Māori overall, including Māori aspirations.

Proposal

We propose to consult on the agricultural emissions pricing framework to commence in 2025, outlined below

43 In this paper and the attached discussion document (Appendix One) we outline a framework which would see agricultural emissions priced in 2025.

44 The framework largely adopts the Partnership's recommended proposal. This includes split-gas farm-level pricing using incentives to provide a strong price signal to reduce emissions through the uptake of mitigation technologies. However, the framework proposes changes to the price settings, oversight of the pricing system, emissions reporting and sequestration components.

45 These changes simplify the Partnership's design, while improving its effectiveness, enabling emissions pricing to commence in 2025. It also incorporates aspects of the Commission's advice and recommendations.

46 The proposed agricultural emissions pricing framework includes:

46.1 a core split-gas farm-level pricing and incentive system to commence in 2025 with enhancements to improve effectiveness built in over time (section one);

¹⁰ These criteria are consistent with the nine general principles for agricultural emissions pricing proposed by the Commission in the Agricultural Progress Assessment report.

- 46.2 an interim processor levy as a transitional step if the farm-level pricing system is not ready in 2025 (section two);
 - 46.3 options for how emissions from the application of synthetic nitrogen fertiliser could be priced either within the farm-level pricing system or via the NZ ETS (section three);
 - 46.4 a proposed pathway for how sequestration from on-farm vegetation could be recognised in 2025 and in the medium- to long-term via the NZ ETS (section four).
- 47 The proposed outcomes of this framework are:
- 47.1 pricing agricultural emissions in 2025 via the farm-level pricing system or the interim processor levy;
 - 47.2 achieving agricultural gross emission reductions in line with Aotearoa New Zealand's domestic targets and achieving net reductions in line with international targets;
 - 47.3 alignment with the split-gas targets legislated in the CCRA;
 - 47.4 recognition and incentivisation of the uptake of farm practice, system, and land-use changes that result in emissions reductions;
 - 47.5 recognition of sequestration from the most permanent forms of on-farm vegetation that sequester carbon and have environmental co-benefits;
 - 47.6 a pathway to enhance the pricing system over time to improve its effectiveness; and
 - 47.7 support for farmers and growers to transition to low emission practices, systems, and land uses over time.
- 48 However, the Minister of Climate Change has concerns that this proposed agricultural emissions pricing framework:
- 48.1 does not provide sufficient certainty that Aotearoa New Zealand will achieve its climate change targets;
 - 48.2 is not consistent or equitable with the approach taken to emissions pricing for all other sectors;
 - 48.3 creates risks that emissions reduction targets will be traded off against other considerations when price-setting decisions are made.
- 49 To address these concerns, the Minister of Climate Change also proposes consultation on pricing methane emissions via a methane market rather than a levy:
- 49.1 A methane market would integrate with many of the aspects (reporting, sequestration etc) of the split-gas farm-level pricing system described below.

49.2 The key difference is how methane prices would be set – being set by farmers through a market mechanism rather than by Ministers and Cabinet.

49.3 A methane market is described in more detail below.

Section one: A core split-gas farm-level pricing system to commence in 2025, with enhancements to improve effectiveness built in over time

Summary of the proposal

- 50 We agree with the Interim Committee, the Commission, and the Partnership that the NZ ETS is not well designed to incentivise farmers to reduce agricultural emissions:
- 50.1 The NZ ETS was developed during the era of the Kyoto Protocol as an economically efficient, whole-of-economy policy, designed to hit a single target for net reductions using a carbon dioxide equivalence measure.
 - 50.2 Under the Paris Agreement, there is now a policy move towards different reductions targets and pathways for different gases, and clearly defined gross reductions targets as well as net removals targets. The different targets outlined in the CCRA are a step in this direction.
 - 50.3 The NZ ETS is not able to hit multiple targets for different gases and incentivises net rather than gross reductions (Aotearoa New Zealand's methane target is for gross rather than net reductions).
 - 50.4 The NZ ETS is designed for corporate emitters of carbon dioxide. Whilst it could work well at the processor level, it is poorly suited to work on 23,000 farms.
- 51 Despite the obvious complexity of designing a system for 23,000 farms rather than around 80 processors, it is felt that emissions pricing should be at the farm-level rather than the processor-level.
- 52 Farm-level pricing puts emissions at the forefront of investment decisions and other important farm business considerations. It also gives farmers the autonomy and flexibility to determine the most efficient, cost-effective mitigation practices for their specific farms.
- 53 We are proposing to consult on a modified version of the Partnership's split-gas farm-level levy where eligible farmers and growers:
- 53.1 report their emissions annually using a single calculation engine and simple reporting method;
 - 53.2 pay an annual split-gas levy for their methane and long-lived gas emissions;

- 53.3 receive an incentive payment for the uptake of a range of mitigation technologies and practices to achieve emissions reductions and provide a price signal (as a proxy for assistance);
- 53.4 receive payment for eligible sequestration to help offset the cost of their levy payment, initially through an adjacent contractual system from 2025, and in the longer term by allowing new categories of sequestration in the NZ ETS.

Key design elements of the farm-level pricing system for consultation

Participation in the pricing system

- 54 The legislation needs to establish which farming and growing businesses are included in the pricing system and who is legally responsible
- 55 We are proposing an approach similar to that recommended by the Partnership, where farm business owners that meet the proxy emissions thresholds are legally required to:
 - 55.1 Initially register in the system by recording relevant farm data (ownership, farm address, farm type/size, farming enterprise, stock type and numbers, fertiliser purchased (if included at farm-level), farm map and GST number(s));
 - 55.2 Annually report their emissions by entering simple farm information including farm size (hectares), annual stock reconciliations, and farm production by output in a single calculation engine to estimate emissions;
 - 55.3 seek approval from landowners for any sequestration being recognised; and
 - 55.4 pay for their emissions.
- 56 They would also be able to opt-in to report as collectives (when enabled).
- 57 The thresholds for emissions reporting are a proxy for annual emissions of 200 tonnes of carbon dioxide equivalent (CO₂-e; or 150 t CO₂-e for dairy cattle) and include business owners who:
 - 57.1 have over 550 stock units (inclusive of sheep, cattle, and deer; calculated on a weighted annual average basis); or
 - 57.2 over 50 dairy cattle; or
 - 57.3 apply over 40 tonnes of nitrogen through synthetic nitrogen fertiliser.
- 58 We are proposing that minor emitting sectors (ie, swine, poultry, goats, llamas, alpacas and asses) which currently make up less than 0.5 per cent of agricultural emissions are initially excluded from the system.

- 59 The Partnership and the Commission recommended different options for pricing emissions from the application of synthetic nitrogen fertiliser (i.e., within the farm-level levy and in the NZ ETS). We are proposing to consult on both these options.
- 60 If the emissions from the application of synthetic nitrogen fertiliser are priced in the NZ ETS, the threshold for synthetic nitrogen fertiliser would be excluded from the farm-level system definition above. This is discussed in section three.
- 61 The farm business owner would hold ultimate legal responsibility for reporting and paying for emissions with the option for the business owner to delegate to a person or entity e.g., a farm advisor or chartered accountant, to act as an agent on their behalf.
- 62 This arrangement incentivises emissions reductions within the farming business operation. It provides recognition of on-farm actions directly to the person making decisions about stock management and fertiliser application.
- 63 Practical transitional approaches may be necessary for alternative types of ownership and business structures, such as Crown-leased land, land administered by Te Tumu Paeroa and Crown Pastoral Lease.

Enabling collective reporting

- 64 Reporting and payment obligations for collectives are an important feature of a farm-level pricing system:
- 64.1 Farmers and growers (including Māori landowners) expressed a desire to be able to form collectives, to reduce the administrative burden on governance structures involving multiple landowners, as well as to access sequestration or offsetting opportunities.
- 64.2 The important role of collectives to support Māori landowners to benefit from sequestration from on-farm vegetation was recognised by the Federation of Māori Authorities and the Commission.
- 65 The Partnership recommended that business owners should be able to opt-in to a collective.
- 66 We are looking into workable ways to enable collective reporting for Māori agribusiness, iwi, hapū and whānau groups from 2025;
- 66.1 Enabling collective reporting will recognise Māori landowner structures and allow farmers who own several businesses to report and pay for their obligations as one entity.
- 66.2 This could potentially increase compliance while also reducing the number of participants in the farm-level pricing system.
- 67 We also recognise the potential of other collectives. However, we consider that the policy issues are too complex for a wide group of collectives to be included in the pricing system from 2025. We are therefore proposing to

explore enabling a broader range of collectives as a future enhancement to the pricing system.

How are the emissions prices set?

A split-gas approach

- 68 The pricing system needs to establish how the levy prices for long-lived gases and methane are set.
- 69 The Partnership recommended a split-gas approach where long-lived gases and methane have separate prices.
- 70 We support this recommendation as applying the same price to gases for which we are pursuing different emissions reduction outcomes would not make sense. Prices for long-lived gases and biogenic methane will therefore be set separately.

Overview of price setting

- 71 Levy prices would be set via regulations. This means that the ultimate decision over levy prices must be taken by Ministers.
- 72 The Partnership recommended a collaborative governance approach to setting levy prices, with the sector having a key role in advising Ministers on the appropriate levy prices. Ministers would have to follow this advice, or else explain why. A range of legislated factors would need to be balanced against one another both by the sector advisory group and by Ministers.
- 73 The Commission recommended that independent and transparent processes are needed when setting the levy prices, to enable emissions prices to change in line with statutory targets.
- 74 We are therefore proposing a transparent, rules-based process for setting levy prices. The Commission will provide independent advice on the methane price instead of the sector advisory group proposed by the Partnership.
- 75 This approach will minimise the complexity of decision-making, and tie levy prices to progress against domestic emissions reduction targets. Meeting these targets will make a significant contribution towards meeting our NDC for 2021-30.

Setting the long-lived gas price

- 76 Long-lived gases from agriculture are subject to the 2050 net-zero target because the Government has not set a specific gross reduction target for long-lived gas emissions.
- 77 We are therefore proposing that the simplest and most transparent way to set the long-lived gas price is to link it to the average New Zealand Unit (NZU) price. Officials propose to adopt the Partnership's proposal to apply a 95 per cent proportional discount that phases out by one per cent each year to this price. This 95 per cent discount is based on the legislation, which currently

states that, if agriculture comes into the NZ ETS, it will do so at 95 per cent discount.

- 78 For other sectors, Industrial allocation in the NZ ETS phases out at 1% per annum to 2030, 2% per annum to 2040 and 3% per annum to 2050.
- 79 The Minister of Climate Change disagrees with this recommendation and proposes to consult on aligning it to the phase out rate in the NZ ETS for all other sectors of the economy. This would be fairer to other sectors and be more effective at driving emissions reductions. As the proposal is an alternative to the NZ ETS he does not agree that the legislated rate applies.
- 80 As this is a relatively straightforward technical exercise, we propose that the long-lived gas price is updated annually to maintain alignment with the prevailing NZU price and allow for annual phaseout of the discount. The Minister for Climate Change proposes consulting on matching the phase out rate for long-lived gases to the standard ETS phase out rates.

Setting the methane price

- 81 We propose that the methane price would follow a separate price pathway, based on progress towards emissions reduction targets.
- 82 Periodically, Ministers would need to assess whether agricultural emissions were on or off-track regarding emissions targets. If emissions are over or under-achieving, Ministers could update the methane price.
- 83 When determining a new price, Ministers would need to be satisfied that the new price would be sufficient to achieve our emissions reduction targets. Ministers could also consider other factors such as socioeconomic impacts, but these factors would be secondary to the main consideration of ensuring targets are achieved.
- 84 Ministers would also be required to seek the advice of the Commission each time the methane price was reviewed and could be required to publish and table before Parliament, alongside regulations setting the new price, a report explaining any deviation from the Commission's advice.

Frequency of methane price updates

- 85 We are considering whether the methane price should be updated annually, or every three years.
- 86 In short, an annual process will allow the price to respond more quickly to the trajectory of the sector's emissions but may require a new price to be set before the impact of the current price can be properly assessed. Updates every three years will allow for better assessment of the impact of the current price and enable additional rigor and transparency to be built into the process but may limit the ability of the pricing system to respond quickly.

- 87 We intend to use the consultation to further develop our understanding of the trade-offs between these options, to support final Cabinet decisions in February 2023.
- 88 Updating the methane price annually would allow Ministers to adjust the price more rapidly if there were evidence that emissions were not reducing fast enough, or if the price were driving unintended behaviour (for example excessive land conversion to plantation forestry rather than uptake of lower-emissions farming practices on farm). A responsive system is likely to be particularly important in 2025-2030, as the pricing system beds in and we approach our first set of emissions targets.
- 89 However, one year may not be enough time to observe the sector's response to the current price. For example, one year is not enough time for the sector's response to be captured by our national inventory. Ministers would instead rely on more timely but less definitive leading indicators to assess progress in reducing emissions and inform their decisions. In years where there is insufficient evidence to change the price, Ministers could elect to leave it unchanged.
- 90 Setting a new levy rate based on historical performance against targets using the process outlined above is likely to take at least 12 months. This means that the new levy rate would be set based on data from two years prior.
- 91 Updating the methane price every three years would allow more time to observe the sector's response to the current price, and for this response to be reflected in our national inventory before the price is updated again.
- 92 However, three-yearly updates pose a particular challenge to achieving our 2030 targets – if the initial price is set in 2025 and only updated every three years, this only provides one opportunity (in 2028) to adjust.
- 93 A three-year update cycle could also make it difficult to respond to events that affect emissions. For example, in 2008 a widespread drought resulted in a 5 per cent reduction in agricultural emissions.
- 94 Updating the methane price is likely to be a complex and contentious process. A three-yearly cycle would allow time for additional procedural steps to be built into the process to provide rigor and transparency.
- 95 Officials are assessing options and will provide further advice to support final Cabinet decisions, but this could include mechanisms such as requiring Ministers to set an escalating price pathway for a three-year period (as opposed to simply setting a flat rate for the entire period), requiring Ministers to publish independent modelling supporting their decisions, or providing for additional Parliamentary scrutiny and debate.
- 96 If the price is updated every three years, officials recommend that Ministers are given the ability to update the price out of cycle by exception. Exceptions could include if there was a significant risk that targets would not be achieved, or if the price was causing significant economic disruption.

Methane market

- 97 Under the Minister of Climate's proposed methane market, the price for methane would be set on an ongoing basis by farmers trading in the market, thereby eliminating the need for a price-setting process.

Transitional support

- 98 Agricultural emissions pricing will have an impact for some rural and Māori communities as businesses respond to the increased cost from emissions pricing.
- 99 There is a case for some form of transitional support for rural and Māori communities impacted by the introduction of an agricultural emissions-pricing system. Both the Partnership and the Commission recommended some type of support, although the Commission were unable to provide specific proposals
- 100 The Commission did provide some guidance that could inform the further work needed to develop the design of transitional support in more detail, including identifying those impacted.
- 101 To support Cabinet decisions in February 2023, officials will need to provide further advice on the likely need for transitional support, and options for how it could be delivered. In this context, it is worth noting that a split-gas farm-level levy with a relatively low price, as the Partnership recommended, does provide a high degree of assistance to affected parties.

How will the revenue from the levy be used?

- 102 The pricing system needs to establish how the revenue raised from the levy will be used (referred to as 'revenue recycling').
- 103 The Partnership recommended that revenue raised from the levy would be used to drive further emission reductions, and to support farmers and growers to reduce their emissions.
- 104 We support this proposal. Funding is required to administer and run the farm-level pricing system. Revenue from the levy would be used for administration where it is appropriate, and remaining funds would be subject to the revenue recycling strategy. The recycling revenue strategy will need to include details of the ring-fenced funding for Māori landowners and agribusinesses and other priority areas for investment.
- 105 Incentive and sequestration payments (if included in the farm-level system) would be an integral part of the levy which will affect the amount of revenue available for other uses.
- 106 This means that the farm-level pricing system:
- 106.1 first calculates the levies due for long-lived gases and biogenic methane; then

106.2 makes deductions from that amount for on-farm mitigation technologies and practices that reduce emissions.

- 107 The levy is expected to raise significant revenue at the prices and levels of uptake that have been modelled, sufficient to cover incentives for mitigation technologies and practices, with a surplus of \$100 million to \$140 million remaining. It will also cover the costs establishment of the system, estimated at \$87 million, and ongoing operating costs, estimated at \$32 million per annum.

How is the system governed?

- 108 In contrast to how the price for energy and industrial carbon dioxide emissions is set through supply and demand within the NZ ETS, the Partnership's proposal is that the price for agricultural emissions be set by Ministers with a significant role for the sector in advising on the price.
- 109 A crucial component of the pricing system, therefore, is who will provide advice and make decisions about the price and other aspects of the system.
- 110 The Partnership recommended a collaborative governance role in the pricing system with sector representation and an independent Māori Board.
- 111 We are proposing a more streamlined governance system than that recommended by the Partnership.
- 112 Under our proposed system, Ministers are responsible for the policy and price settings, including reviewing and updating the levy rates, and are accountable for how the levy revenue is spent.
- 113 Two key functions have been identified that would benefit from advice from the sector and from Māori. These are:
- 113.1 advise Ministers on the strategy for the use of system revenue;
 - 113.2 advice on the strategy for use of dedicated funds to support Māori landowners and agribusinesses.
- 114 A new advisory body could be established to undertake these functions, or an existing body (for example the Centre for Climate Action on Agricultural Emissions) could be utilised.

Incentive payments to encourage and reward emissions reductions

- 115 The Partnership proposed a combination of low marginal prices and high incentive payments to achieve the target. Modelling commissioned by officials expects that the price that is required to achieve the gross biogenic methane target may be low, compared to that needed to achieve the net long lived gases target:
- 115.1 according to the modelling, the Partnership's recommended price of 11 cents per kilogram of methane is expect to be sufficient to meet the targets;

115.2 this price is equivalent to \$3.93 per tonne of CO₂-e, much lower than current prevailing prices in the NZ ETS of \$85 per tonne CO₂-e.

- 116 Note that both officials' and the Partnership's modelling suggest that the Partnership's recommended price of 11 cents per kg, together with the effect of other policies could be sufficient to meet the targets. Though a low price might drive emissions reductions, without an accompanying incentive to uptake mitigation practices or technologies on-farm, these reductions largely come from lower production and land-use change from sheep and beef farming to forestry or scrub. This is because even relatively low biogenic methane prices could have a significant impact on pastoral land use, driving sheep and beef land to forestry and scrub.
- 117 There are advantages to achieving emissions reductions through uptake of mitigation technologies and practices on-farm, rather than land-use change. The disruption involved in our transition to a low-emissions economy is reduced and the prosperity and competitiveness of Aotearoa New Zealand's agriculture sector is maintained.
- 118 As such, the Partnership proposed to use incentive payments to encourage the adoption of mitigation technologies.
- 119 The Commission advised a detailed farm-level system with a full marginal price would most effectively incentivise on-farm emissions reductions. They also advised that structured assistance (i.e., free allocation) could be offered to soften the impact of a high price.
- 120 The Commission's report on structured assistance concluded that an output-based measure (e.g., emissions per unit of production) would be the most effective system for allocating assistance.
- 121 As noted previously, the Partnership was unable to come to consensus on an allocative system that could underpin structured assistance. They proposed instead to set levies low enough that any further assistance would not be required by any sector.
- 122 Officials are of the view that structured assistance is too complex to implement by 2025 and that it would take considerable time to work through the challenges related to distributional impacts across the agricultural sub-sectors. Therefore:
- 122.1 officials have commissioned modelling of only one type of structured assistance as part of the proposed system, assistance based on land-use class;
- 122.2 this resulted in increases in emissions relative to the baseline as the assistance amounted to a payment to continue farming and generated land-use change into pastoral agriculture to claim the assistance.
- 123 However, as noted above, officials may need to develop some form of transitional support.

- 124 We are proposing that the pricing system include incentive payments because:
- 124.1 Incentive payments encourage and reward farmers and growers who adopt approved mitigations practices and technologies to reduce their emissions.
 - 124.2 Incentive payments will work by attaching a value to approved mitigations.
 - 124.3 Farmers and growers will be able to offset their emissions liabilities and receive a deduction for eligible mitigation actions they uptake on their farm.
- 125 This approach aligns with our Emissions Reduction Plan for agriculture which focuses on supporting producers to make changes and accelerating new mitigation technology. Incentive payments place a stronger incentive on achieving mitigation through adoption of technologies and practices.

Methane market

- 126 Under the Minister of Climate Change's proposed methane market, incentive payments would not be required. Farmers would be rewarded for emissions reductions at the full marginal price (the cost of biogenic methane, as set by the market). However, a programme of structured assistance would be required to complement the marginal price.

Enhancing the core farm-level pricing system to improve its effectiveness and practicality

- 127 The Partnership recognised that a full farm-level pricing system would not be able to be implemented by 2025. They proposed a simplified system to be up and running by 2025 and a more complex system to be running by 2027.
- 128 Officials and the Commission are of the view that even the Partnership's proposed simplified system will not be able to be implemented by 2025. Officials have proposed further simplifications, with a backup interim processor-level system in case the proposed simplified farm-level system is not operational by 2025.
- 129 It will therefore be important to be able to build enhancements into the core farm-level pricing system to improve its effectiveness and practicality over time and support the agricultural sector to transition to lower emissions systems and practices.
- 130 We are proposing that the pricing system should allow for future enhancements, such as recognising a wider range of mitigations as they become available, and more detailed reporting.

Consultation on a Methane market

- 131 The Minister of Climate Change is concerned the proposed farm-level pricing system described above, and set out in the attached discussion document, will not provide sufficient certainty that Aotearoa New Zealand will achieve its climate change targets:
- 131.1 The proposed farm-level pricing system is for a low marginal price and no overall cap on emissions. Prior to our Government's reforms last term, the history of the NZ ETS shows that a low marginal price and no cap on emissions were ineffective at reducing emissions.
- 131.2 Further, under a farm-level pricing system, Ministers and Cabinet will need to update the levy rates periodically to ensure the system is effective. The Minister of Climate Change is concerned this process will allow meeting emissions reduction commitments to be traded off against other considerations.
- 132 Accordingly, the Minister of Climate Change also proposes consulting on a methane market as an alternative way of pricing biogenic methane emissions within a substantially similar split-gas farm-level system. This would mean that the emissions price would be set by farmers and growers through a market mechanism.
- 133 Under this alternative pricing system:
- 133.1 Total allowable methane emissions would be set annually with reference to the methane target.
- 133.2 Farmers would calculate their methane emissions and surrender equivalent Methane Units, received via auction, free allocation, or by purchasing from other participants in a secondary market.
- 134 The price on methane emissions results from a cap being placed on the supply of units:
- 134.1 Farmers would be able to trade through a secondary market to sell surplus units.
- 134.2 They could also buy units to cover any shortfall to meet their surrender obligations, in combination with free allocation and the sale of units at auction.
- 134.3 This ability to sell units would create an additional revenue stream for farmers who are able to sufficiently reduce their emissions.
- 135 This system would result in a strong marginal price on methane emissions, so farmers would have a price-driven incentive to reduce their greenhouse gas emissions, as doing so would result in significant cost savings. A strong marginal price signal was identified by the Commission as being important to driving behaviour change and helping achieve Aotearoa New Zealand's targets.

- 136 A methane market would be able to integrate with many of the aspects of the Partnership's proposed farm-level pricing system (and the modified version of the farm-level pricing system described above). The system could also operate on a farm-level basis, with the minimum stock level thresholds and the same process for calculating emissions. The Partnership's recommendations around collectives could also be enabled.
- 137 A methane market would also be compatible with enhanced recognition of on-farm sequestration, either through the NZ ETS or in the shorter-term through a transitional arrangement. It would have significant capacity to raise revenue to direct towards research and development, to cover administrative costs, and provide support to farmers. As under the farm-level pricing system, the sector and iwi / Māori could play a role in advising the government on the priorities for, and use of, this revenue.
- 138 Some key advantages and disadvantages of a methane market are summarised in table 1 below. The Minister notes that consultation on a methane market could assist to further understand some of the disadvantages, such as how farmers view the price-certainty and compliance implications of such a system.

Table 1: Advantages and disadvantages of a methane market

Advantages	Disadvantages
Effective in meeting methane targets as allowable methane emissions are limited to a set quota.	Officials are of the view that structured assistance is too complex to be implemented by 2025.
Strong marginal price provides a strong incentive for farmers to reduce emissions.	Reduced price-certainty and some costs associated with participating in the market.
Timely price response.	The methane market is unlikely to be implementable by 1 January 2025.
Economically efficient levy, as trading likely results in least-cost emission reductions.	Lower sector support.
The price of methane emissions is set independently by farmers through the market.	

- 139 The Minister of Agriculture's view is that a simple farm-level pricing system should achieve the Government's goals of an effective, practical and equitable system to reduce our agricultural greenhouse gas emissions, subject to regular price adjustments.

Implementation of a pricing system by 2025

- 140 The CCRA sets a date of 1 January 2025 for agricultural pricing to commence via the NZ ETS, aligning with all other sectors and calendar year Greenhouse

Gas Inventory reporting. The Government is committed to this date for commencement.

- 141 The Partnership's proposal included a 'quarter three' 2025 start date with mandatory reporting of 2024/2025 emissions, and pricing beginning for 2025/2026 emissions. Meanwhile, the Commission advised it was unable to assess whether a basic farm-level system could be implemented by 1 January 2025.

142 s 9(2)(f)(iv)



Operational framework and agency

- 143 The implementation agency/agencies will need to be appointed in legislation to administer the farm-level pricing system and (if needed) the interim processor-level levy.

144 s 9(2)(f)(iv)



145

146

- 147 Various functions are required to implement an agricultural pricing system. Two systems may need to be developed if an interim processor-level levy is required to come into force in 2025.

- 148 The functions fall into three categories:

148.1 Product and Service Delivery: levy payer management, verification services, and enforcement require the capability to directly engage with farmers and the greenhouse gases emitted from their farm systems in detail. Some of these functions align with existing government agencies. Rural accountants, advisors and the wider agricultural industry could support aspects of levy payer management and verification functions by the implementation agency.

- 148.2 Delivery Support: comprises payment management and processing, and the IT system build (consisting of payment systems, data interoperability systems, and the emissions calculator) and management.
- 148.3 Operational and Technical Policy: this includes stakeholder management, regulation development, technical guidance and decisions, emissions methods and tools, and methods to measure the success of the policies.
- 149 We are proposing to consult on the following functions that are an integral part of the operational framework:
- 149.1 Cost recovery: The legislation enables the costs of the administering the system to be recovered from participants in line with the Government's cost recovery principles (in addition to the payment of the levy).
- 149.2 Verification and auditing: Audit and verification processes are cost effective and aligned with other existing and planned farm audit systems as far as practicable for on-farm audits (e.g., Industry Assurance Programmes or Freshwater Farm Plan audits).
- 149.3 Penalties and offences: A proportionate penalties and enforcement regime that includes provisions for infringement offences to be set by regulation and a model to calculate penalties for a set of specific offences via an automated formula.

Cost Recovery from individual participants

- 150 Funding is required to administer and run the emissions-pricing system. The Government is proposing that the system is self-funded.
- 151 While the levy may raise money that could be used to fund the system costs, other uses for that money may be identified in future and, for some services, fees to individual participants rather than general levy funding may be more appropriate which means cost recovery may be required.
- 152 We are proposing to include a provision in legislation which could enable the regulator to recover some costs of running and administering the pricing system from individual participants in future. If cost recovery is implemented, it would be subject to further consultation, when regulations with the operational details (e.g., fees for services) are developed.
- 153 Cost recovery would be assessed against the four principles of: transparency, justifiability, efficiency, and equity. These principles are the same as those that have been used effectively in other legislation, which are recommended by the Office of the Auditor-General.
- 154 The intention for the pricing system is for those responsible to pay for functions within the system where appropriate, whether that is through the levy or through cost recovery. Officials anticipate that it will be appropriate for

participants to pay for a large majority of system costs, but this is subject to more scoping of functions, costs and options for funding.

Audit and Verification

- 155 Monitoring and verification processes will need to be developed that monitor the reporting system and provide quality assurance as to the validity of the data being used. Monitoring and verification of the payment system will also be required.
- 156 We are proposing a cost-effective system that:
- 156.1 sets clear expectations around the evidence to be gathered and held for a seven-year time-period;
 - 156.2 has minimal annual reporting requirements in addition to the emissions number and approved incentives;
 - 156.3 contains a random audit function that is linked to an exception reporting system, but with the implementation agency retaining discretion to audit as it requires;
 - 156.4 has proportionate penalties for non-compliance (failure to report, false reporting and non-payment).
- 157 We propose to align with other existing and planned farm audit systems to the extent that it is practicable for on-farm audits (e.g., Industry Assurance Programmes, National Animal Identification and Tracing (NAIT) programme, or Freshwater Farm Plan audits).
- 158 We are considering third party auditing and verification, similar to that widely used in the food and related systems. This will provide data integrity and assurance on how emissions targets are being met.

Penalties and offences

- 159 We are proposing a penalties and offences regime similar to that already established under the CCRA. This includes provisions for infringement offences to be set by regulation and a model to calculate penalties for a set of specific offences via an automated formula. The offences and the penalty formula would be legislated and should be stringent enough to ensure compliance.
- 160 We also propose that any offence committed by an employee / agent shall be deemed to have been also committed by their employer (the point of legal responsibility).
- 161 More details on the penalties and offences will be needed in the development of the pricing system, which will be consulted on when secondary legislation is developed. In particular, this will require working with the Ministry of Justice and ensuring that penalty values are proportionate and consistent to similar offences.

What the proposal is expected achieve and its impacts

- 162 Limiting global warming to 1.5°C is essential to Aotearoa New Zealand's social, economic, environmental and national security.
- 163 The agriculture sector itself faces significant costs as it is highly exposed to the impacts of climate change. These include increasingly frequent and severe storms and flooding, longer and deeper droughts and biosecurity threats such as invasive insects and changing disease vectors.
- 164 Reducing agricultural emissions will require communities, landowners, the government to make choices and trade-offs on how to undertake a just transition to a low-emissions, climate resilient, high wage future.
- 165 These choices include progress towards our climate change targets, impacts on the economy, the agriculture sector and subsectors, rural communities and Māori.
- 166 There is evidence of demand for carbon neutral products in Aotearoa New Zealand agriculture's international markets^{11, 12, 13}, and this may be reflected in price premiums for exports that are perceived to be carbon neutral;
- 166.1 For example, it is estimated that there is a positive impact of 11–25 per cent on the profits of dairy farms that supply carbon neutral product.
- 166.2 Meeting this demand with additional supply of carbon neutral Aotearoa New Zealand product will ameliorate the impacts estimated here.
- 166.3 Note that this proposal for farm-level emissions pricing does not aim for carbon neutrality. However, agricultural businesses may choose to go beyond the farm-level pricing system to voluntarily achieve carbon neutrality. Those that do may be able to receive commercial benefit for doing so.
- 167 Modelling by officials suggests that the proposed farm-level levy option might achieve our legislated target of a 10 per cent reduction in biogenic methane emissions by 2030. The modelling also suggests that the proposal may contribute to the emissions reductions necessary for meeting the agriculture sector's sub-target of our first emission budget, and indicative sub-target of our second.

¹¹ G Lucci, W Yang, S Ledgard, G Rennie, G Mercer and M Wang. (2020). The added value of value-add: brief synopsis of findings.

https://ourlandandwater.nz/wp-content/uploads/2021/05/OLWRResearchFindingsBrief_Consumers-WTP.pdf

¹² Cubero Dudinskaya E, Naspetti S, Arsenos G, Caramelle-Holtz E, Latvala T, Martin-Collado D, Orsini S, Ozturk E, Zanolli R. European Consumers' Willingness to Pay for Red Meat Labelling Attributes. *Animals*. 2021; 11(2):556. Retrieved from <https://doi.org/10.3390/ani11020556> (Accessed 20 September 2022)

¹³ Wei Yang, Grant Rennie, Stewart Ledgard, Geoff Mercer, Gina Lucci, Impact of delivering 'green' dairy products on farm in New Zealand, *Agricultural Systems*, Volume 178, 2020, <https://www.sciencedirect.com/science/article/abs/pii/S0308521X19304093>

- 168 The modelling uses farm data from a range of different farms to generate estimates of methane and nitrous oxide emissions and carbon sequestration:
- 168.1 Farm systems modelling has been completed on these farms looking at opportunities to reduce emissions from via reductions in farm inputs (e.g. nitrogen fertiliser use, supplementary feed and stock numbers).
 - 168.2 Several mitigation technologies were assumed to be available in 2030, including low methane genetics for sheep and cattle and methane and nitrous oxide inhibitors.
 - 168.3 Land use data from 2020 was used to form the baseline, which officials consider to be a sufficient equivalent to the 2017 baseline used to assess the biogenic methane target.
- 169 Prices are a key difference between the processor level NZ ETS option and the farm level levy. The Partnership's recommended price of 11 cents per kilogram of methane equates to \$3.93 per tonne CO₂-e. This is much less than the NZ ETS price (after 90 per cent ¹⁴free allocation in 2030) of \$10.86 per tonne CO₂-e. A \$50 per tonne rate of incentive payment was adopted as it delivered the greatest level of emission reduction. See Table 2 below for policy pricing scenarios.

Table 2: Policy pricing scenarios

2030 scenarios	Processor-level NZ ETS	Processor-level levy	Farm-level levy
Methane price (\$ per tonne CO ₂ -e)	\$10.86 (\$108.62 with 90% free allocation)	\$3.93	\$2.86 (low) \$3.93 (medium) \$5.00 (high)
Methane price (cents per kg CH ₄)	30.41 cents	11 cents	8 cents (low) 11 cents (medium) 14 cents (high)
Nitrous oxide price (\$ per tonne CO ₂ -e)	\$10.86 (\$108.62 with 90% free allocation)	\$10.86	\$10.86
Rate of incentive payment (\$ per tonne CO ₂ -e mitigated)	\$108.62	\$50	\$50

- 170 Within the farm level levy option, even these lower prices could be sufficient to achieve our legislated target of a 10 per cent reduction in biogenic methane, below 2017 levels, by 2030.

¹⁴ As the modelling represents 2030, 90% free allocation is used i.e., 95% free allocation with five years of phase out at 1% per annum.

- 171 The high price farm-level levy scenario is might also just achieve the agriculture sector's indicative sub-target of our provisional second emissions budget of 191 Mt CO₂-e.
- 172 The processor-level levy option modelled includes an incentive payment system for adoption of mitigation technologies and practices. The interim processor-level levy proposed in this paper does not include these incentive payments and is therefore not likely to achieve the level of emissions reductions modelled here.

Table 3: Emissions reductions in 2030 compared to 2020

	Processor-level NZ ETS	Processor-level levy	Farm-level levy		
			Low price	Medium price	High price
Methane reductions	18%	10%	12%	13%	15%
Nitrous oxide reductions	10%	5%	3%	5%	5%
Total agricultural greenhouse gas reductions in 2030	16%	9%	10%	11%	12%
Emissions Budget Two (2026–2030) Mt CO ₂ -e	187	197	195	193	191

- 173 Compared to dairy, the sheep and beef sector emits more greenhouse gases relative to the sector's overall net revenue. This means the impact of emissions pricing is greater for the sheep and beef sector.

Table 4: Changes in sector net revenue relative to 2030 baseline

	Processor-level NZ ETS	Processor-level levy	Farm-level levy		
			Low price	Medium price	High price
Dairy	-10%	-6%	-6%	-6%	-7%
Sheep and beef	-32%	-17%	-18%	-21%	-24%
Other	1%	-1%	-1%	-1%	0%
Total	-6%	-4%	-4%	-5%	-5%

- 174 Therefore, across all options modelled, the sheep and beef sector is expected to have the largest reductions in emissions. This is because of reductions in stock numbers, and reductions in production, due to reduced revenue and retirement of land.
- 175 Another portion of emissions reductions comes from both dairy and sheep and beef adopting emissions mitigation technology and farm systems change. This adoption of mitigation technology is greater under the farm-level levy policy option.

Risks of emissions leakage

- 176 As Aotearoa New Zealand is a large exporter of dairy and meat products, any reductions in Aotearoa New Zealand production will have an impact on agricultural trade patterns. Other producers may increase their production to fill the gap left by Aotearoa New Zealand and in the process increase their emissions. This is known as emissions leakage. All evidence and modelling on emissions leakage is highly uncertain and has a high margin of error.
- 177 The Organisation for Economic Cooperation and Development (OECD) has found that emissions pricing (i.e., a carbon tax) always lowers global greenhouse gas emissions from agriculture, even when it is applied in a small group of countries, provided that producers facing the tax can make use of greenhouse gas abatement technologies.
- 178 This suggests that mitigation policies should be considered in conjunction with investments in research and development on abatement practices and technologies. When a small number of countries adopt a carbon tax, about half of the direct reduction in emissions in adopting countries is offset by higher emissions in non-adopting countries; the rate of carbon leakage declines as the group of countries implementing a carbon tax expands.¹⁵
- 179 The Commission also considered emissions leakage in their report on agricultural assistance, and similarly found that it is highly uncertain.
- 180 Under the processor-level NZ ETS option, officials have modelled that 84 per cent of the reductions in Aotearoa New Zealand emissions might leak to other jurisdictions.
- 181 Modelling expects that the farm level levy option could perform better, with only 65 per cent of Aotearoa New Zealand's emissions reduction possibly replaced by additional emissions from trade competitors:
- 181.1 This is because there is greater uptake of mitigation technologies under this option. Domestic uptake of mitigation technologies and practices is critical to avoid emissions leakage.
- 181.2 Generally, sheep meat is more prone to emissions leakage, as Aotearoa New Zealand sheep meat production is much more emissions efficient compared to overseas competition.
- 181.3 Rates of leakage from dairy are lower, with beef falling between these two.
- 182 There are several other factors that will have an impact on whether the results of this modelling will play out in the real world:

¹⁵ Organisation for Economic Cooperation and Development. October 2021. Implications of Carbon Taxes on Agricultural Emissions. Retrieved from <https://www.oecd.org/environment/global-assessment-of-the-carbon-leakage-implications-of-carbon-taxes-on-agricultural-emissions-fc304fad-en.html> (Accessed 22 September 2022).

- 182.1 If Aotearoa New Zealand introduces agricultural emissions pricing, we would set a precedent for other countries to follow, which would limit the risk of emissions leakage.
- 182.2 If mitigation technologies and practices developed in Aotearoa New Zealand are adopted overseas, this will contribute to global emissions reductions.
- 182.3 Consumer preferences in our export markets are evolving.
- 182.4 Climate policy on agriculture is continuing to develop internationally. Other countries are beginning to look more seriously at agricultural emissions, now that the low-hanging fruit from other sectors has already been addressed. Greater agricultural emissions reductions and uptake of mitigation internationally will reduce the emissions leakage resulting from Aotearoa New Zealand domestic policy.
- 182.5 The modelling expects that within the agricultural pricing system itself, there may be a surplus of revenue (after administration and other costs). Combined with incentive and sequestration payments, there may therefore be an additional opportunity to reinvest in additional incentives, sequestration, or relief payments, or to bolster funding toward research and development of mitigations for sheep.

Impacts on Māori

- 183 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 likely significantly and disproportionately impact Māori sheep and beef farmers. This is due to:
 - 183.1 the structural barriers to developing whenua Māori;
 - 183.2 limited access to capital and advice;
 - 183.3 less productive land use capability;
 - 183.4 the limited emissions mitigation options available to sheep and beef farmers, compared to dairy farmers.
- 184 Land-use changes resulting from an emissions pricing policy are also likely to have a flow on effect on the Māori economy and communities. For example, approximately 28 per cent of the meat processing workforce are Māori. Any reduction in Aotearoa New Zealand's sheep and beef sector has the potential to disproportionately impact Māori employment.
- 185 Some respondents to Federation of Māori Authorities engagement considered that a farm-level levy is the only viable option that would recognise the kaitiakitanga role of mana whenua.

- 186 Some submitters also considered the ability to operate at a collective level as a Treaty right, including measuring and mitigating emissions as iwi/hapū collectives.
- 187 The Government is taking into account feedback from Māori in the development of a pricing system, including proposing a farm-level system with collectives. Further engagement with Māori is planned as part of public engagement.

Impacts on rural communities

- 188 Pricing of agriculture emissions will likely lead to significant change in farming practice in Aotearoa New Zealand. This will present both challenges and opportunities to rural communities:
- 188.1 Potential challenges could include a change in spending power across rural communities and of quality of life.
- 188.2 Potential opportunities could include new jobs and retraining opportunities arising from alternative land uses.

Section Two: An interim processor-level levy as a transitional step if the farm-level system is not ready in 2025

Description of proposal

- 189 Implementing a farm-level pricing system in 2025 and meeting the legislated deadline relies on a tightly sequenced series of events. The key components required are:
- 189.1 policy decisions on a preferred option and governance/ownership of implementation;
- 189.2 s 9(2)(f)(iv)
- 189.3 the design and build of the IT system;
- 189.4 s 9(2)(f)(iv)
- 190 s 9(2)(f)(iv)
- 191 To address this, we propose to consult on an interim processor-level levy option as a transitional step if farm level pricing is not possible in 2025. Key components include:
- 191.1 Agricultural processors paying for their emissions associated with the volume of product produced through an interim split-gas levy. For emissions associated with livestock, this is the processor of the animal product (meat or milk).

191.2 Separate levy prices applying for methane and long-lived gases.

191.3 Revenue being recycled to fund administration and R&D, the set-up costs of the farm-level pricing system and supporting on-farm changes through existing funding mechanisms.

192 Agricultural processors already report their annual emissions to the Environmental Protection Authority via the New Zealand Emissions Trading Register. This system could continue to be used to record emissions but instead of trading NZUs, processors would pay a levy.

193 The management of the interim processor-level levy will leverage current systems and processes, likely requiring only minor changes to existing IT systems. This provides a simple and cost-effective approach for this interim arrangement.

194 Implementation of this option does not require a detailed business case and is distinct from the business case required to implement the farm-level pricing system.

195 This option is considered a better option than processors entering the NZ ETS as it includes separate levy prices and revenue recycling.

Proposed approach for triggering the implementation of an interim processor-level levy

196 The interim processor-level levy would only be triggered as a transitional step if the farm-level pricing system is not ready to be implemented in 2025.

197 Primary legislation would set out a framework enabling the Minister of Climate Change and the Minister of Agriculture (the Ministers) to recommend the making of regulations for both a farm-level pricing system and a processor-level levy system.

198 We propose that, if it is not possible to implement the farm-level pricing system in 2025, Ministers could, recommend to Cabinet that a processor-level levy system come into force in 2025, as an interim step.

199 s 9(2)(f)(iv)



200 s 9(2)(f)(iv)

201

202 This approach clearly signals Government's intention to have a farm-level pricing system in place in 2025 to the sector and public, and no additional legislative process is required to 'switch on' farm-level if it is ready to be implemented.

203 As the interim processor-level levy is only a transitional step to farm-level, it is unlikely to be in place for any longer than two years. Work to implement the farm-level system would continue to be progressed as a priority.

What the proposal is expected to achieve and its impacts on the sector and Māori

204 Officials believe that a processor-level levy can be implemented by 2025. As we are not proposing the same degree of farm-level incentives to accompany the processor-level levy it may not meet the targets. An interim processor-level levy would result in additional costs for agricultural processors. Some of these may include both setup and wind-down administrative costs to respond to payment of a levy:

204.1 Farmers and growers are likely to be financially impacted if processors, and importers and manufacturers of synthetic nitrogen fertilisers (if included in the system), choose to pass on the costs of the levy.

204.2 The interim processor-level levy option could lead to reductions in payments for farmers' products. In the case of synthetic nitrogen fertiliser, farmers and growers could face increased product prices.

204.3 Alongside this, farmers and growers would also be preparing to shift to a farm-level pricing system in future. This could have flow-on effects for consumers.

205 As the point of obligation is with processors, there would be no mandatory administrative burden on farmers:

205.1 There may be limited farm-level incentives arranged by the government under the interim processor-level levy, but processors would be able to arrange their own incentive systems that suit their suppliers.

205.2 Applying for incentives is optional and not directly related to levy payment obligation, so this may not encourage farmers and growers to reduce emissions as much as a farm-level pricing system would.

206 An interim processor-level levy would also allow more time to work with, and support, Māori farmers, growers and landowners to participate in the future farm-level pricing system. However, this interim option may not be preferred by many Māori landowners as it does not support them to make decisions or recognise their actions on-farm as much as a farm-level system would.

Section Three: Options for pricing emissions from synthetic nitrogen fertiliser

Description of proposal

207 We propose consulting on two options for the treatment of nitrous oxide and carbon dioxide from the application of synthetic nitrogen fertiliser:

207.1 Option 1: Pricing emissions associated with the application of synthetic nitrogen fertiliser emissions via the farm-level pricing system.

207.2 Option 2: Pricing emissions associated with the application of synthetic nitrogen fertiliser at processor-level in the NZ ETS.

Option 1: Pricing synthetic nitrogen fertiliser emissions at a farm level via the farm-level pricing system

208 Nitrogen fertiliser directly contributes to around six per cent of agricultural emissions¹⁶. Fertiliser has a direct impact on pasture growth. Reducing and optimising the use of synthetic nitrogen fertiliser therefore also reduces enteric methane emissions and nitrous oxide emissions from dung and urine deposited on pastures. The Partnership recommended pricing all agricultural emissions, including those arising from synthetic nitrogen fertiliser, at the farm-level. This is because farmers should have a better understanding of their emissions profile and how they can change their use of synthetic nitrogen fertiliser to reduce emissions (i.e., through mitigation technologies or farm-level practices).

Option 2: Pricing synthetic nitrogen fertiliser at the processor level in the NZ ETS

209 The Commission proposed pricing emissions from synthetic nitrogen fertiliser use within the NZ ETS alongside other sources of long-lived gases. This was on the basis it achieves more broad, equitable and cost-effective coverage of emissions from synthetic nitrogen fertiliser use.

210 The Commission noted the Partnership's farm-level system excluded some users of synthetic nitrogen fertiliser. For example, it would exclude all horticulture, as well as other users of synthetic nitrogen fertiliser, for example, golf courses, home gardens and many orchards and vineyards and would only include around 80 arable farms that use a significant amount of synthetic nitrogen fertiliser.

¹⁶ Of the remaining agricultural emissions, 90 per cent come from ruminant livestock and 4 per cent from the application of lime and burning of crop residues.

- 211 Processor-level pricing of synthetic nitrogen fertiliser would therefore enable a broader and more equitable coverage of emissions from synthetic nitrogen fertiliser application. However, analysis shows that 94 percent of synthetic nitrogen fertiliser use is captured by the proposed farm-level thresholds.
- 212 We see the rationale for both options. We propose feedback is sought via the consultation to determine how emissions from synthetic nitrogen fertiliser should be priced.

Section Four: Options for how sequestration from on-farm vegetation could be recognised

Recognition of sequestration

- 213 We have heard from farmers that if they are to pay for livestock emissions, then they should be recognised for carbon removals currently not captured in the NZ ETS that occur on their farms as well.
- 214 Sequestration is important to farmers, growers and Māori and they see it as a complementary component to the agricultural emissions pricing framework. The Government is committed to recognise additional on-farm sequestration from 2025.
- 215 The Partnership recommended a two-phased approach:
- 215.1 In 2025, vegetation is recognised that is part of existing programmes.
- 215.2 In 2027, a wide scope of vegetation would be integrated into the emissions calculator and levy.
- 216 The Partnership also recommended that the NZ ETS be improved and updated to allow more vegetation categories to be included and the registration and reporting processes to be simplified.
- 216.1 They recommended to prioritise research on improving estimates for the carbon sequestration potential in eligible categories and potential future categories (e.g., farm practices to improve soil carbon).
- 216.2 As a part of Budget 2022, the Government has invested in research through the MaxCarbon research programme that aims to support updates to our carbon accounting in pre-1990 and post-89 forests.
- 217 The Commission strongly advised against integrating on-farm vegetation into a farm-level emissions pricing system. Concerns include that it:
- 217.1 increases the complexity of the pricing system and would create implementation challenges for farmers, government, and the wider sector;
- 217.2 creates inconsistencies with the split gas target and weakens efforts to reach emissions targets;

- 217.3 would not effectively incentivise additional vegetation and carbon sequestration beyond what is already occurring on farms;
- 217.4 produces significant inequity. There are councils, businesses, iwi/Māori, and other landowners with significant amounts of He Waka Eke Noa eligible vegetation that face emissions pricing via the NZ ETS, but who would be unable to claim financial reward for their sequestration under the proposal.
- 218 The Commission was supportive of tools being developed to further incentivise additional removals from on-farm vegetation either within or outside of the NZ ETS.

The NZ ETS with international backing as the long-term goal for recognising sequestration

- 219 We consider the NZ ETS – with full international backing – is the most appropriate mechanism to reward all forms of sequestration from vegetation. Having one system that recognises sequestration in Aotearoa New Zealand is a more coherent, efficient, and equitable approach.
- 220 As part of this work on the NZ ETS, we propose to investigate an innovative system to reward sequestration in the long term. There is a burden of proof for including new categories of vegetation into the NZ ETS and Aotearoa New Zealand's greenhouse gas reporting and accounting. This proposal could leave the burden of proof to lie with those willing to invest or co-invest with the Government in the necessary science and measurement, with independent third-party verification of the science.
- 221 Using the NZ ETS to recognise on-farm sequestration directly addresses some of the Commission's concerns related to fairness and credibility. All eligible landowners could earn NZUs that could be sold within the NZ ETS. However, the NZ ETS currently penalises any deforestation that occurs on all pre-1990 forest land. Clearance or degradation of vegetation in any additional categories could similarly be penalised for the removal of carbon stock.
- 222 Given the timeframes required to deliver some additional sequestration recognition, a short-term solution for recognising of on-farm vegetation is required for 2025.

Recognising sequestration in 2025

- 223 The Partnership recommended a simplified sequestration scheme as an interim option that rewards sequestration in existing programmes such as QEII, Ngā Whenua Rāhui, Māori Reservation land, and relevant Regional Council-funded indigenous vegetation on farmland:
- 223.1 These programmes were set up with purposes not aligned with achieving carbon sequestration. Therefore, the proposal somewhat

arbitrarily includes and excludes appropriate participants from being eligible for the recognition.

223.2 However, we will investigate the extent to which existing programmes could potentially support recognition of sequestration in 2025.

- 224 Instead, a simple system could be developed and implemented by 2025 that sits adjacent to the levy and pays farmers for sequestration via contracts. Only additional sequestration would be considered for recognition, as recommended by the Partnership. Additional sequestration is defined as greenhouse gas removals that would not have occurred under a business-as-usual situation.
- 225 This system would reward additional sequestration arising from riparian margins and the ongoing management of indigenous vegetation. Officials support recognition of these two forms of vegetation because they tend to be the more permanent forms of vegetation and provide wider environmental benefits.
- 226 Our clear intent is to proceed with recognising these two forms of vegetation in the farm-pricing system from 2025, and it is intended to signal this in the consultation document.
- 227 There are however a number of issues that need to be resolved before a final decision on this can be made (e.g., approaches to calculating changes in carbon, determination of minimum area threshold, resolving any equity issues associated with landowners who are not farmers but own similar forests – especially Māori owners of indigenous forests).
- 228 Levy participants would need to apply for their eligible vegetation to be recognised from a fund provided for by levy revenue. Successful applicants would enter in a contract with the implementation agency for a set number of years.
- 229 Sequestration would be rewarded based on the additional management actions, such as stock exclusion. Following the end of the contract, there would be no ongoing liability associated with maintaining the vegetation as required to receive the initial recognition.
- 230 The ability to offset liabilities with sequestration is seen as a critical component of the pricing system for the sector and Māori, which will not be fully realised if some applicants are not able to receive a sequestration payment.
- 231 Sequestration would be paid by the levy, with a set allocation of money set aside. Because these vegetation types are being paid by the levy, it would only be available to levy participants, and therefore has equity concerns for non-levy paying landowners.
- 232 Officials will seek to ensure consistency and explore cross-over between this option and biodiversity incentives being developed in relation to the National

Policy Statement for Indigenous Biodiversity exposure draft and Te Mana o te Taiao, the Aotearoa New Zealand Biodiversity Strategy.

- 233 This partially responds to the Commission's concerns about integrating sequestration payments into the farm-level system, while still providing farmers with some recognition of on-farm sequestration. Measures can be put in place to provide a transition pathway towards these additional categories of sequestration being recognised through the NZ ETS.

Section Five: The Minister of Climate Change's proposed additional consultation points

Mechanisms to ensure contribution to achieving targets

- 234 The Minister of Climate Change also proposes a mechanism for the agricultural sector to contribute to the cost of meeting Aotearoa New Zealand's emissions reduction commitments with offshore abatement if its emissions do not fall sufficiently.
- 235 In the event Aotearoa New Zealand does not meet its legislated targets and/or domestic components of its NDC, the Government will face choices about how to make up the shortfall:
- 235.1 Sectors covered by the NZ ETS generate revenue for the Government which is currently recycled back into climate change initiatives through the Climate Emergency Response Fund (CERF).
- 235.2 Emissions covered by the NZ ETS are capped. If agricultural emissions remain outside the NZ ETS, without a cap, and all revenue after administration costs is recycled into on-farm incentives, this will need to be taken into account.
- 236 This approach would balance placing trust in the sector that its preference for a farm-level pricing system will deliver modelled outcomes, with clear accountability in the event agricultural emissions do not respond sufficiently. This mechanism would act as a backstop, providing an enhanced incentive for the sector to meet its emissions reduction targets, and mean the agriculture sector would be required to contribute to the fiscal cost of abatement.
- 237 Under this proposed mechanism, the agricultural sector would be able to emit up to its sub-sector target in the emissions budget for 2026-30 (which is provisionally set at 191 Mt CO₂-e). If the sector had or was expected to have emissions higher than this, then a portion of the revenue raised from the levy would be diverted to offset the fiscal cost of purchasing abatement.
- 238 If, for example, agricultural emissions between 2026-30 totalled 200 Mt CO₂-e and the agriculture sub-sector target was 191 Mt CO₂-e, the cost of 9 Mt of abatement would need to be diverted.

Long-lived gas proportional discount

- 239 The Minister of Climate Changes proposes consulting on matching the proportional discount phase out rate for agricultural long-lived gases to the industrial NZ ETS allocation phase out rates. This would be fairer to other sectors and be more effective at driving emissions reductions.

Mechanism to promote equity across sectors

- 240 The Minister of Climate Change recommends that the new system also returns \$338.7 million allocated to the Centre for Climate Action on Agricultural Emissions to the CERF, over time. This is because CERF revenue comes from industrial and energy emissions and not agricultural biological emissions.
- 241 The Minister of Climate Change considers that the principle of recycling revenue into reducing emissions should be applied evenly because it is unfair to spend revenue from energy and industry emissions on agricultural biological emissions reductions when (a) agricultural biological emissions did not contribute to the CERF and (b) energy and industry emissions reductions can't be paid for from any agricultural levy revenue.

Implementation and Review

s 9(2)(f)(iv)

Proactive Release

s 9(2)(f)(iv)

Proactive Release

s 9(2)(f)(iv)

Proactive Release

- 247 Officials will also continue to carry out the work necessary to enable the ETS backstop to be operational should Cabinet decide in February 2023 not to progress with an alternative pricing system. Officials consider that the ETS backstop can be implemented by 1 January 2025 should this be Cabinet's preferred approach.

Increasing farm and sector readiness in implementation

- 248 Implementation planning will need to address how the capability and capacity of the agricultural sector will increase to support farms to meet requirements, and to ensure the implementing agency can enforce requirements. It is unlikely that the sector currently has the capacity to support all farms to meet requirements under the proposed farm-level pricing system scheme. It's also unlikely there is an available workforce to audit a subset of farms in each year.
- 249 Training the advisory workforce to have the skills and capacity to support farmers is crucial to the implementation of the farm-level pricing system. Several initiatives are already underway to address this including:
- 249.1 Introductory training courses on greenhouse gas emissions and climate change have been running for two years. More in-depth training modules intending to move advisers from being knowledgeable to being 'expert' are now part of the CERF extension work programme.
 - 249.2 Exploring the level of expertise in climate change and greenhouse gas emissions reduction to understand the availability of skilled advisers (which is anecdotally very low) and developing a long term (5-15 year) advisory workforce capability model.
 - 249.3 Growing the number of farm advisers on the ground through MPI's Careers Pathway Scheme which has training tailored to the individual and may include a greenhouse gas component in the future.
 - 249.4 Direct engagement with farmers and growers led by sector bodies who are running workshops and engaging with farmers and growers as part of the Partnership to ensure farmers and growers know their emissions and have a plan to manage these. With the roll out of CERF initiatives, the scale of the extension programme to support emissions reduction will increase.

Review

- 250 We propose a post implementation review in 2030. This would provide the opportunity to ensure the farm-level pricing system design is still appropriate. The review could consider, among other things:
- 250.1 the extent to which agricultural emissions have reduced;
 - 250.2 projected future emissions from the sector;
 - 250.3 opportunities to improve the effectiveness of the farm-level pricing system (for example, through the adoption of a marginal pricing model);
 - 250.4 the social and economic impact of the levy to date.
- 251 The review would also be an opportunity to assess the level of support provided to the sector, such as the speed at which the proportionate discount

for the long-lived gas levy phases out and the extent to which revenue raised is recycled back to the sector.

- 252 The Minister of Climate Change notes the long-lived gas levy phase down rate discussed above (one percentage point per year) is inconsistent with the industrial allocation phase-down rates (which will increase from 1 to 2 percentage points per year from 2030, and will increase again to 3 percentage points per year from 2040). This raises another question of fairness between the agriculture sector and all other sectors.
- 253 The Minister of Climate Change also notes the Commission has advised that policies to reduce emissions in line with Aotearoa New Zealand's targets will impose costs and create opportunities, and that there will be changes across all sectors as part of the transition. As more is known about these costs and opportunities, it is appropriate the Government review the farm-level pricing system design.

Financial Implications

- 254 Initial work to develop an agricultural emissions pricing system received \$6.28 million in Budget 2022. This provided funding for the development of a detailed business case (\$2m), a pilot of a farm-level system (\$3m), and reporting methodology development (\$1.28m).

255 s 9(2)(f)(iv)

256

Legislative Implications

- 257 A bill and regulations will be needed to implement a farm-level pricing system (with or without an interim processor-level levy). Regulations would be needed to implement the NZ ETS option.

- 258 The implementation of an alternative farm-level pricing system for all agriculture emissions will make existing legislative provisions and processor reporting within the NZ ETS redundant:

258.1 The CCRA provisions for agriculture will need to be revoked to stop the NZ ETS backstop coming into force as currently legislated.

258.2 s 9(2)(f)(iv)

258.3 This will ensure two systems don't exist in parallel, and that there is at least always one pricing system in legislation.

258.4 If an alternative system is progressed, agricultural participants will need to be removed from the Emissions Trading Register.

s 9(2)(f)(iv)

Proactive Release

Te Tiriti o Waitangi Implications

- 262 Te Tiriti o Waitangi obliges the Crown to work together with iwi and hapū in good faith to ensure our climate emergency response recognises Māori tino rangatiratanga, kaitiakitanga and the kāwanatanga of the Crown.
- 263 Māori play a significant role in the primary sector. Māori own an estimated 1.51 million hectares of land. Māori landowners have a substantial primary sector asset base including \$8.6 billion in sheep and beef farming; \$4.9 billion in dairy farming and \$2.6 billion in other agriculture (including horticulture). There are 19,170 Māori employed across these sectors.
- 264 Māori landowners face multiple barriers to managing and developing their land, including land ownership and governance structures, access to capital and advice, and land with less potential for productivity. These same factors will likely impact Māori landowners' ability to respond to an emissions pricing policy.
- 265 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. Draft modelling shows the price of methane emissions will drive 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.
- 266 Changes in land-use in the sheep and beef sector, will impact the Māori economy due to the large proportion of sheep and beef assets, and could potentially impact employment of Māori in the meat processing workforce, where 28 per cent of the workforce identify as Māori.
- 267 It is important to work with Māori landowners to understand how we can manage these impacts, to support a transition to a low-emissions, climate-resilient future.
- 268 The Government is considering feedback from Māori in the development of a pricing system. Potential options to alleviate disproportionate impacts of an emissions-pricing system have been proposed, including ringfencing revenue to support Māori landowners and agribusinesses and recognising sequestration. These mitigations have been informed by earlier engagement with Māori and the input of the Federation of Māori Authorities in the Partnership.

International implications

Trade policy considerations

- 269 There will be a high level of international interest in the design, efficacy, and environmental integrity of Aotearoa New Zealand's agricultural emissions pricing system, presenting an opportunity for Aotearoa New Zealand to build a reputation as a global leader on sustainability.

s 9(2)(h)

270 s 9(2)(h)

271

Impact Analysis

Regulatory Impact Statement

272 An interim Regulatory Impact Statement (RIS) has been prepared for the proposed pricing systems. This will be updated following consultation to incorporate feedback.

273 The Quality Assurance Panel has provided a statement indicating that this RIS 'partially meets' the Treasury standards for regulatory impact assessment, s 9(2)(g)(i)

s 9(2)(g)(i)

274

275 The QA Panel's statement is as follows:

"A quality assurance panel with members from the Treasury, the Ministry for Primary Industries and the Ministry for the Environment has reviewed the interim Regulatory Impact Statement, which is supporting a discussion document. The panel considers that it partially meets the Quality Assurance criteria, s 9(2)(g)(i)

s 9(2)(g)(i)

The RIS usefully assesses a range of feasible options for pricing agriculture emissions against a set of key objectives and criteria, and sets out the costs and benefits of the different approaches relative to the status quo. It would be strengthened by an assessment of different combinations of options. As the RIS notes, one limitation is considerable uncertainty about the impacts of the different options on rural communities and Māori.

In the final RIS, the implementation, monitoring and review sections should be developed further, given the complexity, challenges and risks associated with implementing the system by 2025. The results of consultation on the discussion document should also be incorporated. We recognise the He Waka Eke Noa consultation process has developed one of the options, but

the analysis does not yet draw strongly on the views of stakeholders across all the options.

s 9(2)(g)(i)

Climate Implications of Policy Assessment

- 276 The Climate Implications of Policy Assessment (CIPA) requirement applies to this proposal as it is expected to have a significant emissions impact.
- 277 All three pricing options (farm-level pricing system, processor-level levy and NZ ETS) are modelled as able to meet the 2030 biogenic methane emissions reduction targets. 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.
- 278 Compared to the processor-level NZ ETS, the processor and farm-level levies result in less emissions reduction but is still estimated to be able to achieve more than a 10 per cent reduction in emissions (both total greenhouse gases and methane). The levy at farm-level with a sequestration incentive option is estimated to result in similar emissions outcomes.
- 279 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 agricultural 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.
- 280 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.

Population Implications

- 281 The proposed emissions pricing framework in this paper is expected to impact on the population groups outlined in Table 8. Significant impacts are summarised below and provided in more detail in the assessment of the proposals above.

Table 8: 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 greenhouse gas emissions under the farm-level pricing system. Preliminary economic modelling suggests this will cause a significant reduction in output from the sheep and beef sector and reduced output from dairy, resulting in significant impacts to outputs from the agricultural sector. Modelling is limited to using data to predict outcomes, and it cannot quantify number of positive impacts for the agricultural sector and Aotearoa New Zealand as a whole that result through pricing (including reputation in international markets and avoided cost of abatement above NDC). The pricing system will also be supported by a network of advisory services. In time this will create primary sector opportunities through jobs, services and administration.
Rural communities	Pricing of agriculture emissions will likely lead to significant change in farming practice in Aotearoa New Zealand that will present both challenges and opportunities to rural communities. Potential challenges 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 the risk of widespread financial hardship, improving farm systems, for instance through extension services/programmes, and creating other opportunities for land use.
Māori	Discussed in Te Tiriti o Waitangi implications section.
Households and individuals	A pricing system that is delayed or ineffective in reducing emissions is likely to increase expectations for other sectors to reduce emissions, including potential increases in the NZ ETS unit prices. This will impact household costs for energy and fuel. There would also be a greater reliance on offsetting to enable Aotearoa New Zealand to meet its budgets, targets and NDC. These costs will

Population group	How the proposal may affect this group
	ultimately be transferred to the broader population or come at the expense of other government services.

Human Rights

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

Consultation

Departmental consultation

283 The Department of Conservation, Department of Prime Minister and Cabinet, Environmental Protection Authority, Inland Revenue, Land Information New Zealand, Ministry of Business, Innovation and Employment, Ministry of Foreign Affairs and Trade, Ministry of Justice, Privacy Commissioner, Public Service Commission, Te Arawhiti, Te Puni Kōkiri and Treasury were consulted on this paper.

284 The Treasury provided the following comment for inclusion.

"The Treasury strongly supports the introduction of pricing for agricultural emissions to share the cost of emissions reduction across the economy and to remove the implicit subsidy that agriculture receives due to its exclusion from the NZ ETS.

However, while modelling indicates the proposals in the consultation paper may meet our 2030 targets, we are concerned that proposals will not be sufficient to deliver the emissions reductions that are required to achieve our longer-term emissions reduction targets past 2030. This could have wider implications for the costs of our climate change transition. We also think the proposed approach could lock-in a pathway that has limited opportunities for future improvements.

We also note that the combination of uncertain demand for incentive payments and sequestration as well as low levy prices, generates a fiscal sustainability risk for the system.

In our view the consultation paper could better explore alternative options for key design elements that could help inform final policy decisions, which will be important if changes are deemed necessary post-consultation.

The Treasury recommends that the following options be incorporated in the paper:

- Using the emissions price as the primary driver of abatement, rather than relying on incentive payments. If incentive payments are adopted, these should be considered as a use of levy revenue and applied on a targeted basis.*
- Setting the methane levy on advice from the Climate Change Commission, and this be done in parallel with its advice on the NZ ETS unit supply and price settings and with consideration of New Zealand's domestic and international targets, to allow a whole-of-economy approach to be taken. This is a modification to the option contained in the paper.*

- *Decoupling sequestration from pricing and committing to investigate expanded NZ ETS eligibility criteria to ensure that if genuine sequestration benefits are found, they are available to all landowners.*

Finally, we think that Ministers should seek visibility of the planning for implementation (through the indicative business case) at the earliest possible opportunity so that the viability of the implementation pathway can be tested before final policy decisions are taken”.

Political consultation

- 285 The Green Party was consulted on this paper. The Green Party supports the Minister for Climate Change's efforts to implement a robust, effective, and fair emissions pricing system for agriculture, as soon as possible. This system should operate on the same principles as emissions pricing in the rest of the economy, with a sinking lid on total emissions volumes aligned with targets under the CCRA Climate Change Response Act.
- 286 The Green Party notes that farm-level pricing is seen as likely to be more effective to support on-farm changes to reduce emissions than pricing at processor level. However, it is concerned that the complexity involved to implement an effective farm-level system creates risks that a pricing system could be further delayed.
- 287 The Green Party supports retaining flexibility to implement a processor-level system, including through the ETS, should a farm-level system prove too complex with further work.
- 288 The Green Party's view is that independent price setting such as through a tradable methane market or the ETS, closely linked to emissions targets, would provide a more effective mechanism than a levy set by Cabinet.
- 289 The Green Party opposes proposals for a collaborative governance approach involving the sector to set levy prices, which would risk transparency and independence of process.
- 290 The Green Party supports scientifically sound recognition of on-farm emissions sequestration. However, the Green Party notes that providing a higher price for sequestration than will be charged for emissions will, in the absence of a volumetric cap, likely lead to an increase in gross emissions, rather than a decrease as is required in the legislation.
- 291 Further, the Green Party notes that recognition of sequestration must be consistent with Aotearoa New Zealand's Greenhouse Gas Inventory, domestic targets, and NDC. It queries proposals for work to recognise riparian margin sequestration, and suggests initial work should be focused on larger areas of indigenous vegetation, such as extensive shrublands and restoration of wetlands.
- 292 The Green Party supports advice being provided on use of systems revenue by the Commission, or the existing Centre for Climate Action on Agricultural Emissions, rather than a new advisory body being established. The preparation of that advice should include consultation with Māori landowners.

- 293 The Green Party holds concerns regarding proposed incentive payments, which could result in unintended and duplicative subsidisation when considered alongside the range of supports already available to farmers.

Purpose of consultation

- 294 Given the consultation that has already occurred as part of the 2019 Action on Agriculture consultation process, the purpose of this consultation is not to consult on a farm-level pricing system compared to the NZ ETS backstop.
- 295 The purpose of this consultation is to gather feedback on the design elements for legislation (i.e., levy setting and updating, point of obligation, governance) of the proposed alternative pricing system, particularly where it is different to the design elements consulted on by the Partnership. This feedback will inform final proposals and the decision whether to use the NZ ETS or an alternative system to price agricultural emissions from 2025.
- 296 It will also be important for the discussion document to inform farmers and growers and the wider community what the entire pricing system could look like (not just the elements that sit in legislation). This will support their understanding of the impacts and preparation of submissions. This means details that sit in regulations or operations will be highlighted, but not be the only focus of the discussion document.

Consultation process

- 297 We propose consultation opens on 10 October 2022 and runs for a period of six weeks. Officials will take a mixed-model approach to consultation comprising;
- 297.1 a traditional discussion document with targeted questions;
- 297.2 targeted online meetings and workshops;
- 297.3 some in-person meetings and workshops as appropriate for the audience, for example iwi/Māori.
- 298 The Partnership will be engaged prior to public consultation being announced.
- 299 The Crown has a commitment and responsibility to engage early and meaningfully with iwi/Māori. Engaging inclusively and effectively will also produce the best outcomes for the agricultural emissions pricing system.
- 300 Early conversations have occurred with Ngā Pouwhiro Taimātua and two online hui open to wider Māori were run in January/February 2022. These hui were valuable in identifying the barriers for Māori that would impact their ability to respond to a pricing system, and potential mitigations for these issues.
- 301 We need to continue to engage across the spectrum of Māori communities. This is inclusive of our Treaty partners including iwi, hapū, Māori landowners

and Māori agribusiness. These conversations will need to be tailored to different audiences. Engagement will be in person if the particular group being engaged wishes to do so.

- 302 We are engaging to test and improve our policy with Māori so that we can reach mutually beneficial solutions. We are also hoping to strengthen relationships to inform the implementation stage.

Communications

- 303 Subject to Cabinet agreement we will issue a media statement announcing the release of the discussion document and consultation process.
- 304 The discussion document will be published on both the Ministry for Primary Industries and the Ministry for the Environment's websites.
- 305 There is likely to be high interest in this proposal from iwi/Māori, the primary sector, environmental NGOs and other industry sectors that have been exposed to emissions pricing since 2008.

Proactive Release

- 306 Following Cabinet consideration, we intend to consider the release of this paper on the Ministry for Primary Industries and Ministry for Environment websites in whole or in part, subject to appropriate redactions.

Proactive Release

Recommendations

The Minister of Climate Change and the Minister of Agriculture recommend that the Cabinet Economic Development Committee:

The Government needs to consider the Partnership and the Commission's advice before publishing a report outlining an alternative agricultural emissions pricing system by the end of 2022

1. Agree that the appended discussion document serve as a draft of the alternative system design as required for the Climate Change Response Act 2002 (CCRA) section 215 report, with a final report to be prepared and published following consultation.
2. Agree to delegate authority to the Ministers of Climate Change and Agriculture, and the Prime Minister, to approve publishing the final report required under Section 215 of the CCRA outlining an agricultural emissions pricing system as an alternative to the New Zealand Emissions Trading Scheme (NZ ETS) before 31 December 2022.

A core split-gas farm-level pricing system to commence in 2025 with enhancements to improve effectiveness built in over time

3. Agree to consult on the proposed core design of a split-gas farm-level pricing system as an alternative option for pricing agricultural emissions in 2025. This includes the following key design elements:
 - the business owners above a fertiliser use or stock number threshold have the legal responsibility to report emissions annually using a single calculation engine and simple reporting method;
 - separate levy prices are set for long-lived gases and methane;
 - long-lived gas prices are set annually and linked to the New Zealand Unit (NZU) price, discounted and phased down over time;
 - methane levy prices are reviewed periodically based on progress against emissions targets and advice from the Climate Change Commission (the Commission);
 - incentive payments are funded through revenue raised and available for a range of technology uptake and practice changes to reduce emissions. These incentives will act as a proxy for assistance and provide an opportunity to offset liabilities owed through the pricing system. Detailed reporting and a wider range of mitigations will be introduced over time;
 - any revenue raised from the pricing system, once incentive payments are netted off, would be used for administration where it is appropriate, and remaining funds would be subject to the revenue recycling strategy;
 - a proposed pathway for how sequestration from on-farm vegetation could be recognised in 2025 and in the medium to long term via the NZ ETS;
 - an advisory body (or bodies) is in place consisting of Māori and sector representatives to advise on the use of system revenue and funding to

support Māori landowners and agribusinesses. Ministers will be accountable for how the revenue is spent.

Consultation on a methane market

4. Note the Minister of Climate Change's concerns regarding uncapped emissions, a low marginal price, and the risk of emissions reduction targets being traded off against other considerations when prices are set.
5. Note the Minister of Agriculture's view that a simple farm-level pricing system should achieve the Government's goals of an effective, practical and equitable system to reduce our agricultural greenhouse gas emissions, subject to regular price adjustments.

6. EITHER

- 6.1 Agree to also consult on a proposal to implement a methane market as an alternative to a levy, with other core features of the overall system remaining the same (*Minister of Climate Change's recommendation*).

OR

- 6.2 Agree to only consult on the farm-level split-gas farm-level pricing system (*Minister of Agriculture recommendation*).

An interim processor-level levy as transitional step if the farm-level system is not ready in 2025

7. Agree to consult on a processor-level levy as an interim step if it is not possible to implement farm-level pricing by 2025.

Options for pricing synthetic fertiliser

8. Agree to consult on two options for the treatment of nitrous oxide and carbon dioxide from synthetic nitrogen fertiliser:
 - pricing emissions associated with the application of synthetic nitrogen fertiliser emissions via the farm-level pricing system; and
 - pricing emissions associated with the application of synthetic nitrogen fertiliser at the processor level in the NZ ETS.

Pathway for how sequestration from on-farm vegetation could be recognised

9. Agree to consult on the NZ ETS with international backing as the long-term goal for recognising sequestration.
10. Agree to consult on an interim system to ensure farmers are rewarded for sequestration from 2025.

The Minister of Climate Change's proposed additional consultation points

11. Agree that officials investigate whether the principle of revenue recycling should be applied equally between energy and industrial emissions and agricultural emissions and Climate Emergency Response Fund (CERF)

appropriations to agricultural emissions programmes be recovered from agricultural emissions pricing as revenue allows.

12. Note that if Aotearoa New Zealand does not meet its emissions reduction targets and/or Nationally Determined Contributions (NDC), the Government will have choices about how to recoup resulting costs across economic sectors.
13. Agree to also consult on a mechanism for the agricultural sector to contribute to the cost of abatement in the event its emissions do not meet targets.

Implementation and review

14. Note the Minister of Agriculture and the Minister of Climate Change will explore options to monitor gross emissions reductions in a more regular and timely manner including through data collected by processors.
15. Note that a decision on the lead implementation agency / agencies and governance structures is needed this year to deliver an emissions pricing system in 2025.
16. Note that Ministers have not yet received any advice on options for the lead implementation agency, supporting agencies or any new institutional arrangements. Officials will provide advice to Ministers on these issues, in parallel with the consultation process.
17. Agree that the Climate Response Ministerial Group make in-principle decisions on the lead implementation agency / agencies and governance structure before December 2022 to progress the development of the detailed business case needed to implement the pricing system.
18. Agree that the Ministers of Agriculture and Climate Change will report back to Cabinet in 2030 with a post-implementation review of the agricultural emissions pricing system.

Political consultation

19. Note that the Green Party was consulted on the proposals in this paper and supports the Minister of Climate Change's recommendations. The Green Party believes agricultural emissions pricing must be fair compared to other sectors of the economy, with a sinking lid on total emissions aligned with targets under the CCRA. The Green Party is concerned about the time that farm level emissions pricing will take to implement. The Green Party's preference is for emissions prices to be set independently, rather than by Cabinet.
20. Note that the Cooperation Agreement between the Labour and Green Parties does not restrict Green Party Ministers from noting where Government decisions differ from Green Party policy, including in areas where they hold Ministerial responsibility.

s 9(2)(h)

21. s 9(2)(h)

Consultation strategy

22. Agree that the appended discussion document be released for public consultation between October and November 2022.
23. Authorise the Ministers of Climate Change and Agriculture to make decisions on any subsequent minor amendments to the discussion document not inconsistent with the Cabinet's approvals before its release.
24. Invite the Ministers of Climate Change and Agriculture to report back to Cabinet in February 2023 following consultation with final policy proposals to inform the drafting of legislation needed to implement an agricultural pricing system.

Authorised for lodgement

Hon James Shaw

Minister of Climate Change

Hon Damien O'Connor

Minister of Agriculture

Appendix One: Discussion document

Proactive Release