



Independent Climate Change Committee says it's time for action on reducing agricultural emissions

The independent Interim Climate Change Committee's report *Action on agricultural emissions* was released today by the Minister for Climate Change, Hon James Shaw and the Minister of Agriculture, Hon Damien O'Connor.

Built on a year-long evidence and analysis-based inquiry, the Committee recommends a series of actions the Government should take to reduce emissions of the agricultural greenhouse gases, methane and nitrous oxide.

"It's clear agricultural methane and nitrous oxide emissions are damaging the climate," says Committee Chair, Dr David Prentice. "In New Zealand, we're increasingly seeing the impacts of a changing climate, and globally we're not on track to meet the Paris climate targets."

"For almost two decades, New Zealand has been debating what to do about agricultural emissions. Acting now avoids having to make more disruptive changes later," he says.

"Our farmers are innovative. There are farmers making progress on emissions already and we need to see more of this happening across the whole sector."

The policy package put forward in *Action on agricultural emissions* is staged over time and designed to recognise the role that farmers play in looking after the land. "Our package would provide farmers with practical support and enable them to integrate emissions into their day-to-day planning," says Dr Prentice. "A critical first step is for farmers to understand what their emissions are."

"It's important to recognise farmers as stewards of the land. They are looking to address not just emissions, but water quality and other environmental objectives while running profitable businesses."

Dr Prentice says that the Committee listened to feedback from farmers, iwi/Māori, sector representatives and other groups to ensure its recommendations are fair. The Committee has been conscious of the impacts on rural communities, the international context, and related issues like water quality and soil conservation.

“The actions the Committee recommends are the first steps in a journey that will take decades,” says Dr Prentice.

“We are optimistic that our recommendations will turn into positive climate change action and a fair and equitable pathway towards New Zealand achieving its 2050 target. This is about all of us – New Zealanders today and our future generations.”

The independent Interim Climate Change Committee’s report on *Accelerated electrification* was also released today by the Minister for Energy and Resources, Hon Dr Megan Woods. In this report, the Committee recommends a series of actions the Government should take to reduce greenhouse gas emissions, using electricity to reduce transport and process heat emissions.

The other Committee Members are Lisa Tumahai (Deputy Chair), Dr Harry Clark, Dr Keith Turner and Dr Jan Wright, with specialist adviser Dr Suzi Kerr (whose term finished on 30 April 2019.)

The full report and Terms of Reference are online at:

www.iccc.mfe.govt.nz/what-we-do/agriculture/agriculture-inquiry-final-report

www.iccc.mfe.govt.nz/who-we-are/terms-of-reference

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FAQs

What is the Committee's inquiry about?

The Government asked the Interim Climate Change Committee for evidence and analysis on: '*How surrender obligations could best be arranged if agricultural methane and nitrous oxide emissions enter into the New Zealand Emissions Trading Scheme.*' This inquiry provides recommendations on policies for reducing emissions of the agricultural greenhouse gases, methane and nitrous oxide.

What is the Committee recommending?

The Committee found that addressing agricultural emissions needs a package that includes both emissions pricing and practical support to help farmers understand how to change to lower emitting practices and/or move towards lower emission land uses.

The Committee outlines a two-stage process for implementing emissions pricing for methane and nitrous oxide emissions from livestock:

- as a first interim step, price these emissions at processor level through the Emissions Trading Scheme
- as a second step, by 2025 implement a farm-level emissions price via a levy/rebate scheme that is integrated with the Emissions Trading Scheme.

For emissions from nitrogen fertiliser, the Committee recommends pricing these at the manufacturer and importer level in the Emissions Trading Scheme as soon as practicable.

The Committee recommends that any recycling of funds from pricing agricultural emissions should be focused on practical support programmes that will directly help farmers reduce emissions. For example, this could be through farm environment planning, extension, and deploying new technologies and practices.

The Committee also recommends that free allocation be provided in a way that helps manage the social impacts on farmers and rural communities, while maintaining incentives to reduce emissions.

Why is the Committee recommending a levy/rebate scheme?

The Committee recommends pricing livestock emissions at farm-level using a levy/rebate scheme by 2025. This would be integrated with the Emissions Trading Scheme but would reduce the cost, risk and complexity for farmers as they wouldn't have to trade units. This approach would recognise farmers who are making progress on their emissions.

How would the recommended farm-level levy/rebate scheme relate to the Emissions Trading Scheme?

The Committee has recommended a levy/rebate scheme which is integrated with the Emissions Trading Scheme. The levy rate for nitrous oxide can be linked to the emissions price in the Emissions Trading Scheme, while a separate target for methane can be factored in to how the levy rate for methane is set.

Why is an interim step needed?

The Committee estimates that it would take around five years to implement a farm-level levy/rebate scheme for livestock emissions. But New Zealand can't wait until 2025 to start addressing agricultural emissions. The Committee recommends pricing livestock emissions at the processor-level in the Emissions Trading Scheme as soon as practicable.

The option of a formal agreement between the Government and the sector was also considered, but the Committee judged that this approach would likely result in greater on-going policy uncertainty.

Why use the Emissions Trading Scheme as the interim step?

As an interim measure, the Committee recommends pricing livestock emissions at a processor-level through the Emissions Trading Scheme, rather than through the levy/rebate scheme that is recommended at farm-level. The Emissions Trading Scheme provides options for managing emissions price risk that agricultural processors are more likely than farmers to find valuable and want to use. This approach is also in line with the treatment of other emitters of similar size and capability. Processors also have some familiarity with the Scheme as they are already reporting their emissions and some may already have obligations for their energy emissions.

What impact would this policy have on farmers and the agriculture sector?

Pricing agricultural emissions would encourage farmers to factor emissions into their everyday decision-making. The money from pricing emissions would be recycled back into programmes that help farmers reduce emissions. Farmers and rural communities would be assisted through the transition with 95% free allocation provided in a way that helps manage the social impacts on farmers and rural communities while maintaining incentives to reduce emissions.

An emissions price would cost farmers on average 1 cent per kilogram of milk solids or 3 cents per kilogram of sheep meat, assuming an emissions price of \$25 and 95% free allocation. However, the cost could vary across farms depending on their emissions performance.

How will this affect iwi/Māori?

Any policy to reduce agricultural emissions must fulfil Te Tiriti o Waitangi principle of partnership and good faith with iwi/hapū and recognise the unique characteristics of Māori land. This includes enabling iwi/Māori owned farm enterprises to equitably engage and take up opportunities while taking into account that some iwi/Māori land owners have been unable to develop their land and are also unlikely to sell it. The Committee recommends that the Government work with iwi/Māori on how to implement the policy package, including on an action plan that enables farmers and owners of Māori land to respond effectively to emissions pricing.

What will happen to the funds raised?

Pricing methane and nitrous emissions could raise between \$47 and \$95 million per year over the first decade, assuming an emissions price range of \$25-50. The Committee recommends setting up an Agricultural Emissions Fund for recycling these resources back into programmes that will directly help farmers to reduce emissions. The Committee recommends that a Board oversees this fund and reports regularly on the effectiveness of the funds spent, and that it includes representatives from the agriculture sector and iwi/Māori land owners to ensure effective co-governance.

What about trees and vegetation on farms?

Farmers consistently raise the issue that not all trees and vegetation on their farms can earn units from carbon sequestration. There are numerous issues to consider and the Committee recommends that Government investigates:

- Making it easier for owners of eligible forests to register them in the Emissions Trading Scheme
- Opportunities to reward forestry management that stores additional carbon in pre-1990 forests, and to account for carbon sequestration from small plantings on farms, and
- The feasibility of 'netting off' carbon removals and agricultural emissions at the farm-gate.

What are New Zealand's agricultural emissions?

The two main agricultural greenhouse gases are methane and nitrous oxide. Agricultural greenhouse gas emissions largely come from livestock, as well as from fertiliser spread on farms. Together these emissions account for around 48% of New Zealand's total reported greenhouse gas emissions.

Why do we need to reduce emissions of the agricultural greenhouse gases?

In 2015, global leaders met in Paris to negotiate a new climate change agreement, which includes a goal to limit warming to well below 2 degrees above pre-industrial levels, and to pursue efforts to limit the increase to 1.5 degrees. Globally, we are not currently on track to achieve the goals of

this agreement. To get on track, emissions from all sources globally need to be reduced as much as possible, including from agriculture.

Should methane be treated differently?

The less methane we emit in the future, the less we will contribute to global warming. But methane is a relatively short-lived gas, which means it does not necessarily have to be reduced to zero. Consequently, there is a debate about what the long-term reduction target for methane should be. As part of the Zero Carbon Bill process, the Government recently proposed emissions targets for 2050, including a separate target for methane. The Committee's role was not to provide advice on targets, but rather to provide evidence, analysis and recommendations on policies that could deliver on any targets.

What about nitrous oxide?

There is often less focus put on nitrous oxide, but it is a potent and long-lived greenhouse gas that makes up 11% of New Zealand's emissions. Nitrous oxide must be part of efforts to achieve net zero if the world is to limit warming to within 1.5 degrees.

Why give farmers 95% free allocation?

The Government committed to providing 95% free allocation if agriculture was included in the Emissions Trading Scheme. The Committee considers that the main reason for providing free allocation to the agricultural sector is to help manage the impacts of emissions pricing on farmers and rural communities. The free allocation approach the Committee is recommending aims to strike a balance between encouraging emissions reductions and managing the pace of change. The 95% rate of free allocation is broadly comparable with free allocation provided to emissions-intensive trade-exposed industries such as steel making and aluminium smelting.

The Committee recommends that any changes to the 95% free allocation should be informed by independent advice from the proposed Climate Change Commission.

What about emissions from other sectors?

All other businesses and individuals that emit greenhouse gas emissions face an emissions price. For example, all New Zealanders including farmers pay an emissions price at the petrol pump for the emissions from petrol. Currently, agricultural emissions are the only emissions that are not priced.

What are other countries doing about agricultural emissions?

Many countries include agricultural emissions in their targets. New Zealand is currently the only country considering a compulsory emissions price on agricultural emissions, although pricing

agricultural emissions is regularly discussed – most recently in Ireland. However, many of our key agricultural competitors, particularly in Western Europe and North America, do have stringent targets and policies to limit pollution from nitrates, phosphorus and ammonia, which indirectly limit greenhouse gas emissions and/or production increases. In the coming years, other countries will need to increase their efforts to reduce agricultural emissions in order to meet their targets and the Paris Agreement goals.

But aren't farmers already reducing emissions in New Zealand?

Innovation in the agricultural sector has reduced its emissions intensity (emissions per unit product) by about 20% over the last 25 years. But overall agricultural emissions have increased 13.5% since 1990. The improvements farmers have made have helped keep agricultural emissions relatively stable since 2012. The Committee acknowledges what the sector has already achieved, but also notes that it is not enough to achieve the outcomes sought in the Paris Agreement. The sooner we get going on reducing agricultural emissions, the more opportunity we will have to adjust gradually rather than having to make disruptive changes later.

So is there anything farmers can do right now to reduce their on-farm emissions?

There are things farmers can do to reduce emissions – not just planting trees. What works will depend on the individual farmer and their farm. A first step is for farmers to understand what their emissions are. A few examples of what actions farmers could consider include:

- Maintaining production by increasing animal performance while reducing stocking rates
- Shifting to a less intensive system
- Improving the efficiency of fertiliser use
- Using different feeds
- Diversifying farm operations

Further details on these examples are provided in the Biological Emissions Reference Group's report.

How does this relate to farmers' work in addressing water quality and other environmental issues?

In making recommendations, the Committee has been mindful that emissions management on farms needs to fit into broader farm outcomes, including meeting business and other environmental objectives such as improving water quality and conserving biodiversity. Farm environment plans that link these objectives will play an important role in farmers' planning to meet all these objectives.

Who did the Committee meet with during its investigations?

The Committee met with over 600 individuals, representing more than 200 organisations, during the last 12 months. This includes iwi/Māori representatives, an agricultural forum attended by key organisations and industry representatives, a series of rural workshops held around the country for farmers as well as meetings with foresters, environmental and youth groups.

Where can I find a copy of the report?

The full report: *Action on agricultural emissions*, as well as supplementary material can be found on our website at: www.iccc.mfe.govt.nz/what-we-do/agriculture/agriculture-inquiry-final-report

So what is the Interim Climate Change Committee doing now?

We are underway with the next phase of our work programme with a focus on leadership, evidence and connectedness – the critical elements required for the independent Climate Change Commission to start work as soon as it is established. The Commission will present its first advice in February 2021, for which they will need a range of tools and a broad evidence base. To prepare the Commission's technical foundations, the Committee is working on:

- Prototyping a sectoral approach, focusing on the transport sector
- Assessing data and modelling needs in the land use sector
- Developing high-quality, sector-wide models and analysis to inform emissions budgets

We are also building foundations for assessing impacts on iwi/Māori, communities and regions, and across generations.

Our priorities, outlined in our letter of 7 May 2019 to the Climate Change Minister, are online [here](#).

How can I get in touch with the Interim Climate Change Committee?

Please send any feedback you have regarding this report to enquiries@iccc.mfe.govt.nz. Our full contact information can be found on our website: www.iccc.mfe.govt.nz