



SUBMISSION

on

**2023 Draft advice to inform the strategic direction of
the Government's second emissions reduction plan**

to

He Pou a Rangī, Climate Change Commission

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About the Fertiliser Association of New Zealand

1. The Fertiliser Association of New Zealand (the Association), is an industry association funded by member companies, to address issues of common public good. Member companies include Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both are farmer co-operatives with some 35,000 farmer shareholders. Between them, our members supply the vast majority of all fertiliser used in New Zealand. As co-operatives, they are driven by delivering best value to farmer shareholders rather than maximising the value of product sales to farmer shareholders.
2. Our members have significant numbers of on-farm advisers – around 200 – directly engaging with farmers every day. Their staff are well trained and highly skilled in delivering expert assistance to farmers and growers to make informed, evidence-based nutrient management decisions for their farm systems.
3. The Association member companies have invested significantly in products, systems and procedures which support responsible nutrient management to support a viable primary industry within environmental limits.

Summary

4. The Fertiliser Association supports the proposed recommendations for agriculture.
5. Recognition of a broader range of emissions-reducing practices and technologies is a key factor in realising emission reductions.
6. The fertiliser industry has supported farmers to contribute to the reductions required in the first emissions budget, through increased efficiencies, precision agriculture technologies, improved management and reductions in nitrogen fertiliser use.
7. While we are supportive of increased use of coated urea, the achievement of a milestone of 100% urease inhibitor coated urea has regulatory risk to achievement and ignores the fact that coated urea may not be the best product in all circumstances. Ultimately successful emissions reduction will be aided by use of a broad range of inhibitors.
8. Enabling use and recognition of a broader range of emissions-reducing practices and technologies is critical to achieving emissions reductions. This must include complying with international regulatory frameworks to ensure market access and assurance of food safety.

Submission

9. The Commission's draft advice to Government to inform the direction of the Government's second emissions reduction plan includes proposed recommendations 8 and 9 for the second budget period as follows:

Recommendation 8)

Enhance advisory and extension services to farmers to enable them to respond to pricing and accelerate the adoption of emissions-efficient practices, appropriate land-use diversification, and emerging technologies to reduce gross emissions. These services should be co-designed and implemented in partnership with industry and Iwi/Māori.

Recommendation 9)

Advance the agricultural emissions pricing system to:

a. enable recognition of a broader range of emissions-reducing practices and technologies

b. incentivise gross emissions reductions in line with the 2050 target.

10. We are in support of this intent.
11. There has been a significant fall in fertiliser emissions relative to 2019. In response to a wide range of drivers, including regulatory and commercial drivers, and as a result of increased efficiencies, precision agriculture technologies and improved management, nitrogen fertiliser use (and associated emissions), has seen a reduction of approximately 22 % since 2019/2020. Current nitrogen fertiliser use is lower than in any of the previous 9 years. (Figure 1).
12. This drop in nitrogen fertiliser use is associated with a fall in annual emissions from fertiliser of over 450 ktonnes in CO₂-eq compared to the year of peak use. While nitrous oxide emissions from nitrogen fertiliser application to land only make up about 4 per cent of agricultural emissions, this reduction will make a valuable contribution to the reduction of emissions from agriculture in the first emissions budget.

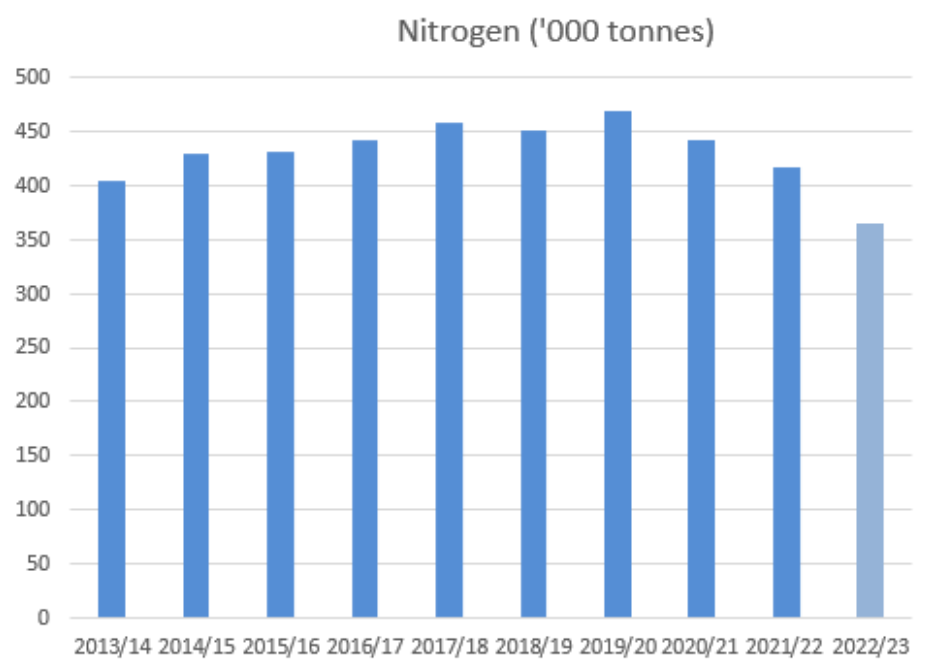


Figure 1: Total nitrogen use demonstrating reduction since peak use in 2019/220

13. Some of this reduction in emissions is associated with farmer use of 'urease inhibitor' coated urea, which represents another pathway for reduced emissions when using urea fertiliser.
14. Urease inhibitors coated on urea fertiliser now accounts for approximately 60 % of urea fertiliser used in New Zealand. This percentage has seen a steady increase over time as farmers have recognised the benefits (Figure 2). The inhibitor enables farmers to use less nitrogen while achieving the same level of production.
15. It is expected that increasing use of coated urea products will continue – though it is unlikely that an absolute of 100 percent of coated products will be achieved. Coated urea is appropriate for use in many circumstances, however in some situations, it will not achieve the same level of benefit, for example where urea is incorporated below the soil surface or where used as part of an irrigation programme.

16. There are also a number of risks in the current regulatory environment– continued use of urease in New Zealand will require registration under the Agricultural Compounds and Veterinary Medicines (ACVM) Act by July 2024. If the requirements for registration cannot be met within that timeframe, it will be necessary to withdraw urease inhibitor coated product from the market. Continued use of coated urea will therefore be dependent on successful registration of the product under ACVM.

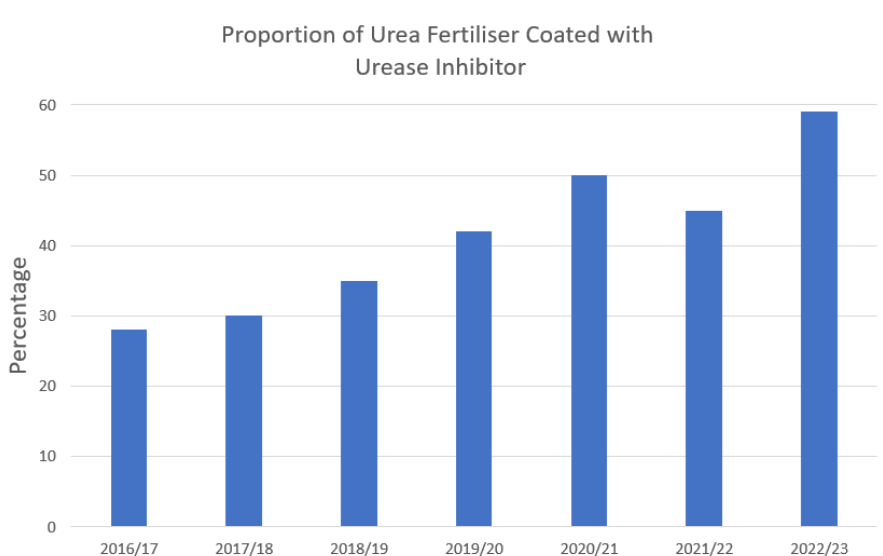


Figure 2: Adoption of urease inhibitor coated urea as a percentage of total urea use

17. There has been significant investment by the fertiliser cooperatives in research and development –somewhere in the order of \$50 million over the last 5 years, and estimates indicate it will be 100 million over the next 5 years. This commitment to investment in new technologies and systems recognises the important role that innovation can play in reducing emissions while maintaining productivity.
18. Nitrification inhibitors can have a significant impact on emissions from fertiliser. Currently NZ research is targeting the enabling of use of such inhibitors in NZ. They could be used on their own, or in combination with existing inhibitors.
19. Any new inhibitor products will require registration to ensure that there is no risk of residues impacting on food safety. Use of these products on pasture will be novel, so will need to take account of the international regulatory environment as well as the domestic one.
20. We consider that use of nitrification inhibitor products could have the potential to make a contribution to the emissions reduction required under the second emissions budget period.

End.