



**Submission on:**  
**Low-emissions economy - Draft report**

**From**

**Ballance Agri-Nutrients Limited**

**8 June 2018**

## Submitters Details

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## Commercial Sensitivity

Nothing in this submission is confidential.

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## Introduction

Ballance Agri-Nutrients Limited (“Ballance”) would like to thank the New Zealand Productivity Commission for the opportunity to make this submission on the recently issued the Low-emissions economy – Draft report.

### Company Overview

Ballance is a farmer-owned co-operative with around 19,000 shareholders and approximately 800 staff throughout New Zealand. We own and operate super-phosphate manufacturing plants located in Tauranga and Invercargill, as well as New Zealand’s only ammonia-urea manufacturing plant located at Kapuni, South Taranaki. The Company also owns and operates ‘SuperAir’, an agricultural aviation company; ‘SealesWinslow’, a high-performance compound feed manufacturer. Ballance has a network of fertiliser storage and dispatch facilities across the country.

As well as supporting New Zealand farmers, Ballance also supplies products to a range of domestic industrial businesses including the domestic wood processing sector:

- Urea, is used in the production of formaldehyde based resins, a key ingredient in the manufacture of particleboard and MDF. In addition, an extremely high purity urea solution is used to produce GoClear at the Kapuni plant. GoClear is an exhaust system additive and scrubbing agent that reduces harmful nitrogen oxide (NOx) emissions from diesel engines, breaking the NOx down into harmless water vapour and nitrogen gas.
- Other products important to non-farming industries include ammonia, used as a refrigerant; sulphuric acid used in the dairy, pulp and paper and power generation industries and liquid alum and hydrofluosilicic acid, both used in water treatment processes.

Ballance places a strong emphasis on delivering value to its shareholders and on the use of the best science to inform and deliver sustainable nutrient management.

### Ballance’s Engagement in Climate Change Policy Development

Ballance strongly supports New Zealand playing its part in international climate change mitigation action and fully endorses New Zealand’s ratification of the Paris Agreement.

- We support the efficient use of products, such as urea, and in the context of agricultural emissions recommend that emission abatement measures should be recognised at the farm level.
- Our view is that emissions pricing alone will not be sufficient to transition the economy at the pace required and supportive policies, in the form of R&D support policies or direct contestable research funding, are also required to accelerate the development & uptake of solutions.
- Domestic policies must continue to recognise carbon leakage i.e. it would not be logical to lose economic activity in New Zealand and displace emissions offshore with no net global emissions reduction. Ballance supports free allocation as a means to counter carbon leakage in trade exposed sectors covered by the New Zealand Emission Trading Scheme.

### Ballance’s Exposure to the NZ Emissions Trading Scheme

Ballance’s operations are directly impacted by the New Zealand Emissions Trading Scheme (NZ ETS). Any change in policy that leads to an increase in ETS related costs is therefore a significant concern to Ballance.

The Kapuni Urea manufacturing facility is an Emissions-Intensive and Trade-Exposed (EITE) entity competing against imported Urea from countries that do not have a Greenhouse gas programme. As a manufacturer and importer of Urea, Ballance is a mandatory reporter (within the Agriculture Sector), for synthetic fertiliser containing nitrogen. All of Ballance’s operations are exposed to NZ ETS costs passed through by energy suppliers and second round impacts including freight costs and inflationary pressure.

## Ballance's Exposure from Agricultural Emissions

Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste. Nitrous oxide gas commonly comes from the conversion, in the soil by microbes, of nitrogen (e.g. sourced from plants, fertiliser, urine and dung).

The Kapuni Urea manufacturing facility produces approximately 240,000 tonnes of Urea annually and Ballance imports approximately 450,000 tonnes of nitrogen containing fertiliser.

## Submission Summary

A summary of our submission is provided below. Answers to the specific questions where Ballance believes it can most add value are also provided and include further detailed supporting material.

1. Ballance strongly supports the concept of setting durable policies (i.e. supported by major political parties) for firms and households to move towards a less emissions-intensive future.
2. If New Zealand is going to become a low-emission economy then delaying action would be more costly.
3. It is fundamental role of government to ensure adequate investment for the transition to a low-emissions economy.
4. Domestic policies must continue to recognise emission leakage.
5. Having the point of obligation for agricultural emissions at the processor level is easiest, but it won't drive change.
6. The opportunity to be involved in the NZ ETS should be widened to include current and possible future mechanisms for greenhouse gas capture.

## Submission Details

### Feedback Context

Ballance considered the report provided a good high level overview. However, being an overview some technical issues Ballance considers important were glossed over. Ballance is concerned that the NZ Productivity Commissions draft report's modelling shows a path, but perhaps not the most sustainable path.

Not all 'Findings', 'Recommendations', or 'Questions' have received comment and for the most part, the feedback in this submission is focussed on matters relating to agricultural emissions.

### Durable Policy

Ballance agrees that with statement in Chapter 7.1 that "Political durability is key". It is essential that political consensus is achieved before New Zealand commits to a long-term, low-emissions goal where significant change to core legal and institutional architecture is required.

### Quick Start

Ballance agrees that if New Zealand want to lead the world towards a low-emission economy delay will be costly. Ballance see benefit to adopting the slow and gradual transition discussed in Chapter 2.2 as opposed to a sudden and significant change in say 2040. Delays will only make the transition more costly.

### Adequate investment

Beyond the obvious requirement for a major shift of private capital investment while transitioning to a low-emissions economy, there will also be a need for significant public investment. In Ballance's submission to the Productivity Commission in 2017 (Q22) we said

*Ballance believes a mechanism to allocate or provide the ability to acquire carbon credits from new technologies is required.*

*The development of a "Primary Growth Partnership" equivalent fund, similar to that run by MPI, where private sector investment is matched by Government via emission credit guarantees or hard cash co-funding is one option. This would reflect the large public benefit from any emission reductions and the risk the private sector would have to take to develop innovative practices.*

*To ensure the taxpayer gets the best value for money amongst the ideas submitted, the fund should be contestable.*

Investment is discussed in Chapter 6, but there might be room for expanding the debate. Areas that might require more consideration or detail include:

- Whether it would be cheaper to invest in research rather than NZUs, if it can be demonstrated that the research will have wide benefits and ongoing impact? This would essentially be enabling research investment to be used as an offsetting tool. If the Green Fund could occupy this sort of space then this sort of mechanism might also be useful for agriculture processing facilities. For example, in the South Island with little option to move away from coal, research may encourage on-farm reductions rather than the shifting of processing plants.
- It might be worthwhile thinking about how the Green Investment Fund links to the R and D Tax incentive being proposed.

### Carbon Leakage

Domestic policies must continue to recognise emission / carbon leakage. As discussed in Chapter 2.6 and Chapter 4, it is not logical to lose economic activity only to displace emissions offshore. New Zealand

requires a system to maintain our international competitiveness while other nations also transition to a low-emission economy. Differences in carbon prices across countries can be a driver of carbon leakage where some production activity transfers from a jurisdiction with a higher carbon price to one with a lower carbon price, even though the latter may have a higher emissions intensity.

## Land Use

### F10.4

*No mitigation option currently exists for achieving dramatic reductions in New Zealand's agricultural emissions without substantially reducing production. Yet, many farmers can achieve modest reductions (perhaps up to 15%) through productivity gains and shifting to low-emissions practices. Some options can also improve farm profitability. More options are currently available for reducing nitrous oxide emissions than methane. Options for sheep and beef farming are much more limited than for dairying.*

The ability to reduce nitrous oxide emissions in agriculture are potentially overstated. Other than cutting back on production, mitigation options for agricultural nitrous oxide emissions in agriculture also remain very limited. There is an argument, where food security is important, for intensity-based measures where mitigation options are limited.

### F10.10

*New Zealand's trade competitors do not yet face a price on their agricultural emissions.*

*Given New Zealand's agricultural sector is highly trade-exposed, introducing a price for agricultural emissions without support would reduce the international competitiveness of New Zealand farms and potentially result in emissions leakage.*

*Yet, with adequate support for farmers (e.g., provision of free allocations), pricing agricultural emissions will provide incentives to reduce emissions, while lessening any risk to the viability of New Zealand's agricultural businesses. Also, the risk may not be as severe as some suggest, since New Zealand's core competitors in international trade are likely eventually to face comparable regulation of emissions.*

New Zealand is likely to be the first to introduce agriculture and the trade risk is very real. This trade risk should not be diminished or dismissed until comparable regulation is introduced for the majority of trading partners internationally.

### R10.3

*Agricultural emissions should be fully included in the New Zealand Emissions Trading Scheme (NZ ETS).*

If a politically durable decision is reached, then including agricultural emissions within the NZ ETS is reasonable. Ballance's Kapuni site operates under the NZ ETS and is an Emissions-Intensive Trade-Exposed (EITE) entity. Agriculture should also be an EITE industry to support interests in 'food security'. Details on transition times, development of capability, complementary government policies, etc. are necessary to encourage acceptance.

### R10.4

*To address potential effects on emissions leakage and international competitiveness resulting from including agriculture in the NZ ETS, the Government should provide free allocation of NZUs to cover a large majority of agricultural emissions, based on their historic level. The Government should withdraw these allocations over time as the stringency of agricultural emissions policies increases overseas and the availability of mitigation options increases; and to be consistent with New Zealand transitioning to a low-emissions economy by 2050.*

This recommendation aligns with how EITE industry within the NZ ETS currently operates.

## Q10.1

*What are the advantages and disadvantages of the following options for a point of obligation for agricultural emissions within the NZ ETS?*

- *Full processor level*
- *Full farm level, only including farms above a minimum size threshold. A point of obligation at the processor level could be used for farms beneath the threshold and for all horticulture and cropping*
- *Farm level for dairying, only including dairy farms above a minimum size threshold; processor level for sheep and beef cattle (and other livestock) farming, and for horticulture and cropping.*

*What other point of obligation approaches should the Commission consider?*

The Commission appears to believe that having the point of obligation for agricultural emissions at the processor level is easiest. Is the intent to optimise ease or effectiveness? The only way to financially incentivise low-emissions practices and technologies in agriculture is at the farm level. It is possible that the starting point is at the processor level with transition to farm level requiring more details on transition times, development of capability, complementary government policies, etc. are necessary to encourage acceptance.

Farmers/growers should be able to opt into the ETS in the short term with a longer term goal of point of obligation being at the farmer/grower level. For example, a small dairy farm required to complete a detailed OVERSEER Nutrient Budget as part of regional council compliance and/or as part of dairy industry stewardship is well placed to be included at farm level reporting using OVERSEER at little additional cost. This is especially important as farmers will be incentivised to adopt existing mitigations or new mitigations as they arise e.g. novel fertilisers, animal feeds, forage, forestry or animal genetics. This should be done with the aim of more easily allowing businesses to invest into the development of mitigation technology where there is a realistic opportunity to have a feasible revenue model or a direct link to farmers rather than via an intermediary.

Areas requiring more consideration or detail includes:

- A national and international effort will need to be made to have standard methodologies for determining footprints of produce. For example some primary sector exporters may have market access or product positioning determined by how accreditation schemes calculate the low-emission footprint.
- The NZ ETS will need to have a full picture of emissions so needs to consider how agricultural lime is factored in the future

## Q10.2

*With developing technology and aggregation for accounting purposes, is it technically feasible and would it be cost-effective to include small areas of planting (such as riparian planting) within the NZ ETS?*

The opportunity to be involved in the NZ ETS should be widened to include current and possible future mechanisms for greenhouse gas capture (e.g., riparian planting, soil carbon sink, sequestering biochar). Soil carbon is a significant pool and potentially a net source or sink. A significant science investment needs to be made to ensure our understanding of soil carbon in NZ is understood to enable the right long term decisions to be made.