

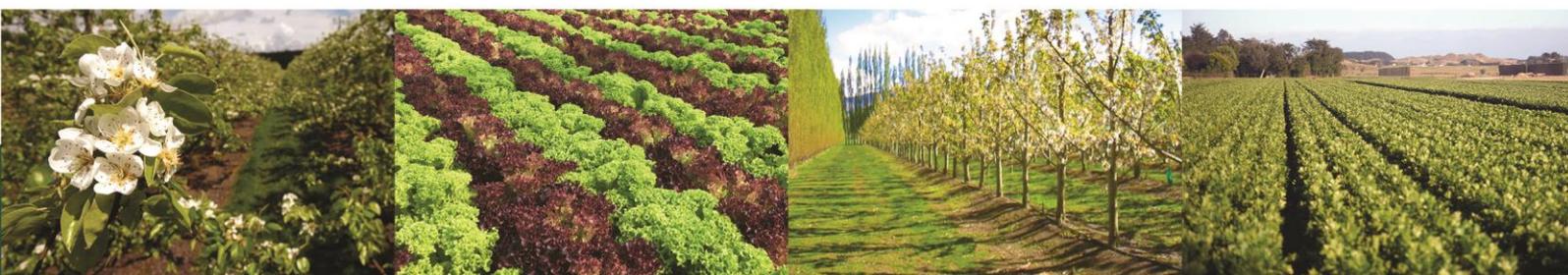
SUBMISSION ON: Climate Change Response (Emissions Trading Reform) Amendment Bill

17 January 2020

TO: The Environment Committee

NAME OF SUBMITTER: Horticulture New Zealand

Supported by: Tomatoes NZ, Vegetables NZ, Citrus NZ, Process Vegetables NZ, Onions New Zealand, New Zealand Apples and Pears, New Zealand Kiwifruit Growers Incorporated



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Introduction

Horticulture New Zealand (HortNZ) thanks the Environment Committee for the opportunity to submit on the Climate Change Response (Emissions Trading Reform) Amendment Bill.

Hort NZ is overall supportive of the action the government is taking on climate change; the details of HortNZ's submission are set out below.

Background to HortNZ

HortNZ was established on 1 December 2005, combining the New Zealand Vegetable and Potato Growers' and New Zealand Fruitgrowers' and New Zealand Berryfruit Growers Federations.

HortNZ advocates for and represents the interests of 5000 commercial fruit and vegetable growers in New Zealand, who grow around 100 different crop types and employ over 60,000 workers. Land under horticultural crop cultivation in New Zealand is calculated to be approximately 120,000 hectares.

The horticulture industry value is \$5.7 billion and is broken down as follows:

Industry value	\$5.7bn
Fruit exports	\$2.82bn
Vegetable exports	\$0.62bn
Total exports	\$3.44bn
Fruit domestic	\$0.97bn
Vegetable domestic	\$1.27bn
Total domestic	\$2.24bn

For the first time New Zealand's total horticultural produce exports in 2017 exceeded \$3.44bn Free On Board value, 83% higher than a decade before.

It should also be acknowledged that it is not just the economic benefits associated with horticultural production that are important. The rural economy supports rural communities and rural production defines much of the rural landscape.

Food production values provide a platform for long term sustainability of communities, through the provision of food security.

HortNZ's mission is to create an enduring environment where growers prosper. This is done through enabling, promoting and advocating for growers in New Zealand.

Submission structure

Part One - Horticulture and Greenhouse Gas Emissions

Part Two – Comments on the Climate Change Response (Emissions Trading Reform) Bill

Part Three – Changes to Bill provisions sought by HortNZ

Part Four – Changes to SOP 413 provisions sought by HortNZ

Part One – Horticulture and Greenhouse Gas Emissions

The covered crops (Greenhouse vegetable) industry

Tomatoes New Zealand Incorporated (TomatoesNZ) is the national organisation representing New Zealand's 125 fresh tomato growers, almost all of whom grow in greenhouses. The fresh tomato industry has an annual farm gate value of \$124m (March 2019), including export sales of about \$10m per year.

Vegetables New Zealand Incorporated (VNZI) is the national organisation representing 550 fresh vegetable growers with a total gate sale value of over \$420m, including approximately \$40m in export sales. This includes approximately 120 greenhouse growers of crops including capsicums, eggplants, cucumbers, lettuces, chilies and herbs.

A 2018 report by NZIER evaluating the contribution of the covered (greenhouse) vegetable crop industries to New Zealand¹ found:

- Gross output (or turnover) of \$295 million
- Contribution to GDP of \$120 million
- 2,400 jobs
- Exports of \$35-\$40 million per year
- Spending of \$34.3 million on heating (including electricity, coal, gas)
- This is an important industry for New Zealand, attracting stable jobs and skills in a growing market for covered crop products. It makes important contributions to GDP and general wellbeing through the employment it provides, exports it makes, and an increased use of technology
- It is a stable and growing industry which provides a significant contribution towards diversifying the New Zealand economy
- Helps to diversify the revenue sources for companies involved in agriculture and horticultural industries

Impact of ETS on covered vegetable crops

Covered crop growers of tomatoes, capsicums, eggplant and cucumbers are currently captured in the New Zealand Emissions Trading Scheme (ETS) via NZ units charged by energy providers (coal and gas) for greenhouse heating fuel. These growers have access to free allocations via the Emissions Intensive Trade Exposed (EITE) scheme. These free allocations offset the ETS costs to varying degrees depending on location. South Island greenhouses are subject to a cooler climate so require more heating; and because most rely on coal are impacted by high ETS costs, as there is no access to natural gas in the South Island.

Currently for covered crop growers, energy is the second highest single input cost (~30%), following closely behind wages.

Indoor tomato, capsicum and cucumber growers who have applied for units under the allocation scheme are ETS account holders.

In the South Island, where coal is the primary source of heating for greenhouses, growers incur a higher ETS cost and these costs are not fully recovered by the free allocations they receive. For example, at an NZU price of \$25, we calculate that the average net cost of the ETS (after allocation) on heating costs for a South Island tomato grower is \$26,693 per hectare. At an NZU price of \$50, this rises to a net cost of \$53,386 per hectare.

¹ Valuing covered crops. A national perspective. NZIER report to TomatoesNZ and Vegetables New Zealand, March 2018

Growers have refined their growing techniques over the past 5-10 years in an attempt to produce enough volume in winter to supply the market and keep prices stable year-round. However, it would not be possible to continue producing at the current level without ready access to heat, plus Carbon Dioxide (CO²) augmentation to enrich growing.

Whilst growers have made significant gains in yield and energy efficiency (approx. 20%) over the past 10 years, the current infrastructure is reaching its limits and there are not many opportunities for future improvements without significant re-investment in new greenhouses and/or energy technologies. This will not happen without cost-effective technological solutions involving alternative energy sources and/or energy saving; a reasonable transition period; support to make transition a feasible business prospect for growers; and certainty of ETS settings.

Managing the ETS Auction Cost Containment Reserve effectively will be important to prevent production costs rising so high that growers are put out of business, particularly in the South Island, because they cannot pass on the higher cost of production onto domestic consumers.

The alternative is that in the future these vegetables will not be grown in New Zealand for substantial periods of the year and instead be imported, which we believe would have negative social and economic consequences. For example, people would no longer have access to locally grown produce, which is fresher than imports; biosecurity risks will increase from the imported products; jobs and export income will be lost; and New Zealand's own food security (ability to provide its own fresh vegetables) reduced. Additionally, those countries that the produce is imported from may not face the same carbon charges that our growers face; they may pay a different price; or they may produce with much higher emissions than NZ growers – i.e. the potential for Carbon Leakage.

A further example of the consequences of reliance on imported produce was highlighted in a recent article referring to 'global turbulence in food production' with reference to limes costing as much as \$80 per kilogram, due to a price spike when local limes are out of season (when limes are imported)². The article noted an increase in this price spike (for imported limes) citing less stable weather patterns in other parts of the world; a trend likely to continue as food production is affected by climate change. The article also quoted a recent Intergovernmental Panel on Climate Change report³ into land use, which stated "*The stability of food supply is projected to decrease as the magnitude and frequency of extreme weather events that disrupt food chains increases*". This emphasises the importance of domestic food supply and food security.

There has been an increase in the type and volumes of crops grown indoors for domestic supply, including lettuces, herbs and berries. These crops do not currently have access to free NZU allocations despite also paying ETS costs on their heating. Indoor growing is becoming more popular worldwide, including in New Zealand, because it mitigates the risks associated with unpredictable climatic events, requires less water per unit of output, and produces more consistent, high quality products.

Covered cropping is vital to ensuring New Zealanders are able to access freshly grown vegetables from a local supplier throughout the year. To protect this in the future, support for indoor growers to access energy saving technology and assistance with capital for conversions and energy saving measures from Government is vital.

² <https://thespinoff.co.nz/food/10-01-2020/why-are-limes-so-freakishly-expensive-in-new-zealand/>

³ https://www.ipcc.ch/site/assets/uploads/sites/4/2019/12/02_Summary-for-Policymakers_SPM.pdf

Another point to note, is an international move towards more covered cropping. This move will be essential to adapt the food production system to the changing, more volatile world climate while still producing enough food in a way that also uses less water and nutrients. Climatic variability, along with increased global demand for fresh produce, is already resulting in a move to more indoor crop production, meaning that the factors impacting the current covered vegetable crop sector will begin to extend into other crops.

Impact of ETS – wider horticulture sector

Horticulture has an important role to play in a low emissions future, however in order for horticulture to expand substantially, ETS costs need to be considered and barriers removed. ETS costs are also present for transport, refrigeration and, post 2050, fertiliser, for all horticulture enterprises.

Horticultural producers are mostly small to medium sized businesses with a few larger corporates in some sectors. Changes in costs can have a dramatic effect on the ability of these businesses to remain profitable and continue to offer job opportunities to New Zealanders. Horticulture is a significant employer and a key factor in the maintenance of provincial New Zealand's cultural and social wellbeing.

New Zealand's unsubsidised horticulture sector is highly efficient but is also highly exposed to competition from moderately to highly subsidised overseas producers⁴.

Successive New Zealand governments have worked hard to remove barriers to trade. It would be counterproductive for New Zealand governments to impose costs on New Zealand producers that would counter these free trade gains and policies that would reduce New Zealand's emissions-efficient food production. Any loss of New Zealand's food production ability would likely be taken up by much less emissions-efficient producers overseas who are not facing the same costs⁵. That would be to the detriment of the climate change initiative.

The 2015 Paris Agreement (and its predecessor the Kyoto Protocol), is strong on ensuring global food security and not reducing food production. New Zealand's unsubsidised, but highly efficient, primary sector is highly exposed to competition from moderately to highly subsidised producers⁶, for example New Zealand's pipfruit is the highest per hectare producer, with relatively low inputs. If our costs rise and make us uneconomic, there will be an increase in emissions as higher emitting producers stay in place.

Rising ETS costs will impact on the wider horticultural sector by increasing the costs of transport and the costs of running on-farm machinery. Horticultural production makes use of higher numbers of on farm vehicles per hectare compared with pastoral agricultural land use.

As in other countries, the transition away from fossil-fuel vehicles is feasible and occurring in public transport and light private transport. There currently are no feasible options for growers to convert heavy on-farm machinery to non-fossil fuel vehicles. Regulation on emissions intensity of vehicles in other countries has seen the forced obsolescence of older vehicles, which improves emissions intensity, but negatively impacts the life cycle assessment of vehicles and total emissions.

Fertiliser is used by growers, and is the only agricultural emission produced by horticultural crops. Fruit and vegetables are very efficient users of fertiliser, when considering the ratio of

⁴ Statistics New Zealand: "Red, ripe, and really versatile: tracking tomato prices in the CPI"

http://archive.stats.govt.nz/browse_for_stats/economic_indicators/CPI_inflation/tracking-tomato-prices-in-cpi.aspx

⁵ OECD Producer Support Equivalents show 1% for New Zealand compared to 18% average across the OECD, 21% in the EU and in some countries as high as 60%.

⁶ Refer above.

fertiliser use to food produced. There are improvements that can be made to New Zealand grower's fertiliser practices to improve fertiliser efficiency and reduce fertiliser losses.

HortNZ, NZGAP and the horticultural product groups are working together to support growers to improve fertiliser practices and reduce potential environmental effects. HortNZ is promoting the use of independently audited farm plans, through industry GAP programmes (NZGAP and Global G.A.P.) for all growers. These independently audited farm plans demonstrate the methods growers have employed to improve the efficiency of fertiliser use, with the aim of producing more food with lesser impacts on both water quality and greenhouse gas emissions.

We also note that the kiwifruit industry is supportive of the steps being taken in New Zealand to address climate change, namely contributing to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels and enabling New Zealand to prepare for, and adapt to, the effects of climate change; and is committed to playing their part as an industry and have work underway to do so.

Some of the costs of reducing emissions that will be borne by the horticulture sector (via the ETS or otherwise) will either be passed on to consumers, or result in significantly reduced domestic supply. For example, most of the vegetables grown in New Zealand are for domestic consumption, and increasing costs of vegetable production may threaten the ability of growers to continue to provide fresh affordable vegetables for New Zealanders.

The expansion of horticulture, in place of animal-based agriculture, has been identified as a method of reducing NZ's overall emissions. HortNZ agrees that horticulture is an efficient land use, and diversification into more horticulture should be encouraged as a method of reducing farmers and New Zealand's emissions liability.

Part Two – Comments on the Climate Change Response (Emissions Trading Reform) Bill

Updating purpose of CCR Act

HortNZ supports updating the purpose of the CCR Act to support implementation of New Zealand's international commitments under the Paris Agreement and link to the Climate Change Response (Zero Carbon) Amendment Bill.

Enabling cap on emissions covered by NZ ETS

HortNZ supports a cap on emissions with 5-year rolling budgets. We think budgets and the cap are important measures to improve price certainty and to increase the likelihood that the scheme will result in reduced emissions.

Allowing for cost containment reserve

Removal of the \$25 fixed price, will result in increased costs for growers participating in the scheme. Careful management of the trigger level will be required to provide a more certain environment to encourage the investment required to transition to a low emissions economy without businesses becoming uneconomic and closing. Increased costs without viable low emissions alternatives, is almost certain to result in carbon leakage or higher food prices for New Zealanders, without resulting in reduced emissions.

Introducing robust and transparent auctions

Most growers are unlikely to participate in auctions. We support a transparent system that enables all parties, regardless of size, fair access to units.

Phase-down of industrial allocation

The industrial allocation remains crucial for the viability of greenhouse growers, particularly those in the South Island.

In our view, any change on the phase-down for greenhouse growers should be linked to the potential for carbon leakage and food security.

HortNZ supports incentives to enable growers to transition to lower emissions growing systems. Until cost-effective alternative heating sources are available, an increase in the emissions costs will not drive emissions reductions but will put some growers out of business.

It may be that the risks of carbon leakage differ for different industries, as different technologies become available and countries implement ETS-type measures at various paces. The provision of fresh food for domestic supply is difficult to substitute efficiently with imported food, due to New Zealand's relative isolation.

We have proposed changes to the Bill to enable industries to phase-down at different rates.

Strengthened compliance regime; Transparent scheme; and ETS-wide operational and technical improvements.

HortNZ supports strengthened compliance, improved transparency and administrative improvements.

Forestry

HortNZ supports a fair and transparent regime for forestry sequestration, that enables sequestration to be accounted for in a manner that incentivises increased sequestration and encourages immediate and long-term emissions reductions.

We support considering future changes to the ETS to enable sequestration from a wider range of plants and scales of plantings to be accounted. We understand sequestration can only be accounted for where it can be fairly measured over-time.

Price on agricultural emissions from 2025

HortNZ are working, as part of He Waka eke Noa, to develop farm-level pricing of animal emissions and reporting of emissions and sequestration at farm-level.

We are of the strong opinion that for horticulture, making use of the existing Good Agricultural Practice (NZGAP and Global G.A.P.) assurance schemes will be the most efficient and effective manner to implement emissions and sequestration reporting for the horticulture sector.

We will continue to work closely across the primary sector and government to develop fit-for purpose tools that build on existing programmes, are aligned across sectors, achieve quality standards and meet the standards proposed on the Bill (and SOP 413).

We support 95% free allocation for agriculture. Emissions from heating some crops grown in greenhouses are not eligible for any free allocation, and those that do receive an allocation of only 60% of emissions, creating a disparity with the rest of agriculture.

Greenhouse growing will remain an important part of the growing system in New Zealand and the horticulture sector seeks investment in technology that will enable growers to transition the heating of these growing systems to economically viable alternative heating systems. In our view, the industry's role in providing food security for New Zealand and the Pacific should be reflected by including this sector in the 95% free allocations provided for the rest of agriculture.

Further, any decision to phase down the free allocations should take into account the carbon efficiency of food produced in NZ relative to competitor food producers, and whether or not those producers also face a cost for their carbon. As well as the importance of the food produced for food security for New Zealand and the Pacific.

Clear criteria for eligibility and phase down of the agricultural and industrial allocations should be developed.

We support fertiliser pricing at processor level as we consider it the most efficient method.

Part Three – Changes to Bill provisions sought by HortNZ

Provision	Support/Oppose	Reason	Decision Sought (Deletion in strikeout , additions in underline)
<p>New section 84A Regulations reducing general phase-out rate</p>	<p>Support in part/Oppose in part</p>	<p>We support the clear direction for the phase-out of the industrial allocation, and we support the ability to vary the phase-out.</p> <p>However, we oppose the provisions that would treat all sectors the same.</p> <p>We are of the view that it should be possible for industries that are Emissions-Intensive and Trade-Exposed (EITE) to justify retaining a lesser rate of phase-out compared to other sectors, provided they can meet carbon leakage and/or food security criteria.</p> <p>Food produced in greenhouses is important for New Zealand’s food supply and it’s food value should be considered, as part of free allocation decisions.</p>	<p>84A Regulations reducing general phase-out rate</p> <p>(1) The Governor-General may, by Order in Council made on the recommendation of the Minister, make regulations that set the phase-out rate to be used by one or more all participants for the purposes of sections 81(1) and 83(2) for a year or years beginning on or after 1 January 2031.</p> <p>(2) The phase-out rate must be—</p> <p>(a) less than the rate in sections 81(2)(a) and 83(2A)(a); and</p> <p>(b) at least—</p> <p>(i) 0.01 for a year in the period beginning on 1 January 2031 and ending on 31 December 2040; or</p> <p>(ii) 0.02 for a year in the period beginning on 1 January 2041 and ending on 31 December 2050.</p> <p>(3) The Minister may not recommend the making of regulations unless—</p>

			<p>(a) the Climate Change Commission \has recommended (under section 84D) that the phase-out rate be set at a lower rate than in sections 81(2)(a) and 83(2A)(a); and</p> <p>(b) the Minister has complied with the requirements of section 84C.</p>
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Part Four – Changes to SOP 413 provisions sought by HortNZ

Provision	Support/Oppose	Reason	Decision Sought (Deletion in strikeout , additions in bold underline)
215 Ministers to report on alternative pricing system for farm-level agriculture emissions	Support	HortNZ is committed to working with growers, other primary sectors and government collectively as part of He Waka Eke Noa to assist in the delivery of the Joint Action Plan.	Retain as proposed
220 Commission to report on progress towards meeting farm-level obligations	Support		Retain as proposed
Schedule 5 Primary sector climate change commitments	Support		Retain as proposed