

SUBMISSION ON

Te Hau mārohi ki anamata Towards a productive, sustainable and inclusive economy–Aotearoa New Zealand's First Emissions Reduction Plan

27 June 2022

To: Environment Committee Komiti Taiao

Name of Submitter: Horticulture New Zealand

Supported by: Citrus NZ , Vegetables NZ, Process Vegetables NZ, Tomatoes NZ, New Zealand Apples and Pears New Zealand Asparagus Council, Teviot Fruit Growers Association

Contact for Service:

Michelle Sands
Strategy and Policy Manager
Horticulture New Zealand
Email: michelle.sands@hortnz.co.nz

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Our submission

Horticulture New Zealand (HortNZ) thanks Environment Committee Komiti Taiao for the opportunity to submit on the Aotearoa New Zealand's emissions budgets and the emissions reduction plan, Te Hau mārohi ki anamata Towards a productive, sustainable and inclusive economy – Aotearoa New Zealand's First Emissions Reduction Plan (published May 2022). We welcome any opportunity to continue to discuss our submission.

HortNZ wishes to be heard in support of our submission.

The details of HortNZ's submission and decisions we are seeking are set out in our submission below.

HortNZ's Role

Background to HortNZ

HortNZ represents the interests of approximately 5,500 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruit, and vegetables. The horticultural sector provides over 40,000 jobs.

There is approximately, 80,000 hectares of land in New Zealand producing fruit and vegetables for domestic consumers and supplying our global trading partners with high quality food.

It is not just the direct economic benefits associated with horticultural production that are important. Horticulture production provides a platform for long term prosperity for communities, supports the growth of knowledge-intensive agri-tech and suppliers along the supply chain; and plays a key role in helping to achieve New Zealand's climate change objectives.

The horticulture sector plays an important role in food security for New Zealanders. Over 80% of vegetables grown are for the domestic market and many varieties of fruits are grown to serve the domestic market.

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



Executive Summary

Horticulture has a role to play in New Zealand's transition to a low emissions economy and in meeting our 2050 targets. We welcome the opportunity to feed into the development of the Emissions Reduction Plan (ERP).

Horticulture New Zealand (HortNZ) has been engaged in the process leading to the development of the Emissions Reduction Plan – previously making detailed submissions on both the Climate Change Commissions Advice to Government¹ and the consultation on the discussion document preceding the Emissions Reduction Plan², as well as submitting other climate policy and being involved as a partner in He Waka Eke Noa.

Safeguarding food security

The Paris Agreement speaks to a 'fundamental priority of safeguarding food security' and action in a manner that does not threaten food production. Food security is a nationally important issue which needs to be addressed at a strategic level. We have a national food producing system that relies on growing vegetables and fruit in pockets of highly productive land (HPL), with good climate and access to freshwater. Fruit and vegetables are essential for the human health of New Zealanders.

Outcomes sought:

- Develop a National Food Strategy, that includes consideration of the importance of New Zealand in supporting food security in the Pacific.
- HortNZ seek that food security be an explicit consideration in climate policy assistance, including investment and industrial allocation.
- HortNZ seek policy support for the transition to a low carbon economy without increasing food costs so that New Zealanders can transition to eating healthy lower emissions food.

Enabling and use change to horticulture

Diversification to horticulture presents an opportunity to reduce emissions while increasing food production. To enable horticulture growth to continue and increase, we need investment in the right areas (for example, plant varieties, chemicals, robotics) and a regulatory/policy environment that enables the market to respond.

Outcomes sought:

- Greater policy direction and investment (and alignment of policy direction) to support alternative land uses such as horticulture, to realise the potential for our highly productive land, to be economically productive and generate lesser emissions.

¹ Submission available here: <https://www.hortnz.co.nz/assets/Environment/National-Env-Policy/Climate-Change/HortNZ-CCC-Advice-Submission-March-2021.pdf>

² Submission available here: <https://www.hortnz.co.nz/assets/Environment/National-Env-Policy/Climate-Change/HortNZ-Submission-Emissions-Reduction-Plan-Final.pdf>

Assurance aligned with international practice

New Zealand produces low emissions foods for New Zealanders and export markets. Assurance frameworks are important in ensuring robust reporting and certainty around emissions reduction actions. Industry assurance programmes such as GAP can leverage off market requirements for lower-carbon products to deliver regulatory outcomes.

Outcomes sought:

- Ensure consistency with international assurance frameworks - for example in Freshwater Farm Plans and Integrated Farm Planning.

Specific commentary on key actions in the EPR

The table included as part of this submission provides commentary in the key actions identified in each of the Emissions Reduction Plan chapters. Areas where amendment or additional considerations are sought are noted below:

- Ensure that the Equitable Transitions Strategy includes a food security lens.
- Ensure that labour policy settings need to enable low emissions land use - e.g horticulture as part of an overall strategy for reducing emissions.
- HortNZ seek that food security be an explicit consideration in the review of the approach to industrial allocation.
- HortNZ support 'recycling' of NZ ETS proceeds into climate change mitigation and adaptation; but seek to amend the funding criteria to include consideration of the benefits to food security and to ensure that the funding is available to a range of business sizes.
- Ensure the Natural and Built Environments Act (and/or national planning framework under this legislation) recognises the importance of highly productive land for food production and specifically prioritise and support the use of this land for low emissions food production; and provides for infrastructure that will enable climate change mitigation and adaptation.
- Ensure the gas transition plan for the greenhouse sector specifically considers impacts on food security.
- Ensure emissions reduction mitigation technologies also support the horticulture industry to be as efficient as possible.
- There is a need for a greater focus on enabling low emissions land use change - such as horticulture.
- Ensure consistency with international assurance frameworks - for example in Freshwater Farm Plans and Integrated Farm Planning.
- Include specific mention of the need to retain highly productive land for food production in respect of forestry regulatory settings.

Submission

1. HortNZ's previous submissions on the Emissions Reduction Plan

HortNZ has previously made detailed submissions in the development of the emissions budgets and the emissions reduction plan which include similar themes to these submissions, specifically:

- To the Ministry for the Environment in November 2021 on the Emissions reduction plan discussion document.³
- To the Climate Change Commission in March 2021, on their draft advice to Government on a path for reducing emissions across the economy.⁴

HortNZ has also recently submitted on the draft national adaptation plan, as well as other climate-related policy (including changes to the ETS and the review of industrial allocation) over recent years.

2. Key themes and high-level outcomes sought

2.1. The need to provide food security

A key theme in HortNZ's submissions on climate related policy is the need to provide for our ongoing domestic food security.

The Paris Agreement speaks to a 'fundamental priority of safeguarding food security' and action in a manner that does not threaten food production.

Food security is a nationally important issue which needs to be addressed at a strategic level. While New Zealand is a net food exporter, many of the vegetables and some of the fruit that we grow are only for domestic food supply.

We have a national food producing system that relies on growing vegetables and fruit in pockets of highly productive land (HPL), with good climate and access to freshwater. Fruit and vegetables are essential for the human health of New Zealanders.

New Zealand's existing food production systems are coming under increased pressure from population growth (and competing land use demands reducing availability of highly productive land), climate change, water concerns, ETS costs and the cost of energy, and the need to improve environmental outcomes.

The greenhouse sector which requires energy for heating is under particularly pressure with rapidly rising ETS costs and the limitations and significant financial investment required for transition.

³ Available here: <https://www.hortnz.co.nz/assets/Environment/National-Env-Policy/Climate-Change/HortNZ-Submission-Emissions-Reduction-Plan-Final.pdf>

⁴ Available here: <https://www.hortnz.co.nz/assets/Environment/National-Env-Policy/Climate-Change/HortNZ-CCC-Advice-Submission-March-2021.pdf>

Food insecurity has health costs – modelling by the University of Otago found that a 43 – 58 percent increase in vegetable prices corresponds to a loss of 58,300 – 72,800 Quality Adjusted Life Years and health costs of \$490 – \$610 million across the population.⁵

Outcomes sought

- Develop a National Food Strategy, that includes consideration of the importance of New Zealand in supporting food security in the Pacific.
- HortNZ seek that food security be an explicit consideration in climate policy assistance, including investment and industrial allocation (specifically addressed in the feedback provided in the table below).
- HortNZ seek policy support for the transition to a low carbon economy without increasing food costs so that New Zealanders can transition to eating healthy lower emissions food (specifically addressed in the feedback provided in the table below).

2.2. Opportunities for land use change to horticulture as low emissions land use

Diversification to horticulture presents an opportunity to reduce emissions while increasing food production.

In New Zealand there is 1,000,000 ha of land that could potentially be converted to horticulture. If this land was converted to horticulture it would be as effective at reducing New Zealand’s agricultural emissions as a methane vaccine.⁶

The Climate Change Commission’s advice⁷ to Government assumed (in the demonstration path) converted of 2,000 ha of land per year to horticulture from 2025, but noted that this could increase if “if barriers – such as water availability, labour, supply chains and path to market – are addressed.” The following was listed as a critical outcome – “Opening up opportunities for more conversion to lower emissions production systems and land uses, including horticulture”.

Plant based balanced diets are recognised as key mitigation strategy in the IPCC 6th Assessment Report⁸.

Research has illustrated the connection between eating patterns, climate change and health outcomes and eating more plant-based foods and minimising food waste were one of the most important ways individuals could reduce their personal climate footprint, while also having health gains and health system savings⁹. This research reported annual diet-related emissions reductions of between 4 percent (following New Zealand Dietary Guidelines) to 42 per cent

⁵ Cleghorn, C. 2020: The health and health system cost impacts of increasing vegetables prices over time, University of Otago

⁶ BERG. (2018). The report of the biological emissions reference group

⁷ Ināia tonu nei: a low emissions future for Aotearoa.

⁸ <https://www.ipcc.ch/report/ar6/wg2/>

⁹ Drew, J et al. (2020) ‘Healthy and Climate-Friendly Eating Patterns in the New Zealand Context’.

Environmental Health Perspectives <https://ehp.niehs.nih.gov/doi/full/10.1289/EHP5996>

(waste free vegan diet), the latter being equivalent to one-fifth of the current emissions reduction needed to meet New Zealand’s commitment under the Paris Climate Agreement.

2.2.1. POLICY AND INVESTMENT TO ENABLE THIS POTENTIAL TO BE REALISED

To enable horticulture growth to continue and increase, we need investment in the right areas (for example, plant varieties, chemicals, robotics) and a regulatory/policy environment that enables the market to respond.

Research can also support the transition to low emissions land uses, including in the following areas: climate resilient fruit and vegetable varieties, agrichemical assessment (new chemicals), robotic technology and new generation orchard design.

Outcomes sought

- Greater policy direction and investment (and alignment of policy direction) to support alternative land uses such as horticulture, to realise the potential for our highly productive land, to be economically productive and generate lesser emissions (specifically addressed in the feedback provided in the table below).

2.3. Assurance aligned with international practice

New Zealand produces low emissions foods for New Zealanders and export markets.

Assurance frameworks are important in ensuring robust reporting and certainty around emissions reduction actions. In our view, the GAP schemes for horticulture provide the vehicle for integrating reporting required for regulators, such as He Waka Eke Noa and to local and international consumers.

Industry assurance programmes such as GAP can leverage off market requirements for lower-carbon products to deliver regulatory outcomes. We seek policy to support the use of industry assurance programmes.

Outcomes sought

- Ensure consistency with international assurance frameworks - for example in Freshwater Farm Plans and Integrated Farm Planning.

3. Specific comments on the Emissions Reduction Plan chapters

ERP chapter	Objective or action reference (where applicable)	HortNZ comments and outcomes sought
1. Playing our part		No specific comments.
2. Empowering Māori		No specific comments.
3. Equitable transition	3.2.1 Develop an equitable transitions strategy	<p>Ensure that the Equitable Transitions Strategy includes a food security lens.</p> <p>Support the development of an Equitable Transitions Strategy, however, note that it is important that food security features in the strategy. There is a relationship between climate mitigation measures/strategies and food security (which disproportionately affects some sectors of society).</p>
	3.3.1 Develop an income insurance scheme	<p>Labour policy settings need to enable low emissions land use - e.g horticulture as part of an overall strategy for reducing emissions.</p> <p>HortNZ submitted¹⁰ on the proposal for an income insurance scheme seeking amendments - we have concerns that the proposal undermines the development of a sustainable economy.</p>
4. Working with nature	4.1 Prioritise nature-based solutions	The proposed outputs for this action are not clear - in terms of how this will be prioritised.

¹⁰ Available here: <https://www.hortnz.co.nz/assets/About-Us/Submissions/HortNZ-submission-A-New-Zealand-Income-Insurance-Scheme-FINAL-26-April-2022.pdf>

5. Emissions pricing	5.4.1 Update industrial allocation policy	<p>HortNZ seek that food security be an explicit consideration in the review of the approach to industrial allocation.</p> <p>HortNZ's submission¹¹ on the review sought further work be undertaken (jointly with the greenhouse sector and government) to redesign the assistance under Climate Change Response Act, so the assistance supports capital investment for decarbonisation of the greenhouse sector.</p>
	5.4.2 Investigate long-term options to address emissions leakage	<p>Support - HortNZ support considering alternative mechanisms to address the risk of carbon leakage.</p> <p>Growers are concerned about the risk of imported products, not subject to climate change policies as robust as New Zealand's, displacing NZ grown products in the domestic market.</p> <p>It is also important that there are robust assurance frameworks around emissions reporting and carbon-footprint standards enable consumers to make informed choices – as a mechanism for reducing the risk of carbon leakage. We seek policy support for the use of Industry Assurance Programmes.</p>
	5.5 Develop a voluntary carbon market framework	<p>Support - HortNZ support considering alternative mechanisms to address the risk of carbon leakage.</p>
6. Funding and finance	6.1 Establish the Climate Emergency Response Fund (CERF) to ensure that climate is prioritised in the Budget process	<p>HortNZ support 'recycling' of NZ ETS proceeds into climate change mitigation and adaptation.</p> <p>Amend funding criteria to include consideration of the benefits to food security;</p>

¹¹ Available here: <https://www.hortnz.co.nz/assets/Environment/National-Env-Policy/Climate-Change/HortNZ-submission-on-ETS-IA-review-17-Sept-2021.pdf>

		<p>It is important that food security is considered within our transition to a low emissions economy and projects which align with maintaining or enhancing food security supported.</p> <p>Ensure funding is available to a range of business sizes</p> <p>Ensure this is available to smaller producers who have not had access to the GIDI fund</p> <p>It is important that the CERF overcomes some of the barriers of funding structures including, that:</p> <ul style="list-style-type: none"> • The level of support is often ‘out-of-reach’ for smaller growers, due to the scale thresholds of funding, administrative requirements, and the need to employ professionals to design bespoke solutions due to the wide variation in needs and circumstances. • In some situations, funding to support capital investment for already proved technologies is limited, however even when the technology is established there are still barriers to widespread commercial uptake.
	6.9 Collaborate with the finance sector to accelerate sustainable finance	<p>Support where this provides options that support transition in a manner which if affordable.</p> <p>For example, HortNZ’s submission on the review sought further work be undertaken (jointly with the greenhouse sector and government) to redesign the assistance under Climate Change Response Act, so the assistance supports capital investment for decarbonisation of the greenhouse sector.</p>
7. Planning and infrastructure	7.1 Improve the resource management system to promote lower emissions and climate resilience	<p>Ensure the Natural and Built Environments Act (and/or national planning framework under this legislation):</p> <ul style="list-style-type: none"> • Promotes Te Oranga o te Taiao, in a way that enables the benefits of strategically important outcomes to be balanced against localised effects. • Specifically recognises the importance of highly productive land for food production and specifically prioritise and support the use of this land for low emissions food production.

		<ul style="list-style-type: none"> • Enables appropriate water storage infrastructure to enable climate change mitigation and adaptation. • Includes a linkage with planning and resource management (e.g., SPA and NBA legislation) to ensure that new forestry is appropriately located, in terms of the highly productive land resource. <p>Develop a National Environmental Standard for commercial vegetable growing, to provide a longer-term planning certainty.</p>
	7.3 Address infrastructure funding and financing challenges	<p>Re-frame this action to broaden the focus from solely urban development.</p> <p>Water storage multiple benefits and will be important in enabling low emissions land uses and climate adaptation (for rural and urban communities). This can face funding challenges.</p>
8. Research, science, innovation and technology	8.1.1 Establish a portfolio of Climate Innovation Platforms to support and coordinate strategic, effective and innovative initiatives.	<p>Support - ensure this includes horticulture focused initiatives to enable land use change as part of moving to a low emissions economy e.g. research into new products/varieties, robotic technology and new generation orchard design.</p>
9. Circular economy and bioeconomy	9.1 Commence a Circular Economy and Bioeconomy Strategy.	<p>Support - HortNZ supports initiatives to support the development of the bioeconomy and move towards a more circular economy.</p>
	9.4 Support businesses moving to circular economy models.	<p>Support - HortNZ supports initiatives to support the development of the bioeconomy and move towards a more circular economy.</p>
	9.6 Accelerate sustainable and secure supply and uptake of bioenergy in Aotearoa.	<p>Support - this is important in enabling transition in the greenhouse sector, which rely on energy for heating.</p>

	9.7 Support research and development and accelerate investment in the bioeconomy to commercialise bioeconomy technology and products.	Support - HortNZ supports initiatives to support the development of the bioeconomy and move towards a more circular economy.
10. Transport	10.1.3 Enable congestion charging and investigate other pricing and demand management tools to reduce transport emissions	Clarity required. We seek clarity on the scope of options relating to congestion pricing - in respect to the approach to freight compared to light vehicles. There also needs to be clear objectives, not just revenue raising. Revenue should be limited to supporting alternative modes of transport.
	10.3.1 Support the decarbonisation of freight	Support the need for support to be provided. It is important that this is supported by investment into developing commercially viable options, including: <ul style="list-style-type: none"> • Where the technology is available - there needs to be a focus on making it affordable/accessible. • Investment in technology and subsidisation of options before they become fully economically viable to drive critical mass
11. Energy and industry	11.3.1 Manage the phase out of fossil gas	Ensure the gas transition plan for the greenhouse sector specifically considers impacts on food security.
	11.3.2 Develop low-emissions fuels	Support initiatives that enable transition to low emissions alternatives that are a necessity for transition.
	11.4.1 Decarbonise Aotearoa industries	<u>Action plan for decarbonising the industrial sector</u> - support, ensure that the greenhouse sector (and its specific challenges and context) is sufficiently reflected. <u>Expand and continue the roll out of the GIDI fund</u> - support.

		<u>Support businesses to decarbonise through the Energy Efficiency and Conservation Authority's (EECA) business programmes and funds</u> - continue to support this approach. VegetablesNZ and TomatoesNZ have an active project/partnership with EECA.
	11.5.2 Develop energy strategies for Aotearoa	Support the development of an energy strategy to assist in transition whereby the energy needs of low emissions activities are able to be met.
12. Building and construction		No specific comment.
13. Agriculture	Focus area 1 Price agricultural emissions by 2025	HortNZ a partner in He Waka Eke Noa and support continued Government investment in this.
	Focus area 2 Accelerate new mitigations	Ensure emissions reduction mitigation technologies also support the horticulture industry to be as efficient as possible. In relation to Action 13.2.5, ensure that New Zealand has robust assurance (aligned with international practice) to as noted 'create a more fair and even international playing field for agricultural exports'.
	Focus area 3 Support producers to make changes	Support
	Focus area 4: Transition to lower emissions land use and systems	There is a need for a greater focus on enabling low emissions land use change - such as horticulture. We seek that the Emissions Reduction Plan is more explicit in the way in which it can include policies that support expansion of horticulture which produces healthy, low emissions food.

		<p><i>“Opening up opportunities for more conversion to lower emissions production systems and land uses, including horticulture” is listed as a critical outcome in the Climate Change Commissions advice to Government.</i></p> <p><i>The policy direction for agriculture included: “Support systems and infrastructure for alternative, lower emissions land uses so that there is more potential to convert land to low emissions uses in future. This includes, for example, infrastructure and supply chains for horticulture.”</i></p> <p>seek that the</p> <p>To enable horticulture growth to continue and increase, we need investment in the right areas and a regulatory/policy environment that enables the market to respond. Investment and policy support needs to occur now to enable outcomes to be achieved in the second and third emissions budgets.</p> <p>An integrated plan to remove horticulture expansion barriers is required. This encompasses:</p> <ul style="list-style-type: none"> • R&D and Innovation including research into new products/varieties, robotic technology and new generation orchard design • Policy/regulatory settings (labour, environment, food) aligned with this goal - including enabling land use change and enabling new covered cropping (a more climate resilient system) structures to be consented. • Enabling investment: e.g. water storage that provides reliable water and community benefits, investment in growing international markets
	13.5 Māori Agribusiness Pathway to Increased Productivity	Support - horticulture (and expansion of) is a real opportunity with many co-benefits that allow some iwi around the country to use their lands to align with environmental and social sustainability.
	13.7 Essential Freshwater	Promote consistency with international assurance frameworks

		Freshwater Farm Plan implementation should be supported by assurance that is aligned with international practice, as is signalled in the Standards and Accreditation Act 2015. For horticulture, GAP assurance frameworks provide a robust system for meeting market and legislative requirements.
	13.9 Integrated farm planning	Promote consistency with international assurance frameworks Integrated Farm Planning (including Freshwater Farm Plans) implementation should be supported by assurance that is aligned with international practice, as is signalled in the Standards and Accreditation Act 2015. For horticulture, GAP assurance frameworks provide a robust system for meeting market and legislative requirements.
14. Forestry	14.1.1 Ensure regulatory settings deliver the right type and scale of forests, in the right place.	Include specific mention of the need to retain highly productive land for food production; In planning for where to locate forestry, there is a need to retain highly productive land for food production, now and for future generations - this is likely to be best managed through resource management legislation.
	14.4.2 Invest in expanding the supply of woody biomass	Support - it is important that there is an efficient fuel market that supports the transition (which relies on the availability of alternative fuels).
15. Waste	General feedback	Support promotion of greater commercial composting to facilitate the bioeconomy - to provide low emission alternative fuels and fertiliser products. We also consider that the EPR should include support for bioprocessing of waste into food products.
16. Fluorinated gases		No specific comment.