

SUBMISSION TO

Help shape 2035 international climate change target

6 December 2024

To: Ministry for the Environment

Name of Submitter: Horticulture New Zealand

Supported by: Boysenberries New Zealand, Citrus NZ, Ettrick
Fruitgrowers Association, New Zealand Apples & Pears,
Tomatoes NZ, Vegetables NZ, Zespri

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Our submission

Horticulture New Zealand (HortNZ) thanks the Ministry for the Environment for the opportunity to submit on the "Opportunity to provide feedback to help shape Aotearoa New Zealand's 2035 international climate change target" and welcomes any opportunity to continue to work with the Ministry for the Environment and to discuss 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

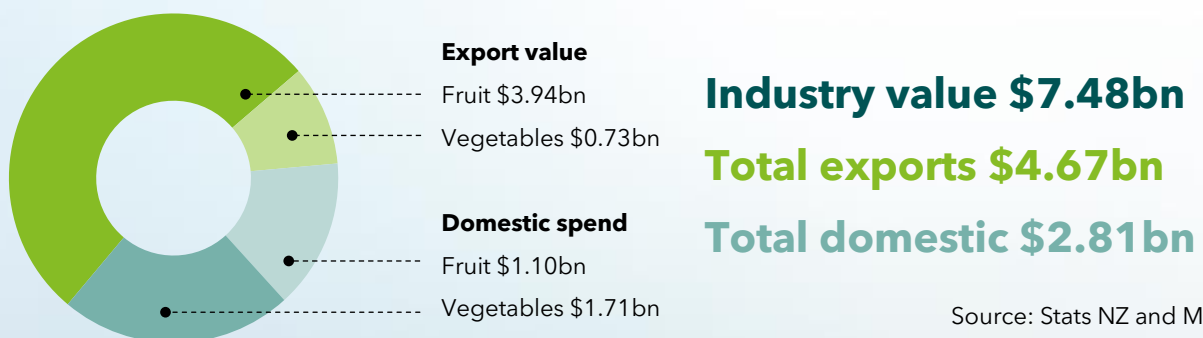
HortNZ represents the interests of approximately 4,500 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruits and vegetables. The horticultural sector provides over 40,000 jobs.

There are 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

Enabling conversion to horticulture to achieve NDC 2

Horticulture New Zealand **supports a robust and ambitious second Nationally Determined Contribution (NDC 2)**. New Zealand's Free Trade Agreement with the European Union (EU) has clauses requiring environmental collaboration, urgent action on climate change, and commitments through NDCs. As such, exports to one of our largest markets depends on an ambitious NDC 2.

Major exporters to the EU, including Zespri, will soon be required to adopt and put into effect science-based emissions reduction targets. Other markets may follow suit. Because horticulture is a low emissions activity on-farm, reductions will come through the rest of the supply chain. New Zealand would benefit from policies that allow the horticulture industry to further decarbonise in a way that meets market expectations and protects our competitiveness. A robust NDC will support this.

New Zealand's NDC should state a commitment to enabling the continued operation and expansion of the horticulture sector as part of a transition to a low emissions economy. The Climate Change Commission's modelling to support development of NDC 2 counted on a vast transition from pastoral farming to horticulture. Meeting the level of ambition for diversification shown in the modelling requires similar policy ambition.

A commitment to enabling land use change to horticulture should be included in NDC 2 and New Zealand's second Emissions Reduction Plan (ERP 2). Diversification is an opportunity to reduce emissions while increasing food production. Land use change to horticulture from higher emissions land uses is a 100% certain way to reduce our emissions. Conversion to horticulture will only occur if there are markets to buy the food produced, so expanded market access and development is critical.

Horticultural conversion can only take place with access to the land and water necessary to grow. **Enabling resource management provisions** which recognise the importance of emissions reductions are needed to support this transition.

The RMA states that all regional and district policy statements and plans shall have regard to the ERP. Land use change to horticulture needs to be discussed in the ERP to drive enabling resource management rules. That language provides justification for enabling provisions in RMA policy statements and plans which, in turn, would direct local government to provide for the expansion of low emissions land uses.

One of the key questions for NDC 2 will be how much New Zealand meets our emissions commitments with offshore mitigation (through buying international carbon credits at the cost of the taxpayer) or domestic action. Domestic action, such as decarbonisation of the greenhouse industry, will have positive economic and food security benefits for New Zealand's economy and should be prioritised.

Submission

1. Horticulture for emissions reductions

Horticulture is a low emissions land use which produces healthy food for New Zealanders and the world, while making \$7.48 billion of value between the domestic and export markets,¹ all on less than 0.1% of New Zealand's land area² and while contributing only 1.1% of New Zealand's greenhouse gas emissions.³

It is well known that horticulture is a low emissions land use, with the sector's limited greenhouse gas emissions coming from the use of fuel for farm equipment, processing, cool storage and freight. Horticulture also produces nitrous oxide emissions from fertiliser, although horticulture's share of nitrous oxide emissions is only 1% of New Zealand agriculture's total.⁴ Even with international shipping, our export products have small carbon footprints.

Land use change to horticulture is one option of many that the country should draw on to reach New Zealand's emissions reduction targets and Nationally Determined Contribution. For the least risk pathway to net-zero, the Government should develop a diverse portfolio of emissions reduction policies.

2. Nationally Determined Contribution linked to horticultural export value

The Nationally Determined Contribution (NDC) is New Zealand's international commitment to emission reductions under the Paris Agreement. New Zealand's second NDC will cover our commitment for the period from 2031-2035 and must be finalised by Government by February 2025. NDC 2 will sit alongside domestic targets, but it can be met using international cooperation (e.g. international carbon credits) as opposed to just domestic action. The NDC must show the highest possible ambition (increasing over time) and New Zealand's fair share of global effort.⁵

HortNZ supports a robust NDC because it is key to growing trade with sustainability-focused markets and meeting the Government's goal to double export value.⁶ New Zealand's second NDC will have an impact on horticultural exports through the requirements of trade agreements and market's expectations for sustainability credentials.⁷

¹ HortNZ. [Annual Report to March 2024](#). Accessed online 6/12/24.

² StatsNZ. [Agricultural and horticultural land use](#). 15 April 2021.

³ StatsNZ. [Greenhouse gas emissions \(industry and household\): Year ended 2022](#). 30 April 2024.

⁴ StatsNZ. [Greenhouse gas emissions \(industry and household\): Year ended 2022](#). 30 April 2024.

⁵ Ministry for the Environment. [Nationally Determined Contribution](#). 17 June 2023.

⁶ Hon. Todd McClay. ["Supporting rural New Zealand: one year of action"](#). 26 November 2024.

⁷ New Zealand Story. [Latest Market Pulse Research Highlights Perceptions of New Zealand](#). 12 February 2024.

2.1. Impact of NDC2 on EU Free Trade and Horticulture

New Zealand's Free Trade Agreement with the European Union (EU) has clauses requiring environmental collaboration, urgent action on climate change, and commitments through NDCs. As such, New Zealand's primary sector exports to one of our largest markets depend on an ambitious NDC 2. Relevant sections from the agreement are copied below:

- "The Parties shall cooperate on topics such as...the environmental and climate impacts of food production, including on agricultural greenhouse gas emissions, carbon sinks and biodiversity loss";⁸
- "The Parties recognise the importance of taking urgent action to combat climate change and its impacts, and the role of trade in pursuing this objective...";⁹
- "In light of [this], each Party shall effectively implement the UNFCCC [United Nations Framework Convention on Climate Change] and the Paris Agreement, **including commitments with regard to nationally determined contributions...**" (emphasis added);¹⁰
- "...each Party shall: promote the mutual supportiveness of trade and climate policies and measures, thereby contributing to the transition to a low greenhouse gas emission, resource-efficient and circular economy and to climate-resilient development".¹¹

Major exporters to the EU, including Zespri, will also be required to adopt and put into effect science-based emissions reduction targets for scope 1, 2 and 3 emissions under the EU Directive on Corporate Sustainability Due Diligence, subject to a revenue threshold. These targets must be in line with the transition to a sustainable economy and limiting global warming to 1.5°C in line with the Paris Agreement.¹² It is possible that other markets will follow suit.

Because horticulture is already a low emissions activity on-farm, reductions will mostly come throughout the rest of the supply chain, including indirect industries like fertiliser production and packaging manufacturing. New Zealand would benefit from setting policies that allow the horticulture industry to further decarbonise in a way that meets market expectations and protects our competitiveness. A robust NDC will support this.

⁸ Ministry of Foreign Affairs and Trade. [NZ-EU FTA Text and Associated Documents](#), Chapter 7 Sustainable Food Systems, Article 7.4, s.4(c)

⁹ Chapter 19 Trade and Sustainability, Article 19.6, s.1

¹⁰ Chapter 19 Trade and Sustainability, Article 19.6, s.2

¹¹ Chapter 19 Trade and Sustainability, Article 19.6, s.4(a)

¹² [Directive \(EU\) 2024/1760](#) of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859. Article 22

2.2. Horticulture can contribute to achieving NDC 2

This section responds to the consultation question, “Do you have any comments on the CCC’s advice?”

New Zealand’s NDC should explicitly state a commitment to enabling the continued operation and expansion of the horticulture sector as part of a transition to a low emissions economy. In their *Report on the potential domestic contribution to Aotearoa New Zealand’s second nationally determined contribution (2024)*, the Climate Change Commission counted on a vast transition from pastoral farming to horticulture in their modelling.¹³

This included 3,000 hectares conversion of dairy to horticulture (or another low emissions land use) per annum before 2030 at a base level.¹⁴ The further expansion modelled in each of the report’s scenarios is included in Table 1 below. This is a remarkable amount of expansion given that from 2012 to 2022, fruit-growing area expanded by just 3% and vegetable-growing area decreased by 25%.¹⁵ Horticulture is highly productive on small land areas, and operations a few hectares in size can be commercially viable for some crops. This means that one-to-one conversion from pastoral use is unlikely to meet the scale assumed in this modelling.

Table 1: Modelled conversion to horticulture to meet NDC 2 (from 2021 to 2035)

Scenario	Horticultural land increase (%)	Conversion to horticulture per annum (ha)
EB4 Demo Path	28%	2,000
Low Technology Low Systems Change (LTLS)	54%	4,000
High Technology High Systems Change (HTHS)	93%	7,000

The Climate Change Commission noted in their report that “land use conversion from ruminant pastureland to low emissions uses, such as horticulture and forestry, is expected to result in more revenue for these uses”.¹⁶ Fruit-growing, in particular, produces high-value exports.

Conversion to horticulture can be one important piece of meeting both the country’s goals for export value and emissions reductions, but to meet the level of ambition for expansion in the Climate Change Commission modelling, similar policy ambition is required. It is notable that none of the Draft Second Emissions Reduction Plan, the Ministry for the

¹³ Climate Change Commission. [Report on the potential domestic contribution to Aotearoa New Zealand’s second nationally determined contribution](#). October 2024.

¹⁴ Climate Change Commission. [Report on the potential domestic contribution to Aotearoa New Zealand’s second nationally determined contribution](#). October 2024. (p. 22)

¹⁵ United Fresh. [Fresh Facts 2024](#).

¹⁶ Climate Change Commission. [Report on the potential domestic contribution to Aotearoa New Zealand’s second nationally determined contribution](#). October 2024. (p. 25)

Environment’s (MfE) NDC 2 consultation document, nor MfE’s summary of the Climate Change Commission’s report mention horticulture.^{17,18,19}

Given that the modelling to domestically meet our NDC relies on horticultural conversions, Government support is needed behind it. A direct commitment to enabling land use change to horticulture would fit in the section of the NDC titled of “Party’s implementation plans, including, as appropriate, domestic institutional arrangements”²⁰ or the equivalent in NDC 2. Enabling horticulture should also be part of New Zealand’s second Emissions Reduction Plan (ERP 2), as described in Section 4 of this submission, and supporting policies should then be included in NDC 2.

3. What would it take to reach the estimated land use change to horticulture?

Diversification to horticulture presents an opportunity to reduce emissions while increasing food production. Land use change to horticulture from higher emissions land uses is a 100% certain way to reduce our emissions and should be part of a diverse portfolio of emissions reduction policies. In New Zealand, there are 1,000,000 ha of land that could potentially be converted to horticulture to meet increased demand for plant-based foods. If this land was converted to horticulture, it would be as effective at reducing New Zealand’s agricultural emissions as a methane vaccine.²²

Conversion to horticultural production will only occur if there are markets to buy the food produced. Expanded market access and development is critical to make the conversion commercially viable, including work to remove tariffs and nontariff barriers.²³

For example, Zespri is confident that global market demand for kiwifruit has not been saturated. Kiwifruit represents less than 1% of the global fruit bowl, which means there is space for demand to grow.²⁴ Growers require a license to grow SunGold or RubyRed kiwifruit varieties. The expected release of SunGold

Table 2: Domestic kiwifruit license release (subject to annual review by Zespri Board)²¹

Year	SunGold release (ha)
2024	250 ha
2025	Up to 350 ha
2026	350-500 ha
2027	350-500 ha
2028	350-500 ha

¹⁷ Ministry for the Environment. [New Zealand’s second emissions reduction plan](#). July 2024.

¹⁸ Ministry for the Environment. [Aotearoa New Zealand’s 2035 international climate change target: Opportunity for public feedback](#). November 2024.

¹⁹ Ministry for the Environment. [Potential Domestic Contribution to Aotearoa New Zealand’s second Nationally Determined Contribution](#). November 2024.

²⁰ UNFCCC. [Submission under the Paris Agreement: New Zealand’s first Nationally Determined Contribution](#). 4 November 2021.

²¹ Zespri. [Five-Year Outlook](#). November 2024.

²² Dorner, Z et al. (2018) Land-use Change as a Mitigation Option for Climate Change. Report to the Biological Emissions Reference Group (Project No. 18398) <https://www.mpi.govt.nz/dmsdocument/32140/direct> Accessed 24/04/23. (p. 12)

²³ Freyckberg, Erik. “[A gradual and multi-speed fall in tariffs is helping the horticultural sector overcome choppy trading conditions](#)”. 3 December 2024. Interest.co.nz.

²⁴ Zespri. [Five-Year Outlook](#). November 2024.

licenses in New Zealand is outlined in Table 2, noting that a portion of this new SunGold area will replace existing vines of green kiwifruit.

Other crops like cherries,²⁵ blackcurrants²⁶ and onions²⁷ are all finding new value streams, but land use change to growing these products would require markets to buy them. Access to skilled labour and capital is also a constraint to expansion. Growing horticultural output will require more support services like cool storage and processing facilities.

3.1. Policy change

If there is demand for more horticultural products and capital to invest, horticultural conversion can only take place with access to the land and water necessary to grow. Enabling resource management provisions which recognise the importance of emissions reductions are needed in order for land to change uses and sustain operation. Unworkable regional and district rules have been limiting factors for horticulture, including when they inadvertently limit vegetable rotation, prohibit vegetable expansion or fail to manage land use conflicts and reverse sensitivity. Resource management reform needed to enable horticulture is discussed in the following section.

4. Policy change enabled by emissions reduction plans

The consultation document notes that “NDC2 decisions need to be informed by the domestic emissions reductions that are achieved through the second emissions reduction plan (ERP2), as emissions reductions achieved between 2026 - 2030 can set us up for 2030 and beyond.”²⁸ The draft ERP 2 released for public consultation in 2024 contained no mention of horticulture, fruits or vegetables.

If there is true commitment to meet New Zealand’s emissions reduction targets, prioritisation for emissions reductions is needed across resource management policy, including the Resource Management Act (RMA) 1991, the National Policy Statement for Highly Productive Land, and the National Policy Statement for Freshwater Management.

4.1. Relationship to the RMA

The RMA states that all regional and district policy statements and plans shall have regard to the ERP²⁹. Land use change to horticulture needs to be discussed in the ERP in order to drive enabling resource management rules. Without those enabling rules, the land use change in the Climate Change Commission modelling will not be possible. This is illustrated in Figure 1.

Commercial vegetable production, in particular, faces unworkable freshwater rules in multiple regions that prevent crop rotation, expansion or even gaining a consent to grow at all. This issue is described in great detail in HortNZ’s [Position Paper on National Direction for](#)

²⁵ Eden Orchards. <https://edenorchards.co.nz/>

²⁶ Hon Nicola Grigg. [“Squeezing more bang for buck from blackcurrants”](#). 27 November 2024.

²⁷ Onions NZ. Humble to Hero project.

²⁸ Ministry for the Environment. [Aotearoa New Zealand’s 2035 international climate change target: Opportunity for public feedback](#). November 2024.

²⁹ Resource Management Act 1991. S61(2)(d), S66(2)(f), S74(2)(d)

Vegetables. Access to reliable volumes of water will also be a limiting factor for horticultural expansion in some regions. District planning rules for key horticultural structures and technology need to be enabling to manage potential land use conflict, especially since horticulture often takes place on the urban-rural fringe. Examples include provisions for audible bird scaring devices and agrichemical application conditions under local air plans.

The second Emissions Reduction Plan should include diversification to horticulture as a key proposed policy and discussed the national importance of low emissions land uses such as horticulture to meet New Zealand’s targets. If included, that language would provide justification for enabling provisions in RMA policy statements and plans. That, in turn, would direct local government to provide for the expansion of low emissions land uses.

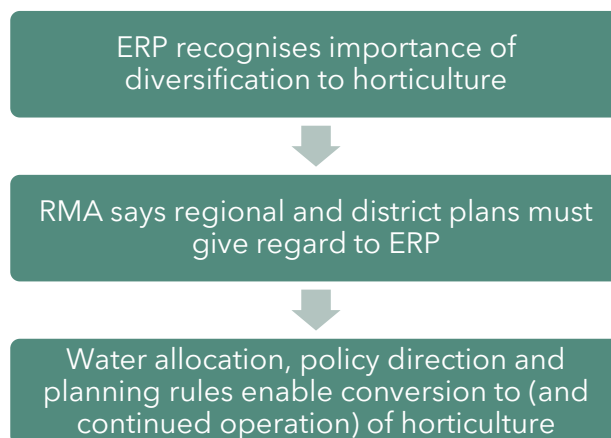


Figure 1: Link between the Resource Management Act 1991 and Emissions Reduction Plans

Outcomes sought:

1. Include diversification to horticulture as a key proposed policy in ERP 2.
2. Under the RMA:
 - a. Make “enabling the supply of fresh fruits and vegetables” a matter of national importance under the RMA and its replacement legislation.
 - b. Implement national direction for commercial vegetable production to remedy the consequences of unworkable regional rules.

These policies and non-RMA mechanisms to enable and decarbonise horticulture are described in greater detail in Appendix A.

5. Offshore mitigation versus domestic action

This section responds to the consultation question, “Should NDC2 be set at a level that is achievable with domestic action only or should it be set at a level that is achievable with a mix of domestic action and international cooperation (offshore mitigation)?”

One of the key questions for NDC 2 will be how much New Zealand meets our emissions commitments with offshore mitigation (through buying international carbon credits at the

cost of the taxpayer) or domestic action. Domestic action will have flow-on economic benefits for New Zealand's economy.

For instance, if New Zealand's domestic climate change policies drive emitting industries out of business instead of decarbonisation, the productivity of those businesses is then lost from the country. With carbon leakage, other countries may benefit from that production (and importing the same goods to New Zealand) while the taxpayer funds credits overseas for reductions that could have happened onshore.

The Government needs to decide at what price point it is worth buying offshore credits as opposed to paying for domestic decarbonisation. Only credible offshore credits should be purchased. If it is possible to invest in decarbonisation or land use change domestically to reduce emissions for less money than buying credits overseas, the Government should always choose that action. The question is how much more expensive domestic decarbonisation needs to be before offshore credits are purchased instead, since it will be the taxpayer's dollar which is spent either way. An example of this dilemma is at play in the greenhouse sector, discussed in the next section.

5.1. Greenhouse sector

Growing indoors, also known as covered cropping, is what allows New Zealanders to buy tomatoes, cucumbers, capsicum, courgettes, eggplants, leafy greens and herbs year-round. Covered crop growers even out the supply of fresh produce, extending the availability of seasonal crops when outdoor cropping is challenging. Greenhouse growing is also a form of climate adaptation because the crops are less vulnerable to adverse weather events. If these crops were not grown in New Zealand, consumer demand would drive greater imports from other countries without ambitious climate change policy, driving carbon leakage and emissions from international freight.

61% of known greenhouse growers (covering 80% of greenhouses by area) use heating sources powered by fossil fuels in colder months.³⁰ Those who use natural gas rely on capturing CO₂ to pump into the greenhouses to boost plant productivity. These users are unlikely to switch from natural gas without an alternative source of CO₂ for boosting plant growth. Greenhouse growers pay into the Emissions Trading Scheme (ETS) and receive industrial allocation as process heat. Energy-switching is prohibitively expensive, particularly for small and medium-sized growers.

The greenhouse sector's total emissions are approximately 100,000 tonnes CO₂e.³¹ Greenhouses contribute little to New Zealand's net emissions (0.17%³²) while providing a resilient supply of healthy food. Yet, one in five greenhouse growers have gone out of business, due in part to ETS costs.³³ Funding to decarbonise is needed to reverse this trend, but financial support was lost with the disestablishment of the Government Investment in Decarbonising Industry (GIDI) fund.

³⁰ Vegetables NZ, Inc.

³¹ Vegetables NZ, Inc.

³² [New Zealand's Greenhouse Gas Inventory 1990-2022](#).

³³ Vegetables NZ, Inc, based on industry tracking beginning in 2021

Decarbonising the greenhouse sector would keep food production in New Zealand and keep small and medium-size growers in business. New electric or biomass boilers or connections to geothermal energy would be 100% certain to reduce emissions. Government investment to support this transition would bring public health benefits through access to affordable, nutritious food. This added value cannot be achieved with international credits.

Outcomes sought:

- Funding or zero/low interest loans for decarbonisation or energy efficiency improvements,
- Electricity infrastructure upgrade support to overcome the cost barrier of connecting new heating systems to the grid to replace gas, oil or coal boilers,
- Carbon capture, storage and use policy settings which support a resilient domestic supply of CO₂,
- Insurance to de-risk low temperature geothermal exploration to encourage geothermal energy use as a viable alternative energy source for all processed heat users.

6. Criteria to drive investment

The Government needs to be clear and transparent about the criteria used to decide when to invest in reductions domestically (and which ones) as opposed to buying international credits. These criteria may include export value, social cohesion, certainty of reductions or otherwise, but it is unknown to the public.

For instance, what criteria drives investment in uncertain technological advances to meet agricultural emissions reductions, as supported in ERP 2, as opposed to the certainty of reductions from greenhouse decarbonisation?

Policy to Enable Horticulture

Horticulture provides New Zealand's lowest emissions food source and the third-largest primary sector export.³⁴ HortNZ seeks a robust discussion of the policies needed to enable horticulture for a high-nutrition, low-emissions future. Proposed changes to support the industry are described in this appendix.

1. Enabling the supply of fresh fruits and vegetables

Fresh fruit and vegetables are nationally significant for the health of the nation, domestic nutrition and food security and export value as low emissions, high value products. Recognition of the importance of fresh fruit and vegetables is needed at a national level because regional and district councils cannot be expected to make policy for national value without Central Government direction.³⁵ The supply of fresh fruits and vegetables should be enabled as a matter that all RMA practitioners should have particular regard to under Section 7 of the Resource Management Act 1991 (RMA). This wording is preceded in Section 129 of the repealed Natural and Built Environment Act 2023³⁶ and Section 3.33 of the National Policy Statement for Freshwater Management (NPS-FM) 2020.³⁷

2. National direction for commercial vegetable production

HortNZ urgently seeks national direction for commercial vegetable production to make vegetable growing a permitted activity. Over 20% of New Zealand's fresh vegetable supply is threatened by unworkable freshwater regulations likely to become operative in 2025. If over one-fifth of the country's supply of fresh vegetables is disrupted by unworkable regulations, the impact on the price and access to fresh vegetables for New Zealanders will be severe. This threatens the viability of a sector that is both low emissions and essential for the health of New Zealanders. In order for the country to meet our emissions budgets, we need to enable, rather than stifle, low emissions industry.

A consistent approach can best be provided through a new National Environmental Standard. Workable rules for vegetable production are possible while progressing aspirations for protecting and improving our freshwater. HortNZ has written an extensive policy position document on this topic, which can be found on our website.³⁸

³⁴ MPI. [Situation and Outlook for Primary Industries June 2024](#)

³⁵ NZIER. 2024. [Making the case for vegetable production in New Zealand](#). A report for Horticulture New Zealand.

³⁶ [Natural and Built Environment Act 2023](#).

³⁷ This section was quashed only due to deficiencies in the consultation process, not due to the content of the policy. [National Policy Statement for Freshwater Management 2020](#).

³⁸ Sands, Michelle. [Position Paper on National Direction for Vegetables](#). 14 November 2024. HortNZ.

3. Policies to further decarbonise horticultural production and exports

Policies to further decarbonise horticultural supply chains include:

- increasing supply of renewable energy and local energy infrastructure,
- enabling upgrades to key infrastructure in ports and roads to allow for low- or zero-carbon transportation,
- decarbonisation innovation and tech funding to replace the GIDI fund,
- investment in horticultural research and development and
- incentivising carbon removals through non-forestry plantings with supporting policy.

3.1. Low-emissions shipping

New Zealand needs to progress on green shipping to help cargo users stay competitive. The Government has a role to play in enabling the use of low- or zero-carbon shipping on trade routes. HortNZ supports accelerating green shipping opportunities through policy work from the New Zealand government to support the work under way by exporters to decarbonise their supply chains.

Horticulture exports are dependent on maritime freight to travel to their destination, although some highly perishable, high value crops like cherries are transported via air freight. Horticulture is already a low emissions industry on-farm, so international freight is the emissions category where the sector has the greatest opportunity to reduce. As the “food miles” conversation becomes more prevalent, and market requirements for science-based targets increase, New Zealand will be at a disadvantage in its trade due to distance, unless we can access lower-emissions ways of transporting product. This will be a critical consideration for our export markets as supply chains come under more scrutiny.³⁹

HortNZ encourages the Government to continue its support for green hydrogen as the basis for green fuel, as indicated in the Energy Strategy for New Zealand,⁴⁰ the Hydrogen Roadmap⁴¹ and the Regional Hydrogen Transition programme.⁴² The 2023 Coalition Agreement between the National Party and New Zealand First calls for a plan for infrastructure to increase hydrogen use and facilitate port development and efficiency.⁴³

For low-emissions shipping alternatives to be accessible to New Zealand suppliers, the Government needs to support investment in building bigger berths at ports to handle the larger, low-emissions ships.

³⁹ WBCSD (2024) Briefing on Key Trends for 2024, <https://www.wbcsd.org/Overview/Resources/General/Briefing-on-key-trends-for-2024>

⁴⁰ MBIE. [Towards an energy strategy for New Zealand](#). 20 November 2023.

⁴¹ MBIE. [Hydrogen in New Zealand](#). 6 September 2024.

⁴² MBIE. [Regional Hydrogen Transition](#). 22 September 2023.

⁴³ New Zealand First. [2023 Coalition Agreement](#).

Just slowing down the boats (“slow steaming”) is not suitable for horticultural trade because fruit and vegetables have a limited shelf life. From the moment the product is harvested, the countdown begins to get that produce to the consumer at the right ripeness.

Action is needed on low-emissions shipping. Otherwise, New Zealand risks reputational damage, as well as being left out of international low-emissions shipping programmes and paying more to use older, higher emissions vessels.

Outcomes sought:

- Fast-track port and fuel bunkering upgrades,
- Develop the regulations necessary to safely store and work with these new fuels and
- Support investment in low-emissions fuel production.

3.2. Research and development

Research and development are needed to enable the expansion of the horticulture industry. Growth can be realised with increased productivity, mechanisation and technological improvements and plant varietal selection.⁴⁴ This will require a joint effort from industry, universities and Crown research organisations. Outcome Area 4 of the Aotearoa Horticulture Action Plan, the sector strategy jointly owned by Government, industry, the science sector and Māori, calls for a strong research and development programme and consideration of Mātauranga Māori to enable, accelerate and support horticulture.⁴⁵

3.3. Removals from non-forestry plantings

The Government should develop a standardised measurement system for non-forestry removals, including wetlands, shelterbelts and riparian plantings. Growers restore wetlands and plant shelterbelts (hedgerows), riparian plantings, diverse inter- and under-plantings and green buffers on horticultural properties for their numerous benefits, including water quality, biodiversity and shelter for crops from the elements. Horticultural properties generally do not have the space for ETS forest planting, but these other plantings sequester carbon, and that benefit should be recognised. Growers should be compensated for this benefit with a standardised measurement approach for non-forestry removals and the opportunity to earn carbon credits.

⁴⁴ New Zealand Apples & Pears

⁴⁵ HortNZ. [Aotearoa Horticulture Action Plan](#).