

SUBMISSION ON

Whether emissions from international shipping and aviation should be included in the 2050 target

31 May 2024

To: Climate Change Commission

Name of Submitter: Horticulture New Zealand

Supported by: Citrus NZ, New Zealand Apples & Pears, NZ Horticulture Export Authority, Onions New Zealand Inc., Pukekohe Vegetable Growers Association, Strawberry Growers NZ, Summerfruit NZ, Tararua Growers Association, TomatoesNZ

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OVERVIEW

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Our submission

Horticulture New Zealand (HortNZ) thanks the Climate Change Commission for the opportunity to submit on the *Review on whether emissions from international shipping and aviation should be included in the 2050 target* and welcomes any opportunity to continue to work with the Climate Change Commission 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

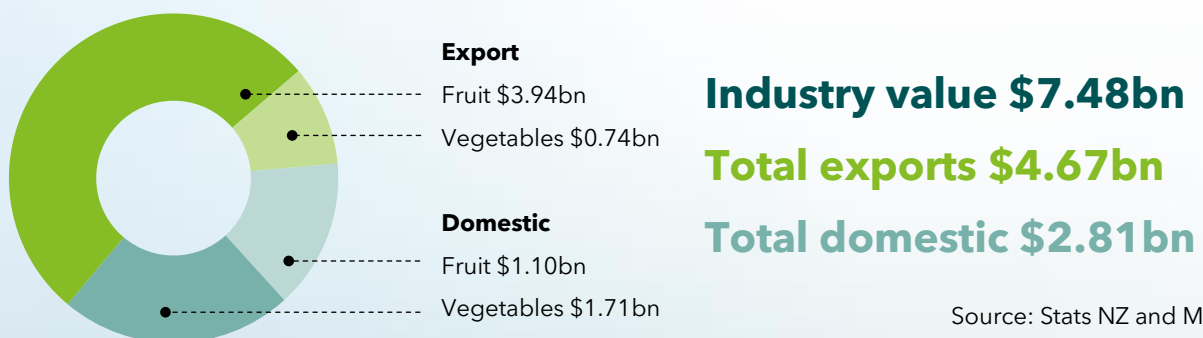
HortNZ represents the interests of approximately 4,200 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruits and vegetables. The horticultural sector provides over 40,000 jobs.

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

Key Points

HortNZ supports and recognises the need for emissions reductions in global shipping and aviation as a whole. We are concerned, however, that counting international shipping and aviation emissions before alternative fuels are available domestically will have unintended consequences for New Zealand's export-driven economy.

This submission's key points are:

- Do not include international shipping and aviation emissions in New Zealand's 2050 net-zero target.
- Counting these emissions is not sensible until green shipping and aviation alternatives and accompanying infrastructure are available domestically.
- Policy to reduce these emissions would run counter to the Coalition Government's stated goal to double export value in ten years¹ and the Aotearoa Horticulture Action Plan's aim to double horticultural farmgate value by 2035.²
- The cost of compliance or emissions accounting, let alone emissions pricing, from counting international freight emissions will be passed onto exporting businesses, including growers.
- With international targets already in place, there is a serious risk of double counting emissions. This is a concern for the integrity of emissions accounting and to ensure exporters are not burdened with duplicated compliance or emissions pricing.
- Producers already face pressure from export markets to be sustainable through private standards and trade agreements. Government regulation in this area risks duplication.

¹ [National sets bold target for export growth](#)

² [HOR-4794-Action-Plan-One-Pager_FA_web.pdf\(hortnz.co.nz\)](#)

Submission

Horticulture has a role to play in New Zealand's transition to a low emissions economy and in meeting our 2050 net-zero target. We welcome the opportunity to comment on whether to count international shipping and aviation emissions in this target.

The Climate Change Commission is deciding whether to advise the Government to include international shipping and aviation emissions in their 2050 target. If these emissions are included, the Government will then need to include them in their Emissions Budget and Emissions Reduction Plan.

If the Government does include the international emissions, they will then need to enact policy to support reductions. At this stage, it is unknown whether those policies would be a "carrot" (e.g., investment in green shipping fuels, port upgrades to allow for green vessels), a "stick" (e.g., pricing through the Emissions Trading Scheme), or some combination.

1. General Position

HortNZ supports and recognises the need for emissions reductions in global shipping and aviation. Horticultural exports are forecasted to reach NZ\$8.19 billion in 2025 as New Zealand's third highest value export sector.³ These 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 we have the greatest opportunity to reduce.

HortNZ's position is that international shipping and aviation emissions should not be counted in New Zealand's 2050 net-zero targets without the infrastructure for green alternatives available domestically. The Government should not ask exporters to reduce their international shipping and aviation emissions without a viable pathway to do so.

In New Zealand, we cannot help our geographic isolation. We need to know our country's strengths - including low emissions exports with a low environmental impact which feed the world. We also need to know our country's weaknesses - our location in the corner of the world is far from major shipping routes and key markets. New Zealand's exports are small compared to the global market, meaning that New Zealand's stop on shipping schedules is not guaranteed.

Emissions targets should be about taking ownership of the emissions that New Zealand can control. New Zealand does not have enough export volume or trade of high enough value to influence international shipping companies. With an export-reliant economy, New Zealand has more to risk should domestic policies inadvertently disincentivise these companies from operating here than we have influence to reduce those companies' emissions.

³ [Situation and Outlook for Primary Industries \(SOPI\) December 2023 \(mpi.govt.nz\)](#)

The horticulture industry is fully behind New Zealand's emissions reduction goals, and we see our industry as a solution to the transition to a low emissions future. Fruit and vegetable growers - the high value, low emissions success story of the primary industries - will bear rising costs if exports are priced through shipping emissions.

Outcome sought: Do not include international shipping and aviation emissions in the 2050 target until there is a viable, domestically available alternative.

2. Changes Will Happen without New Zealand Action

The discussion document for this consultation states up front, "Global action will cause change to international shipping and aviation whether or not these emissions are included in Aotearoa New Zealand's 2050 target."⁴ If the primary concern is whether these emissions will decrease to mitigate the effects of climate change, the Climate Change Commission is aware that counting them in New Zealand will not make a difference.

International collaboration is needed and possible without these emissions in New Zealand's national targets. The International Maritime Organisation (IMO), of which New Zealand is a member, already has a target to reduce international shipping emissions to net-zero by 2050 through their 2023 IMO Strategy on Reduction of GHG Emissions from Ships.⁵ New Zealand has also already signed the Clydebank Declaration at COP26 to support development of green shipping corridors⁶ without international shipping included in our 2050 target.

The European Union (EU), one of New Zealand's biggest export markets, requires businesses to manage the environmental impacts of their entire supply chain through the Directive on Corporate Sustainability Due Diligence.⁷ Under this directive, large companies must show how they are helping limit climate change based on the Paris Agreement target of 1.5°C, and New Zealand suppliers of any size could be captured as part of a wider supply chain.

Grower exporters are deeply concerned about the possibility of having their emissions "counted twice", by their export markets and at home. Moving forward, horticulture exporters will be paying into multiple emissions trading schemes in New Zealand and the EU (whose emissions trading scheme already includes international shipping), adding cost and reducing the value of New Zealand products. This financial pressure will leave less money left over for the sector to invest in innovation, research further environmental improvements, or to return to the New Zealand economy through spending on goods and services.

Outcome sought: Policy should be designed to eliminate any risk of double counting of international shipping and aviation emissions.

⁴ Climate Change Commission. "Review on whether emissions from international shipping and aviation should be included in the 2050 target, and if so how". April 2024. (p. 19)

⁵ <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Cutting-GHG-emissions.aspx>

⁶ [Commitments made at COP26 | New Zealand Ministry of Foreign Affairs and Trade \(mfat.govt.nz\)](https://www.mfat.govt.nz/en/commitments-made-at-cop26/new-zealand-ministry-of-foreign-affairs-and-trade)

⁷ [Corporate sustainability due diligence - European Commission \(europa.eu\)](https://ec.europa.eu/economy_finance/corporate-sustainability-due-diligence)

3. New Zealand Green Shipping and Aviation

As the “food miles” conversation becomes more prevalent, New Zealand will be at a disadvantage in its trade due to distance, unless we can access greener ways of transporting product. HortNZ fully supports accelerating green shipping opportunities through targeted investment from the New Zealand government.

This investment is already happening without including international shipping and aviation emissions in the 2050 target. There are dozens of hydrogen projects underway⁸ and hydrogen is considered under the Energy Strategy for New Zealand⁹, the Hydrogen Roadmap¹⁰ and the Regional Hydrogen Transition programme¹¹. 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.¹²

In order for green shipping alternatives to be accessible to New Zealand suppliers, the Government needs to invest in building bigger ports that can handle the larger, low-emissions ships. 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. For instance, some export markets will not accept New Zealand avocados if they took more than 30 days from picking to reach the destination port.¹³ The discussion document correctly identifies slow steaming is not a viable option (p. 85).

New Zealand exporters also cannot require vessels to sail directly to their end-destination to cut transportation emissions. New Zealand is just one stop on a shuttle network, and shipping companies travel around the region to fill ships in Australia or Singapore before continuing to Asia or Europe in whatever configuration is the most efficient. Emissions per container go up because the shipping schedule is not in exporters’ control.

Alternatives for green shipping must be available before we penalise exporters for not using these services. Otherwise, producers have no alternatives except buying offsets. Sequestration from orchard trees isn’t recognised in the New Zealand Emissions Trading Scheme. If an increased price of export drives some growers away from orcharding while others buy offsets, this policy will effectively replace fruit growing with forestry.

At this stage, counting emissions from international shipping would be introducing risk and cost for exporters on the gamble that alternative fuels can be produced in New Zealand. Growers will have to bear that risk before the alternative even exists.

⁸ [NZ Hydrogen Projects – New Zealand Hydrogen Council](#)

⁹ [Towards an energy strategy for New Zealand | Ministry of Business, Innovation & Employment \(mbie.govt.nz\)](#)

¹⁰ [Hydrogen in New Zealand | Ministry of Business, Innovation & Employment \(mbie.govt.nz\)](#)

¹¹ [Regional Hydrogen Transition | Ministry of Business, Innovation & Employment \(mbie.govt.nz\)](#)

¹² [Coalition Agreement - New Zealand First \(nzfirst.nz\)](#)

¹³ Horticulture Export Authority

4. New Zealand's National Interest

The Coalition Government's stated goal is to double export value in ten years¹⁴, which aligns with the Aotearoa Horticulture Action Plan aim to double horticultural farmgate value by 2035.¹⁵ Counting international shipping and aviation emissions is counter to increasing the value of New Zealand's exports, especially since there is no guarantee that counting the emissions would not lead to pricing them. Even if these emissions are not priced, the cost of compliance and emissions accounting on international shipping companies will be passed onto exporters, including growers.

One of the principles of the New Zealand Freight and Supply Chain Strategy is "National Interest", meaning "We will identify, protect, and strengthen the parts of the freight and supply chain system that are critical to New Zealand's national interest".¹⁶ Policies that threaten our export profitability are not in New Zealand's own best interest. Policymakers need to be mindful of our national character. New Zealand is a geographically isolated, export-driven economy, feeding the world with efficient, low-emissions food.

Before making a significant change to our 2050 targets, the Government needs to consider whether the decision is in the best interest of New Zealanders, now and for future generations. The discussion document itself says, "As an island nation further from other major economies, the country has larger international shipping and aviation emissions for the same items/travel trips relative to other countries" (p. 82). New Zealand's geographic location is not changeable, so replicating emissions reduction policies from denser parts of the world like Europe and North America will disadvantage our country's trade.

The discussion document continues, "Costs associated with the reduction of emissions from international shipping and aviation may be disproportionately higher for Aotearoa New Zealand than other countries" (p. 82). Knowing both that the costs will be higher for New Zealand and that these emissions will decrease without adding them to our targets, counting the emissions would cause our country disproportionate cost for limited impact.

5. Vulnerability of New Zealand's Shipping

Knowing New Zealand's unique circumstances means acknowledging our fragile position on the world's shipping networks. Shipping to and from New Zealand is almost entirely dependent on international freight companies. New Zealand does not sit on the main East - West shipping routes, so international shipping companies only add our ports to their schedules when it is profitable and efficient to do so. New Zealand has relatively small export volumes on the global scale of shipping companies' operations, so we are not a high priority stop, and our suppliers pay more for the privilege to ship.¹⁷

Higher shipping costs are passed onto exporting growers, who are already feeling squeezed by rising labour and input costs. Fees continue to increase without

¹⁴ [National sets bold target for export growth](#)

¹⁵ [HOR-4794-Action-Plan-One-Page-FA_web.pdf \(hortnz.co.nz\)](#)

¹⁶ https://www.transport.govt.nz/assets/Uploads/MOT4806_Aotearoa-Freight-and-Supply-Chain-Strategy-p09-v03.pdf (p. 6)

¹⁷ https://www.transport.govt.nz/assets/Uploads/MOT4806_Aotearoa-Freight-and-Supply-Chain-Strategy-p09-v03.pdf (p. 49)

accompanying port productivity.¹⁸ Shipping is a significant cost for growers, whose ability to stay in business will be compromised by any increases in the cost.

Supply chain disruptions during the COVID-19 pandemic showed that our links to international shipping are not guaranteed.¹⁹ During the rise of COVID-19, some shipping lines withdrew boats from New Zealand or dropped ports of call, at first because there wasn't enough cargo, and later because of congestion.²⁰ When lockdown online shopping drove a burst of trade between North Asia and North America, shipping companies reallocated resources to that route, and New Zealand was left out, with vessels now serving that northern route. Shipping lines continue to be unpredictable due to global geopolitical conflict and disruptions from environmental events.²¹

The international shipping companies serving New Zealand are few and highly consolidated. If just one company changed their strategy and redirected resources away from New Zealand, it would have a massive impact on our exports. Ships already avoid refuelling in New Zealand due to the cost, requiring a stop in Singapore or Australia en route.

Due to these dynamics, New Zealand needs to keep international shipping companies interested in our market, not drive them away. For supply chain resilience, the Aotearoa Freight and Supply Chain Strategy recommends to "reduce the costs of operating services to New Zealand"²², not increase them. Opening the door to pricing international shipping emissions could have the reverse effect. Putting the emissions in our 2050 targets would send a market signal and introduce carbon accounting costs, even if a pricing policy would be decided by officials later down the line. Even if shipping companies are already counting their emissions, New Zealand's unique data requirements could require additional reporting, which introduces additional cost.

Furthermore, our international shipping emissions cannot be isolated because ships travel along a shipping route, on which New Zealand is only a stop. When the ships reach New Zealand, there are already goods in the cargo going to a different destination later on the route.

6. Importance of Air Freight

Air freight transportation is used for fruit with a short shelf life that is valuable enough to merit the additional cost, like strawberries and kiwiberries. Air freight is essential for cherries, which reach customers in Asia 48 hours after leaving the orchard gate. Air freight allows New Zealand cherry growers to access a premium market for the highest quality. If these cherries were instead shipped by ocean freight, they would have to compete in a lower value market with supply from Chile, which has magnitudes more volume. Maritime

¹⁸ "No growth without infrastructure" interview with Mike Knowles, chair of the New Zealand Council of Cargo Owners (NZCCO) [The-Orchardist-May-2024-pages.pdf](https://www.hortnz.co.nz/assets/Uploads/The-Orchardist-May-2024-pages.pdf) (hortnz.co.nz) (p. 48)

¹⁹ [The pandemic exposes NZ's supply chain vulnerability - be ready for more inflation in the year ahead](https://theconversation.com/the-pandemic-exposes-nz-s-supply-chain-vulnerability-be-ready-for-more-inflation-in-the-year-ahead) (theconversation.com)

²⁰ [Coastal Shipping Investment Approach: Report 1 - State-of-Play](https://www.nzta.govt.nz/assets/Uploads/Coastal-Shipping-Investment-Approach-Report-1-State-of-Play.pdf) (nzta.govt.nz) (p. 14)

²¹ https://www.transport.govt.nz/assets/Uploads/MOT4806_Aotearoa-Freight-and-Supply-Chain-Strategy-p09-v03.pdf

²² https://www.transport.govt.nz/assets/Uploads/MOT4806_Aotearoa-Freight-and-Supply-Chain-Strategy-p09-v03.pdf (p. 51)

freight takes far longer, so the cherry quality cannot be guaranteed in the same way as via air freight. In this way, transport by air allows New Zealand growers to access a profitable niche in the market.

Air freight depends on passenger volumes, because cargo is often transported via passenger airplanes.²³ If rising costs of flights to New Zealand reduce the number of international visitors, lower passenger volumes could reduce the number of trips with space to air freight goods, losing market for New Zealand growers.

High value export sustains orcharding, which has a far lower environmental impact than other primary production activities in New Zealand. Orchards are highly efficient and produce more monetary value with each unit of water than other land uses. For example, cherries grown in Central Otago can earn \$686 per millimetre of water applied per hectare, compared to dairy at \$17 per millimetre of water applied per hectare, as expressed in the table below.²⁴

Water use activity	Gross revenue (\$ per ha)	Efficiency (\$ earned per mm of water applied per ha)
Cherry - Upright Fruiting Offshoot (UFO) system	\$240,000	\$686
Cherry - traditional growing system	\$127,575	\$365
Other summerfruit	\$60,740	\$174
Pipfruit	\$56,705	\$162
Dairy	\$8,664	\$17

Should policies to reduce international aviation emissions come at the cost of the premium export market, it could push efficient water users like cherry growers out of business. Emissions reductions policies should not come at the expense of activities that are beneficial for New Zealand’s own environment and economy.

Air freight is also strategically important for food security in the Pacific Islands, where low frequency shipping and delays can stifle maritime trade.²⁵

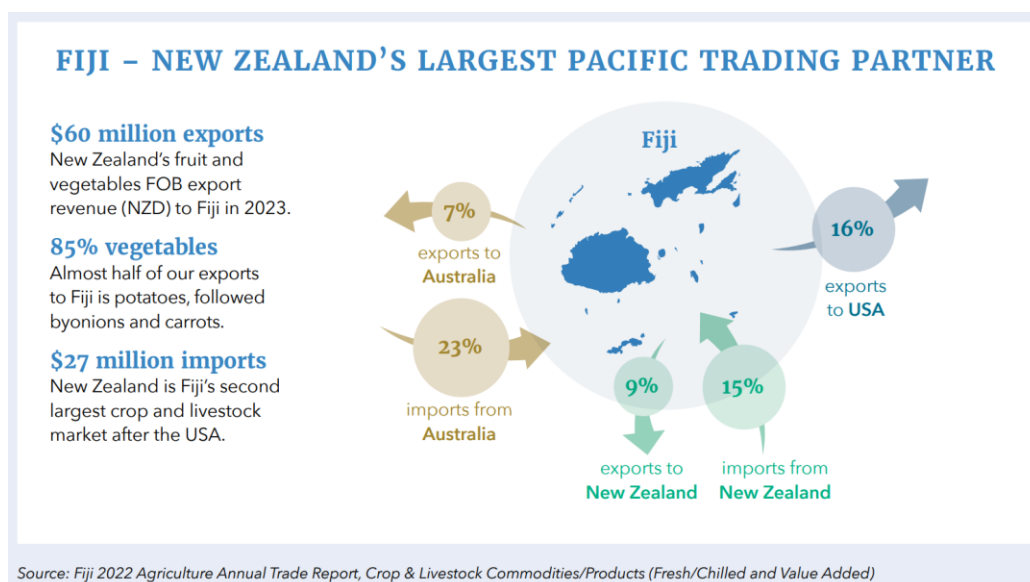
²³ https://www.transport.govt.nz/assets/Uploads/MOT4806_Aotearoa-Freight-and-Supply-Chain-Strategy-p09-v03.pdf

²⁴ [horticulture-new-zealand-stuart-ford.pdf \(orc.govt.nz\)](#) (p. 13)

²⁵ “Trading with our Blue Pacific neighbours”, *The Orchardist*. [The-Orchardist-May-2024-pages.pdf \(hortnz.co.nz\)](#) (p. 29)

7. Feeding the World

New Zealand punches above our weight in terms of feeding the world. Our horticulture industry plays a particularly important role in providing fresh vegetables and fruit to the Pacific Islands, which are too geographically isolated to import perishable products from many other countries. For instance, Fiji was our third largest recipient of exported New Zealand vegetables (\$50.7 million) in 2023.²⁶ This is illustrated in the diagram below.



The Pacific Islands are also vulnerable to shipping disruptions. During COVID-19 border closures, shipping disruptions to Pacific Island countries like Nauru led to food shortages.²⁷ Shipping disruptions in New Zealand affect our ability to export to the Pacific as well. The managing director for South Sea Exports, a company with 20 years of experience in the region, told *The Orchardist*, “New Zealand used to have better shipping services to the Pacific than Australia, but since Covid-19 the advantage has swung to Australia. Moving containers around in New Zealand has just become so expensive.”²⁸

Policy choices that could increase the cost of imported food, including through increasing shipping costs, would be an adverse outcome for the wellbeing of the Pacific region and disadvantage New Zealand’s trade position.²⁹

International agreements recognise that emissions reduction should not put global food supply at risk. The Paris Agreement highlights the importance of food production and food security in the context of greenhouse gas emissions reduction targets, recognising the “fundamental priority of safeguarding food security” and noting the need to adapt, foster resilience and lower emissions “in a manner that does not threaten food production”.³⁰

²⁶ StatsNZ International Trade Dashboard, accessed 09/05/24

²⁷ [Food insecurity is a growing challenge for the Pacific | RNZ News](#)

²⁸ “Trading with our Blue Pacific neighbours”, *The Orchardist*. [The-Orchardist-May-2024-pages.pdf](#) (hortnz.co.nz) (p. 29)

²⁹ New Zealand exports \$83.22 million of vegetables and \$21.83 million fruit to the Pacific Islands (year-end Dec 2023), especially potatoes, onions and apples. (StatsNZ International Trade Dashboard, accessed 09/05/24)

³⁰ [ADOPTION OF THE PARIS AGREEMENT - Paris Agreement text English \(unfccc.int\)](#)

Existing carbon border adjustments do not include food because changes to food prices can quickly drive global hunger. Food security is a global crisis, even in the most developed countries. Most of New Zealand's exports are food, and the Government should be cautious about unintended consequences for Sustainable Development Goal 2 - Zero Hunger.

8. The Market Drives Emissions Reductions

The horticulture export industry is already driven to emissions reductions by consumer demand. Private standards, meaning requirements that retailers place on their suppliers, are rising to meet the challenges of consumer and investor demand.³¹ Private standards are frequently more stringent than government regulation, and policy levers often introduce duplication with market requirements.

When it comes to New Zealand Inc.'s clean, green brand, horticultural exports are already fast to respond to consumer market demands for sustainability. HortNZ is not aware of any evidence that changes to our national emissions targets are needed to maintain positive brand recognition overseas.

As far as HortNZ is aware, New Zealand companies do not see any differentiation for those that count shipping emissions versus those that don't. If exporters experience market demand for reducing shipping emissions, they can already pay for offsets (at high cost) when they order shipping containers. It is unknown whether these offsets support projects within New Zealand or overseas. The option for green shipping does not yet exist through companies that serve New Zealand.

9. Carbon Leakage

New Zealand exporters already have low greenhouse gas emissions compared to global production. If these producers are priced out of exporting, production will shift overseas where there are fewer environmental regulations. This carbon leakage is a risk should counting international shipping and aviation emissions drive pricing those emissions. This would benefit our trade competitors who do not have equivalent environmental policies.

10. Imports

New Zealand imported \$107.94 billion worth of goods and services in the year ending December 2023.³² All of the goods had to travel to New Zealand by sea or by air. If those goods were essentially "taxed" through emissions pricing, it would drive inflation in New Zealand. That would have adverse impacts for the cost of living and for New Zealand businesses who rely on imports to operate. New Zealand imports nearly all of our fuel, making up 14.6% of total imports by value.³³ Increasing the cost of these imports is a risk to New Zealand's energy security.

³¹ [2024 The+Aotearoa+Circle+Report Protecting+New+Zealands+competitive+advantage.pdf \(squarespace.com\)](#)

³² StatsNZ International Trade Dashboard, accessed 15/05/24

³³ StatsNZ International Trade Dashboard, accessed 15/05/24

Discussion Questions

HortNZ's position is that international shipping and aviation emissions should not be counted in New Zealand's 2050 net-zero targets until the infrastructure for green alternatives is available domestically.

If the Climate Change Commission decides to advise differently, HortNZ's preferences for how international shipping and aviation emissions are counted are included in responses to the consultation questions.

Q. 5 Is there any further information or evidence the Commission should consider on the potential impacts or policy options if international shipping and aviation emissions were included in the target?

The Commission should consider the impacts on grower (and other primary producer) returns from exports.

Q. 6 Which of these options for whether international shipping and aviation emissions should be included in the 2050 target do you support? What are your reasons and evidence for that?

DO NOT INCLUDE IN THE 2050 TARGET AT THIS POINT

See submission above.

Q. 7 If international shipping and aviation emissions were included in the 2050 target, which of these options for counting the emissions would you support? What are your reasons and evidence for that?

OPTION 2: TO/FROM NEXT PORT - FOR THE SPECIFIED TRAVEL LEG

Option 2: Preferred option if one must be chosen. This approach is similar to the EU's approach to non-EU ports. This option has an implicit expectation that the country on the other half of each trip is counting their half of the emissions. This option still does not account for the fact that many goods are picked up at ports before New Zealand stops and distributed in another country further along the shipping route, meaning they are just passing through New Zealand.

Q. 10 If international shipping and aviation emissions were included in the 2050 target, which of these options for the structure of a target would you support? What are your reasons and evidence for that?

OPTION 1: INCLUDE IN THE NET ZERO COMPONENT OF THE TARGET

This choice is what businesses and the public will assume is meant by the change. The other options would be unnecessarily confusing and risk misinterpretation.