

#### ENVIRONMENT COMMITTEE KOMITI WHIRIWHIRI TAKE TAIAO

8 November 2024

Dr Rod Carr Chairperson He Pou a Rangi Climate Change Commission

By email: governmentservices@climatecommission.govt.nz

Dear Mr Carr,

## Petition of Alex Johnston: End free carbon credits by 2030 and undertake other actions to reduce emissions.

The Environment Committee is currently considering the above petition. It requests:

That the House of Representatives accelerate the phase-out of free industrial allocations in the Emissions Trading Scheme to end free credits by 2030; use funds generated from ending free credits to contribute to the upfront costs of decarbonising emissions-intensive industries; protect jobs through a Carbon Border Mechanism similar to that being introduced in the EU; and note that 6070 people have signed a similar online petition.

To assist with our consideration of this petition, we invite the Climate Change Commission to provide written evidence. The committee has already received written evidence from the petitioner and Energy Resources Aotearoa, which is attached to this letter for your reference.

If you wish to include any information of a private or sensitive nature, you should first discuss this with the clerk of committee, as the committee usually releases all evidence to the public.

Please send your written evidence by **4.00pm Monday**, **2 December 2024** to Isobel Tannock, clerk of committee, at <a href="mailto:en@parliament.govt.nz">en@parliament.govt.nz</a>. If you have any questions, please contact the clerk on (04) 817 6921.

Yours sincerely

Hon Scott Simpson

Chairperson

**Environment Committee** 



## Reforming industrial allocation:

How ending free carbon credits can cut emissions and unlock green jobs in New Zealand's industrial sectors

SUBMISSION TO THE PETITIONS COMMITTEE FROM THE DON'T SUBSIDISE POLLUTION COALITION.

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## Introduction and summary of recommendations

This written submission is to accompany the Petition of Alex Johnston: 'End free carbon credits by 2030 and undertake other actions to reduce emissions'. **The petition was accompanied by a similarly worded online petition on the 'OurActionstation' platform, signed by 6070 people.** This demonstrates a strong mandate for reform. The wording of that petition is copied below:

#### End free carbon credits. Cut pollution. Unlock green jobs.

We call on the Minister of Climate Change and Cabinet to:

- 1. **End free carbon credits:** accelerate the phase out of free industrial allocation in the Emissions Trading Scheme to end free credits by 2030.
- 2. **Cut pollution:** use funds generated from ending free credits to contribute to the upfront costs of decarbonising emissions intensive industries (in the form of loans or in return for equity stakes).
- 3. **Unlock green jobs:** protect jobs with a Carbon Border Mechanism (like the EU is introducing), green infrastructure investment via a Ministry of Green Works or public procurement, and fund a just transition for any affected workers.

These petition asks are supported by a growing coalition of climate advocacy organisations, communities of faith and construction industry groups (see page 3) who want an industrial future for Aotearoa that is green, creates good jobs, and ensures a fair distribution of effort in cutting climate pollution.

Together we believe that when we all play our part in reducing emissions, then we can get further together, faster. But right now, **some of New Zealand's biggest industrial polluters get a free pass for their pollution, locking in unsustainable business as usual and creating a financial disincentive to change to modern technologies.** We believe that subsidising pollution in a climate crisis doesn't make sense and that it's time to end free carbon credits to cut emissions and unlock green jobs for our industrial future.

#### We ask that the Petitions Committee:

- requests further evidence from officials at the Climate Change Commission, the Ministry for the Environment and independent experts such as Dr Christina Hood about the issues raised in this petition.
- seeks a response from the Minister of Climate Change about the petition requests.
- Finally, we ask for the opportunity to provide an oral submission to the Petitions Committee to accompany this written submission.



### Introduction and summary of recommendations

#### Supporters of the Don't Subsidise Pollution campaign



























Common Grace Aotearoa, 350 Aotearoa, Coal Action Network Aotearoa, NZGBC Te Kaunihera Hanganga Tautaiao, Parents for Climate Aotearoa, Climate Club NZ, Engineers for Sustainable Development, Christian World Service, the Anglican Diocese of Wellington, Greenpeace Aotearoa, Generation Zero, the Anglican Diocese of Auckland, and Fridays For Future Te Ūpoko/Wellington.



## Introduction and summary of recommendations

#### Key facts about industrial allocation.

- Industrial allocation subsidises the pollution of industries that make up around 10% of New Zealand's emissions profile.
- The biggest 5 recipients of free carbon credits Methanex, New Zealand Steel,
   Tiwai Point Aluminium Smelter, Fletcher Concrete and Ballance Agri-Nutrients
   produce over 6% of New Zealand's emissions. Their combined emissions
   footprint is equivalent to 44% of the nation's vehicle fleet. [Appendix 1]
  - These 5 companies receive over 3/4 of free carbon credits.
- Industrial allocation was set up to be a transitional measure, with **the original** Emissions Trading Scheme legislation in 2008 setting a phase out of industrial allocation by 2030. [1]
- Officials advised Cabinet in 2021 that industrial allocation "is estimated to provide an implicit subsidy of around \$550 million to [Emissions Intensive and Trade Exposed] firms annually." [3]
- Ending free carbon credits by 2030 could free up over 35 million tonnes worth of emissions credits by 2035.
  - Using just half of those to shrink the emissions cap could meet the 17MT gap forecast in the government's Second Emissions Reduction Plan draft for the third emissions budget, and cut the cost of purchasing offshore carbon credits to meet our 2030 Paris Agreement target. [4]
  - The other half could be auctioned generating over \$3.5 billion in revenue.[5]
- The European Union has legislated to end free carbon credits and swap them for a Carbon Border Adjustment Mechanism, with the phase out between 2026 and 2034.
- Decarbonisation options for heavy industry are developing rapidly, and can be adopted if the right incentives are in place.
- The concrete industry supports swapping out industrial allocation for a Carbon Border Mechanism. [6]
- [1] Climate Change Response (Emissions Trading) Amendment Act 2008, section 73(1)(b).
- [2] See Appendix 1 for full calculations.
- [3] IRD proactive release "Emissions Reduction Plan advice: addressing emissions leakage" (August 2022), p. 5 <a href="https://www.taxpolicy.ird.govt.nz/-/media/project/ir/tp/publications/2022/2022-ir-cab-22-env-22-sub-0011/2022-ir-cab-22-env-22-sub-0011.pdf?modified=20220823060024&modified=20220823060024>
- [4] See Table 1 on page 18.
- [5] See Table 2 on page 19.
- [6] See page 4.



## Introduction and summary of recommendations

## Expressions of support for industrial allocation reform and elements of this petition request:

There's often concern that the cost of decarbonising may leave New Zealanders flocking to cheaper, higher polluting off-shore alternatives. A Carbon Border Mechanism, as the EU is taking ahead, will help level the playing field, and ensure New Zealand industry can remain competitive while tackling their emissions.

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Andrew Eagles, CEO of the New Zealand Green Building Council

Holcim New Zealand supports the gradual phase out of free issue carbon credits for trade exposed industries and the phase in of a Carbon Border Adjustment Mechanism (CBAM) in Aotearoa New Zealand, based upon the model recently agreed by the European Union [7]

**99** 

**Holcim Cement** 

"We note that Golden Bay Cement has indicated strong support for a CBAM as an alternative to free allocation, to address emissions leakage. [8]

77

IRD Cabinet Paper on emissions leakage

The **Environment Select Committee cross-party report** on 2022 reforms to industrial allocation noted the need for much larger structural change:

We note that urgent work is still needed to improve the design of climate change policy in relation to industrial emitters. This would encourage the move from a system that locks in highly emissions-intensive activities, to one that incentivises decarbonisation. [9]

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[7]. Holcim Cement, LinkedIn post < <a href="https://www.linkedin.com/company/holcim-new-zealand/?">https://www.linkedin.com/company/holcim-new-zealand/?</a> <a href="miniCompanyUrn=urn%3Ali%3Afs\_miniCompany%3A80214749&lipi=urn%3Ali%3Apage%3Ad\_flagship3\_detail\_base%3BYo%2F0ZkNxSiSMuLLuy5zl1Q%3D%3D">https://www.linkedin.com/company/holcim-new-zealand/?</a> <a href="miniCompanyUrn=urn%3Ali%3Afs\_miniCompany%3A80214749&lipi=urn%3Ali%3Apage%3Ad\_flagship3\_detail\_base%3BYo%2F0ZkNxSiSMuLLuy5zl1Q%3D%3D">https://www.linkedin.com/company/holcim-new-zealand/?</a> <a href="miniCompanyUrn=urn%3Ali%3Afs\_miniCompany%3A80214749&lipi=urn%3Ali%3Apage%3Ad\_flagship3\_detail\_base%3BYo%2F0ZkNxSiSMuLLuy5zl1Q%3D%3D">https://www.linkedin.com/company%3A80214749&lipi=urn%3Ali%3Apage%3Ad\_flagship3\_detail\_base%3BYo%2F0ZkNxSiSMuLLuy5zl1Q%3D%3D</a> <a href="miniCompany">https://www.linkedin.com/company</a> <a href="miniCompany">miniCompany</a> <a href="miniCompany">miniCompany</a> <a href="miniCompany">https://www.linkedin.com/company</a> <a href="miniCompany">https://www.linkedin.com/company</a> <a href="miniCompany">https://www.linkedin.com/company</a> <a href="miniCompany">https://www.linkedin.com/company</a> <a href="miniCompany"

[8] As above n [3] at p. 17.

[9] Environment Select Committee Final Report Climate Change (Late Payment Penalties and Industrial Allocation) Amendment Bill (09 August 2023), p. 7.



#### Free industrial allocation distorts the carbon market.

The Emissions Trading Scheme will be the government's primary tool in reducing emissions and meeting our climate targets, however there are a number of problems that impact the ability of the ETS to reduce emissions to the extent required.

The ETS currently provides for the free allocation of New Zealand units for emissions generated from eligible industrial activities (industrial allocations). The primary aim of industrial allocations is to reduce the risk of emissions leakage – which is when the increased cost of operations to businesses from ETS costs cause production to shift offshore in a way that increases global emissions. **The industrial allocation system is not fit for purpose.** 

## The problems with industrial allocations are well documented and include:



#### They are a subsidy to pollute

Industrial allocations create a disincentive to decarbonise emissions intensive industry, which is meant to be the purpose of the ETS. The provision of free units allows high emitters to continue emissions-intensive activities. Not only is there no requirement to change, they have a disincentive to adopt low-emissions technologies that would not get a free allocation subsidy.



#### They are incompatible with our climate targets

The phase-out rate of industrial allocations does not align with Aotearoa New Zealand's emissions reduction targets under the Zero Carbon Act, or with emissions budgets. The volume of industrial allocation will not decrease over time to enable net zero long-lived gas emissions by 2050. Rather, the legislated phase-out rate provides for free units to still cover 30% of eligible activities by 2050.





#### They are not based on evidence

The justification for industrial allocation - the concept of preventing emissions leakage - is not based on evidence, rather companies receive free allocation simply for being emissions-intensive. There is no actual test to see whether global emissions would increase or decrease if production moved offshore.



Industrial allocations represent a significant amount of forgone public revenue. The value of industrial allocations is approximately \$550 million a year. Not only is this a lost opportunity to reinvest that revenue in meaningful emissions reduction strategies, but it burdens other participants in the ETS - both everyday households and clean-technology competitors who do not receive a similar subsidy - with greater responsibility for achieving Aotearoa New Zealand's emission reduction targets. The system is inequitable.

The Climate Change Commission thinks industrial allocation needs reform.

The multiple systemic issues with industrial allocation have led to **the Climate**Change Commission urging action in its Advice on the Second Emissions

Reduction Plan. It has concluded that, given the taxpayer costs, ineffectiveness and inequity, industrial allocation "is not fit for the long term or proportionate to emissions leakage risk". [10]

It notes that the Government does not appear to have assessed emissions leakage risk to ensure industrial allocations are commensurate with the risk of leakage or represent value for money in preventing any such leakage. Consequently, the Government could provide more industrial allocations than is necessary, to the detriment of taxpayers and further undermining the ability of the ETS to help achieve emissions budgets and reach the 2050 net zero target.

[10] Climate Change Commission 2023 Advice on the direction of policy for the Government's second emissions reduction plan, p. 191.



## Running out of units to give away for free: how industrial allocation will soon be a direct subsidy to big polluters.

Free Industrial allocation shrinks the share of the carbon market the government can manage through auctioning of units, and the revenue that can be generated that way. Under the Climate Change Commission's advised setting, by 2025, the volume of units the Commission recommends be auctioned by the government is equal to the volume of industrial allocations that are to be given away to big polluters for free. [11] After 2025, more carbon credits will be given away for free than auctioned to polluters.

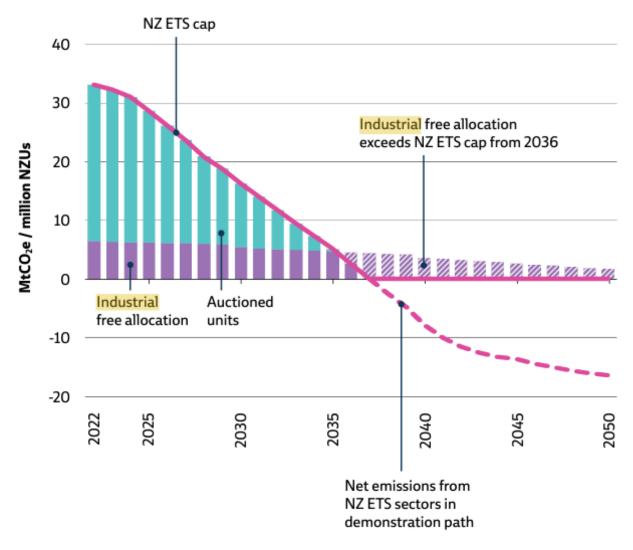
Secondly the Commission has advised that by 2035-2036 all units within the ETS cap will be generated from forestry in the secondary market, rather than by government auction (see the graph below). Once that point is reached, **the actual cost of free industrial allocation would shift directly to the taxpayer rather than represent foregone revenue.** [12] The Government would have to fund removals outside the ETS cap to compensate for the ongoing free units provided to eligible activities.

The projection of how free allocations will exceed the ETS cap from 2035-2036 is demonstrated in the graph from the Commission's advice on the following page.

<sup>[12] 2023</sup> Advice on the direction of policy for the Government's second emissions reduction plan, Figure 5.5.



<sup>[11]</sup> Climate Change Commission, NZ ETS unit limits and price control settings for 2025–2029, Figure 7.



Commission analysis of NZ ETS unit limit settings - Figure 5.5: Under current settings industrial free allocation exceeds the NZ ETS cap from 2036 onwards

#### Government officials think industrial allocation needs reform.

The need for a better system to manage emissions leakage and reduce industrial emissions has been noted by many officials. The **Cabinet paper in 2021 on reforms to industrial allocation**, that led to the minor reforms in the Climate Change Response (Late Payment Penalties and Industrial Allocation) Amendment Bill, noted that **the current system is not based on an actual analysis of emissions leakage risks:** 



Whether emissions leakage is in fact a problem for all New Zealand EITE firms is not clear cut; competitiveness (and the associated leakage risk) is impacted by many factors including energy price, labour costs, transport costs, the cost of capital, and plant efficiency. It is also not a given that displacement will result in emissions leakage; this would depend on a range of factors, including the energy efficiency of the offshore producer and whether their emissions are being released under an emissions cap, as well as potential changes to domestic consumer preferences and the availability of domestic low emissions alternatives[]

It also noted that industrial allocation is hindering the effectiveness of reducing economy wide emissions and meeting our emissions budgets:

This comes at a compromise to New Zealand's climate objectives, as the emissions price signal is muted, reducing the incentive on consumers to purchase low emissions products. IA therefore decreases the effectiveness of emissions pricing and makes it more difficult for New Zealand to meet its emissions reduction targets and budgets.

[13] Cabinet Paper "Emissions Reduction Plan: Addressing emissions leakage" at [29] < <a href="https://www.taxpolicy.ird.govt.nz/-/media/project/ir/tp/publications/2022/2022-ir-cab-22-env-22-sub-0011/2022-ir-env-22-sub-0011-2-paper.pdf?modified=20220822233252">https://www.taxpolicy.ird.govt.nz/-/media/project/ir/tp/publications/2022/2022-ir-cab-22-env-22-sub-0011/2022-ir-env-22-sub-0011-2-paper.pdf?modified=20220822233252</a> [14] At [33].



#### Decarbonisation options in major EITE firms

It is claimed that industrial allocation needs to persist due to the lack of available decarbonisation options in industries currently receiving free credits. While this may have been the case when the Emissions Trading Scheme was being established, it is certainly not the case today.

The following section details the potential decarbonisation opportunities in the major firms currently receiving the bulk of industrial allocation, which are possible with the right combination of price incentives, industrial policy, support from the government and proactive involvement of electricity generators. The 15 companies whose production processes are highlighted below received 91% of the 6.15 million free credits allocated in by the EPA in 2022. [14]



**Steel:** New Zealand Steel received 1.9 million free credits in 2022. Emissions profile: 1.48 million tonnes CO2/year - the equivalent of 600 000 cars.

New Zealand Steel's decarbonisation potential is already being partially realised through the introduction of Electric Arc furnaces. This will reduce its emissions by 45%. Details of how much NZ Steel's allocation of free carbon credits will be affected by this decarbonisation and the receipt of direct funds from the government to enable this have not been made clear. Further reductions are possible for NZ Steel by using green hydrogen[6] to reduce ironsands into iron, which would require a large amount of additional renewable energy to produce the green hydrogen. If this was done, NZ Steel's emissions would be negligible.

[14] Environmental Protection Authority, 2022 Final Allocation Decisions < <a href="https://www.epa.govt.nz/industry-areas/emissions-trading-scheme/industrial-allocations/decisions/">https://www.epa.govt.nz/industry-areas/emissions-trading-scheme/industrial-allocations/decisions/</a>

[15] This report by Mckinsey outlines the potential of green hydrogen in steel decarbonisation. <a href="https://www.mckinsey.com/~/media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Decarbonization%20challenge%20for%20Steel/Decarbonization-challenge-for-steel.pdf">https://www.mckinsey.com/~/media/McKinsey/Industries/Metals%20and%20Mining/Our%20Insights/Decarbonization%20challenge%20for%20Steel/Decarbonization-challenge-for-steel.pdf</a>



Decarbonisation options in major EITE firms



**Concrete:** Fletcher Concrete and Infrastructure Limited (owner of Golden Bay Cement) received 660,00 free credits in 2022. Emissions Profile: 600,400 tonnes C02/year - equivalent to 250,000 cars.

The concrete sector would be well placed to manage the impact of reduced industrial allocation and an increasing carbon price, with their current sector roadmap having a goal of reducing from the industry by 44% from 2020 levels by 2030. [16] For these investments to make sense for the concrete sector, the financial incentives need to align. Subsidising current practice creates disincentives to invest in lower emitting alternatives.

The sector is looking to reduce emissions in concrete production by 12% by reducing the amount of cement in concrete and using other waste materials. A further 27% reduction is achievable by substituting fossil fuels with alternatives (waste tyres are sometimes used, but sustainable alternatives like woodchip are available).

Concrete is a widely available and cheap product. Increased costs due to increases in carbon price may lead to a more discerning use of it in construction for essential areas, and the sector forecasts design and construction efficiencies could lead to a further 10% reduction in emissions.

The cement importer Holcim supports the introduction of a Carbon Border Adjustment Mechanism as a better alternative to free credits already, as does Golden Bay Cement (see p 4).

[16] Concrete NZ "Roadmap to Net Zero Carbon for Aotearoa New Zealand's Concrete Industry" < <a href="https://concretenz.org.nz/news/646675/Roadmap-to-Net-Zero-Carbon-for-Aotearoa-New-Zealands-Concrete-Industry.htm">https://concretenz.org.nz/news/646675/Roadmap-to-Net-Zero-Carbon-for-Aotearoa-New-Zealands-Concrete-Industry.htm</a>



Decarbonisation options in major EITE firms



**Fertiliser:** Ballance Agri-Nutrients received 383,000 free credits in 2022. Emissions profile: 1.2 million tonnes CO2/year, equivalent to 520,000 cars.

The production of synthetic nitrogen fertiliser can be fully decarbonised. Ballance has outlined a 'Te Ata' plan [17], achieving 50% reduction from switching out natural gas to renewable supply for fuel for manufacturing. The other 50% of production emissions can be decarbonised through green hydrogen used as a feedstock in the chemical process to create the ammonia, when that hydrogen is sourced via renewable energy. However, it is important to note the fertiliser itself releases nitrogen oxide upon use in farms, which makes up 6% of New Zealand's entire gross greenhouse gas emissions.[18] The broader picture of the need for a transition away from using high levels of synthetic nitrogen fertiliser in New Zealand's agricultural system, as well as the fact that its rival, Ravensdown, is now importing lower carbon urea from Saudi Arabia would also lend weight to the removal of Ballance's free industrial allocation.

[17] Ballance Agri-Nutrients submission on the Climate Change Response (Late Payment Penalties and Industrial Allocation) Amendment Bill, from page 7 < <a href="https://www.parliament.nz/resource/en-NZ/53SCEN\_EVI\_130118\_EN16852/1ce2f23c4d5bcac8e7810d52435c312023ad0b0a">https://www.parliament.nz/resource/en-NZ/53SCEN\_EVI\_130118\_EN16852/1ce2f23c4d5bcac8e7810d52435c312023ad0b0a</a>

[18] Ministry for the Environment, New Zealand's Greenhouse Gas Inventory 1990-2021 Snapshot (13 April 2023) <a href="https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902021-snapshot/">https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902021-snapshot/</a>



Decarbonisation options in major EITE firms



**Aluminium:** New Zealand Aluminium Smelters Limited received 605,000 free credits in 2022. Emissions profile: 600,566 tonnes CO2/year, equivalent to 250,000 cars.

Tiwai Point Aluminium Smelter, owned by Rio Tinto, produces 0.8% of New Zealand's emissions, and uses 14% of the country's electricity supply. Direct emissions come from smelting the alumina into aluminium. The direct emissions can be erased by replacing the carbon anode with another material. Rio Tinto is already using an emissions free anode in production in Canada, in partnership with the Canadian government and Apple. [19] The government should look at working with Rio Tinto to bring this replacement anode material into use in New Zealand.

There are also indirect emissions from the huge energy demand in the smelting process. By using so much of the country's electricity supply, they maintain demand for burning coal in the electricity grid. A 2021 government reform removed industrial allocation for NZAS electricity-related emissions, however under its recently announced electricity supply contract, the smelter will qualify again for electricity-related free carbon credits. If reactivated at previous levels, this will lead total a further 15 million credits on top of what it already receives, worth nearly \$2 billion over the 20 year life of the contract. [20]

This highlights the outdated nature of industrial allocation to industry who are heavy users of electricity, which is not related to a company's actual emissions, but compensates them simply because they consume lots of electricity, while other everyday consumers of electricity face the full emissions price.

Rather than relying on free allocation, electricity related emissions can be minimised through demand management (e.g. winding down production in dry years or at peak demand), and increasing renewables in the electricity supply. Together with an emissions-free anode, these could see successful production of aluminium under a full carbon price.

[19] Rio Tinto, "Rio Tinto to expand its AP60 low-carbon aluminium smelter in Quebec" (12 June 2023) < <a href="https://www.riotinto.com/en/news/releases/2023/rio-tinto-to-expand-its-ap60-low-carbon-aluminium-smelter-in-quebec">https://www.riotinto.com/en/news/releases/2023/rio-tinto-to-expand-its-ap60-low-carbon-aluminium-smelter-in-quebec</a>

[20] Newsroom, "Tiwai certainty welcome, but concerns remain about \$2 billion subsidy" (4 June 2024) <a href="https://newsroom.co.nz/2024/06/04/tiwai-certainty-welcome-but-concerns-about-2-billion-subsidy/">https://newsroom.co.nz/2024/06/04/tiwai-certainty-welcome-but-concerns-about-2-billion-subsidy/</a>



Decarbonisation options in major EITE firms



**Methanol:** Methanex received 838,000 free credits in 2022. Emissions footprint: 1.67 million tonnes CO2/year, equivalent to 700,000 cars.

Methanex uses fossil gas to produce methanol, and currently is the largest consumer of fossil gas in New Zealand, providing 40% of the domestic market's demand. The conventional methanol produced in New Zealand cannot be fully decarbonised, just made more efficient. A blend of alternative fuels like biogas can be used, but the core product currently is based off a fossil fuel feedstock. Methanex's publicly available gas supply contracts expire in 2029, and the Climate Commission's expects their closure in its modeling by 2040. [21]

Solutions to decarbonise could involve transforming the production process to use green hydrogen combined with a renewable carbon feedstock via bioenergy, and other forms of technology such as utilising Carbon Capture and Storage technology have been proposed, but the right incentives would need to be in place to reinvest in a next-generation production facility, and to generate sufficient demand for more premium priced 'green methanol'. [22]

Due to 95% of methanol produced being exported, methanex would not benefit from a carbon border mechanism.

[21] He Pou a Rangi Climate Change Commission, "Inaia Tonu Nei: a low emissions future for Aoteatoa" p. 135. [22] Methanex 2023 Sustainability Report, p. 27 <a href="https://www.methanex.com/wp-content/uploads/2023-sustainability-report.pdf">https://www.methanex.com/wp-content/uploads/2023-sustainability-report.pdf</a>



Decarbonisation options in major EITE firms



## **Wood processing:** 10 wood processing companies received a combined 1.2 million free credits in 2022.

Most emissions from wood processing are in process heat from two processes: kiln drying of timber, and MDF/particle board creation. Although only 12.5% of energy used in wood processing is non-renewable (mostly natural gas, some coal), this accounts for ~75% of wood processing emissions. So replacing non-renewable fuels with renewable options will significantly reduce emissions.

However most likely these are for high-heat needs. This requires government investment in the wood processing industry transformation to allow this technically difficult production process to change and be commercially viable. For example, Oji Fibre Solutions' Kinleith bio hub project could reduce emissions by up to 120,000 tonnes per year, but has a large upfront investment cost [23].

[23] Oji Fibre Solutions submission to Environment Select Committee on the Climate Change Response (Late Payment Penalties and Industrial Allocation) Amendment Bill, at [16], <a href="https://www.parliament.nz/resource/en-NZ/53SCEN\_EVI\_130118\_EN16886/8794a102b1464b9bfd3c313818631ba4b63c8e7c">https://www.parliament.nz/resource/en-NZ/53SCEN\_EVI\_130118\_EN16886/8794a102b1464b9bfd3c313818631ba4b63c8e7c</a>

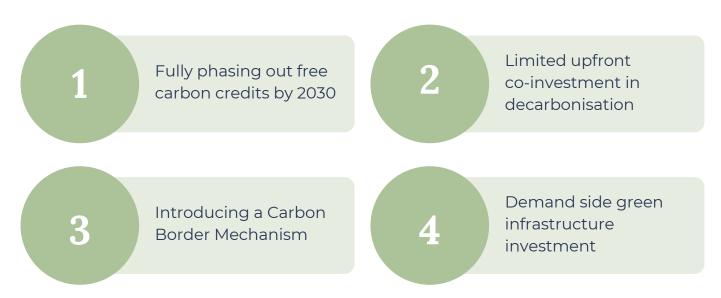


# An alternative way to manage emissions leakage and decarbonise emissions intensive and trade exposed industry

The status quo of maintaining free industrial allocation functions as a subsidy to keep polluting, so government intervention in industrial policy is already a reality. Equally, it is unlikely for any government to remove free industrial allocation by 2030 and provide no alternative whatsoever to manage the transition for large industries that employ thousands of people.

We believe it is possible to removes and replace industrial allocation with other form of intervention to accelerate decarbonisation while protecting jobs in Emissions Intensive and Trade Exposed businesses.

#### The answers proposed in this briefing are fourfold:





## Step 1: Fully phasing out free carbon credits by 2030

We are recommending that the Government end the system of industrial allocation by 2030. The level of free credits should phase out by 14% each year between 2025 and 2030, at the same time as a Carbon Border Adjustment Mechanism is phased in on imports.

Businesses currently receiving free credits would need to pay for their pollution in full by 2030. Overseas imports of the same products (like steel, concrete etc) made in a more polluting way would face a tariff at the border, so that domestic producers would not be at a competitive disadvantage, but would still face the price incentive to reduce their emissions.

## The current subsidy of millions of carbon credits a year could be repurposed in two ways:

Half of these credits could be 'cancelled', tightening the overall supply of credits and shrinking the overall emissions cap, leading to steeper cuts in climate pollution, and a fairer distribution of reductions between these previously subsidised industries and the rest of the economy. This would lead to 17.9 million tonnes of extra emissions reductions between 2025 and 2035, the current gap forecast in meeting the Third Emissions Budget under the government's draft Emissions Reduction Plan (see Table 1). This would also cut the cost of purchasing offshore credits for NZ's Paris Agreement targets.

The other half of credits could be sold back to polluters as part of the supply of credits that polluters have to purchase to cover their emissions (thus also incentivising more emissions reductions), generating revenue that can be used to invest in climate action, particularly to help these industries with the upfront costs of decarbonising (in the form of loans or in return for equity stakes). If ETS prices were at the Climate Change Commission's demonstration path, this could generate a total of around \$1.1 billion by 2030, and \$2.8 billion by 2035 (see Table 2)

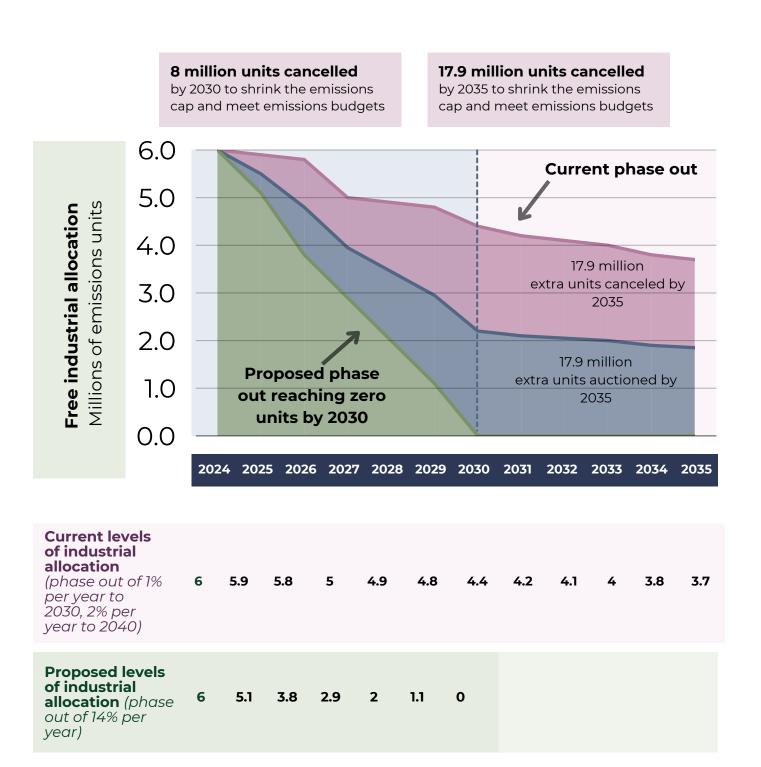
Using the Commission's demonstration path numbers on forecast industrial allocation on the current phase out rate, and forecast emissions price from the 2021 advice, the following tables detail a potential accelerated phase out and the impact this could have on the emissions cap and on ETS revenue generated at auction.

[24] Alternatively, the phase out could increase to 20% per year from 2026-2030 to align with the second emissions budget period, if legislative change and design of the Carbon Border Mechanism would need at least a year after the Emissions Reduction Plan is decided to come into force.



## Step 1: Fully phasing out free carbon credits by 2030

**Table 1:** Phasing out industrial allocation by 2030, using projections from Climate Change Commission's ETS settings advice for 2025-2029.



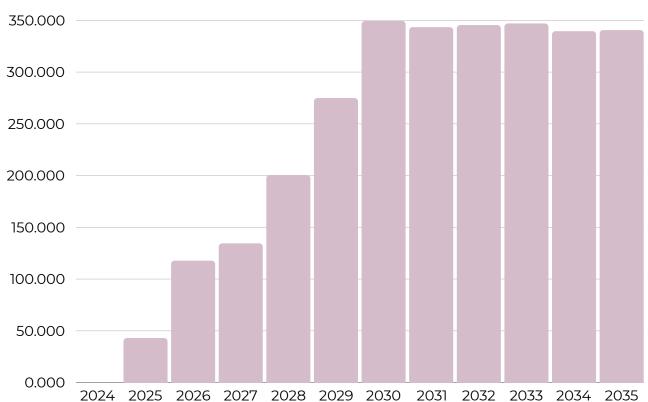


## Step 1: Fully phasing out free carbon credits by 2030

**Table 2:** Value of extra auctioned emissions units annually based on Climate Change Commission's demonstration path carbon price (millions NZD)



**\$2,836,253,000** extra auctioning value by 2035



Value of extra auctioning at CCC core demo path price (if half auctioned) \$millions

0 43.04 117.8 134.51 200.54 274.91 349.36 343.56 345.43 347 339.53 340.59



## Step 2: Limited upfront co-investment in EITE firm decarbonisation



The second pillar of our recommendation is for **limited government co-investment** in decarbonisation to avoid industries closing or going offshore where they could otherwise adopt zero emissions technologies.

In general, fully phasing out free industrial allocation will make decarbonisation investment far more commercially attractive than the status quo. Ongoing free industrial allocation is holding back such investments by creating an opportunity cost, as EITE firms lose the subsidy if they replace existing high-emissions processes with low-emissions alternatives. Ongoing free industrial allocation is holding back such investments by creating an opportunity cost, as EITE firms lose the subsidy if they replace existing high-emissions processes with low-emissions alternatives. Such an opportunity cost is one reason NZ Steel's investment in an electric arc furnace was not done sooner, and required further government subsidy to bring forward.

However there may remain instances where such investments may not be economic based on a company's access to capital, their timeframes set by shareholders for a return on such an investment or the priority among a range of global investments they may be making. In such a case, to avoid closure, government co-investment may be needed to de-risk, bring forward, or pool in capital investments from the private sector that enable decarbonisation of industrial processes in EITE firms.



## Step 2: Limited upfront co-investment in EITE firm decarbonisation

Any co-investments from the Government should be linked to credible emissions reduction outcomes, and in response to verifiable, ambitious industry decarbonisation plans rather than a cash in hand subsidy. It could come in the forms of concessional loans or an equity stake in the firm if a large enough investment is required so that there is limited long term cost to the taxpayer.

Such co-investments or loans should be seen as a way for the Government to reduce the cost of emissions reductions through international carbon credits to meet the 2030 Nationally Determined Contribution under the Paris Agreement, as it would drive deeper domestic reductions that shrink the size of the international carbon credits bill the government is facing.

Even if it comes in the form of a direct grant, in many cases, the cost per tonne of reductions will be cheaper than the cost per tonne of international carbon credits. For example, the NZ Steel investment made by the previous government has a cost per tonne of abatement of \$16.20, compared to an estimated range of \$30/tonne to \$240/tonne for international carbon credits in the latest Treasury and Ministry for the Environment estimates.[25]

As highlighted in Table 2 above, ending free allocation can generate significant revenue through the sale of emissions units back to these firms, and that revenue can partially cover the cost of such government co-investments.

[25] Ministry for the Environment "Government Partnership with NZ Steel set to unlock massive emissions reductions" (22 May 2023) < <a href="https://environment.govt.nz/news/government-partnership-with-nz-steel-set-to-unlock-massive-emissions-reductions/">https://environment.govt.nz/news/government-partnership-with-nz-steel-set-to-unlock-massive-emissions-reductions/</a> ; NZ Steel deal Offshore mitigation cost estimates contained in Ministry for the Environment, Updated NDC Strategy Proactive Release at [98],



<sup>&</sup>lt;a href="https://environment.govt.nz/assets/publications/NDC-strategy-proactive-release.pdf">https://environment.govt.nz/assets/publications/NDC-strategy-proactive-release.pdf</a>

#### Step 3: Phase-in a Carbon Border Mechanism like the EU

The third pillar of this recommendation is for a Carbon Border Mechanism (or CBAM) on imports to manage emissions leakage for industries that have a domestic market. This would protect domestic industrial production from competing producers operating under looser carbon regulations overseas and prevent production shifting offshore rather than comply with regulations.

This border mechanism would be directly tied to a decrease in industrial allocations available to Emissions Intensive and Trade Exposed industries in New Zealand in a managed transition. The European Union has begun implementing a Carbon Border Adjustment Mechanism on imports of iron, steel, cement, fertiliser, aluminum, electricity, and hydrogen. [26] Importers of these products have to declare the embedded-carbon of their imports and surrender the corresponding amount of carbon border certificates.

As the EU's border mechanism phases in from 2026 to 2034, the free industrial allocation to those industries is phased out. The fact that a major global economy has gone down this route makes it easier for New Zealand to do the same, with questions of WTO compliance and the scope of products to apply the border adjustment to not having to be answered by being a first mover. A border mechanism would mean that current recipients of industrial allocation who have a domestic market would be on a level playing field to overseas competitors, even as they face the full price of carbon.

However the inverse is also true that if a product can be made more carbon efficiently elsewhere, then there would be a clear incentive on New Zealand based industries to decarbonise, compared to the current status quo where free industrial allocation shelters such an incentive.

### A Carbon Border Mechanism would help manage emissions leakage for the following major recipients of free allocation:

- New Zealand Steel
- Ballance Agri-Nutrients
- Fletchers/Golden Bay Cement
- Wood processors that have a mix of domestic and export markets for their wood panels and paper products

[26] European Commission "Carbon Border Adjustment Mechanism (CBAM) starts to apply in its transitional phase" <a href="https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_4685">https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_4685</a>



## Step 3: Phase-in a Carbon Border Mechanism like the EU

#### Other major jurisdictions are also implementing or exploring border mechanisms:

- California has implemented a carbon border mechanism for electricity imports from jurisdictions without a carbon trading mechanism[26]
- Canada has also explored the possibility while the UK consulted on the issue earlier this year.[27]
- Australia is currently reviewing its risks of carbon leakage and assessing feasibility of a Carbon Border Adjustment Mechanism particularly in steel and cement industries.[28]

We propose modeling a Carbon Border Mechanism for New Zealand on the approach that the EU is taking phased in between 2025 and 2030, at the same time industrial allocation is phased out. To avoid punishing developing countries' differentiated responsibility to reduce emissions, there could be an exemption for Least Developed Countries and Small Island Developing States. [29] New Zealand's international trade obligations permit differential treatment for developing and least developed countries in some circumstances). Furthermore, revenue from the border tariff could go directly towards increased climate finance in developing countries. The EU's border mechanism will send revenue from the tariff towards climate finance. [30]

## Support for a Carbon Border Adjustment Mechanism among industry

There is growing support for a Carbon Border Mechanism, particularly from within the construction sector, as was noted on page 4 with the support of the New Zealand Green Building Council, Holcim Cement and Golden Bay Cement.

[26] (CARB (2011), §95852(b)).

[27] UK Government, "Addressing Carbon leakage risk to support decarbonisation" (April 2023)

<a href="https://www.gov.uk/government/consultations/addressing-carbon-leakage-risk-to-support-decarbonisation">https://www.gov.uk/government/consultations/addressing-carbon-leakage-risk-to-support-decarbonisation</a>

[28] Australian Government, "Australia's Carbon Leakage Review" (March 2023)

<a href="https://www.dcceew.gov.au/climate-change/emissions-reduction/review-carbon-leakage">https://www.dcceew.gov.au/climate-change/emissions-reduction/review-carbon-leakage</a>

[29] As above n 3 at [72].

[30]. Oxfam Manifesto on tax for the French Presidency of the Council of the EU (December 2021) < <a href="https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/2021-12/Oxfam%20Manifesto%20on%20Tax.pdf">https://oi-files-d8-prod.s3.eu-west-2.amazonaws.com/s3fs-public/2021-12/Oxfam%20Manifesto%20on%20Tax.pdf</a>>



### Step 3: Phase-in a Carbon Border Mechanism like the EU

## Investigation of a Carbon Border Mechanism in the cement industry

The first Emissions Reduction Plan provided a starting point for exploring a Carbon Border Mechanism that can be built upon in the second Emissions Reduction Plan. In ERP1, Action 5.4.2 was to look at the cement sector as a test case to determine the feasibility of implementing a Carbon Border Adjustment Mechanism.

There is no clarity in the current government's draft Second Emissions Reduction Plan on what has happened to this Action, and whether it has been dropped or is continuing.

This will be an important piece of work to pick up and expand upon for the second Emissions Reduction Plan period.



### Step 4: Complementing a Carbon Border Mechanism with Green Infrastructure investment and public procurement policy



In addition to a Border Mechanism, demand side measures through green infrastructure investment will be needed for particular industries that are an important part of a low-carbon transition where it is in New Zealand's interest to maintain a domestic producer. Products like steel, aluminium, concrete and engineered wood are needed to build a low carbon future like windmills, railways, cycleways, sustainable houses and electric cars.

It is important that they pay the emissions from producing these products like the rest of the economy, and decarbonisation is possible in each of them, but as they transition there will likely be increased costs on using these products passed on to the construction industry, which the government will need to manage the effects of in the wider construction sector.

The Government can absorb some of that increase in cost and stimulate demand across the sector through major sustainable infrastructure investment in construction of railways, cycleways, and public housing needed in an equitable transition through public procurement policy, for example by **prioritising NZ made products for a due period, such as 10-15 years. This can help manage the impact on the construction sector through a level of predictable demand as production of these materials faces increased carbon costs.** 



### Step 4: Complementing a Carbon Border Mechanism with Green Infrastructure investment and public procurement policy

## Matrix detailing how these four steps work for main industries receiving the bulk of free allocation

Industry/company	Technology available to decarbonise part or all of process and avoid increased emissions price	Helped by Carbon Border Mechanism for importers	Helped by supply side co- investment in decarbonisation	Helped by demand side incentives in green infrastructure and public procurement	Likelihood of closure
NZ Steel	Yes	Yes	Yes	Yes	No
Aluminium Smelter	Yes	No	Yes	No	No
Methanex	Maybe	No	No	No	Maybe
Ballance	Yes	Maybe	Yes	No	Maybe
Cement	Yes	Yes	Yes	Yes	No
Wood processors	Yes	Maybe	Yes	Yes	No



## Ensuring a just transition for any affected workers in EITE firms



While most companies can reduce emissions in order to avoid the increased costs of carbon, paying an accurate carbon cost may lead to an evaluation of multinational's evaluating investment in New Zealand as opposed to other jurisdictions where they are getting a lot of government support to pilot and roll out new technologies. There may be some who choose not to reinvest in next-generation technologies and instead close production. This might result in workers in these companies losing their jobs.

It is important that any affected workers have adequate support, and that no one is left behind in the transition. It is also vital that the government promote good jobs in social services and renewable, low emissions industries. Indeed, if the ETS can become fully effective, new, job-creating industries will emerge that become more competitive with existing emissions intensive industries.

### E Tū has previously outlined [31] four key areas that are needed to ensure a just transition:

- · Social dialogue and planning, involving workers in the transition plans
- Supporting workers in transition things like funded retraining, multi-employer redeployment schemes

[31] E Tū Union Submission to the He Pou a Rangi Climate Change Commission "2021 Draft Advice for Consultation" < <a href="https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/future-climate-action-for-aotearoa/consultation/view\_respondent?uuld=414444237">https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/future-climate-action-for-aotearoa/consultation/view\_respondent?uuld=414444237</a>>



## Ensuring a just transition for any affected workers in EITE firms

- Social protection so that every worker whose job might be lost would have income support
- Economic diversification so regions that lose large employers have good replacement jobs to maintain thriving economies

We propose that part of the revenue from auctioning off previously freely allocated units go towards a just transition fund specifically for workers in EITE industries who might be impacted by the rapid phase out.



## Other opportunities presented by ending industrial allocation



The revenue created by auctioning off otherwise freely allocated NZUs, as well as the revenue from a Carbon Border Mechanism on imports could go towards **topping up** New Zealand's climate finance commitment, or contributing new and additional funds towards international loss and damage finance. This is an approach the EU has partially taken with revenue from its Carbon Border Mechanism. Such contribution would be key to ensure that a climate policy that may appear protectionist shows a commitment to internationalism and global climate equity, and is in fact policy aimed at decarbonisation, which would assist with WTO-rule compliance.[32]

[32]Center for Strategic and International Studies "Analysing the European Union's Carbon Border Adjustment Mechanism" (February 2023) < <a href="https://www.csis.org/analysis/analyzing-european-unions-carbon-border-adjustment-mechanism">https://www.csis.org/analysis/analyzing-european-unions-carbon-border-adjustment-mechanism</a>>



#### Summary

Reform of industrial allocation is needed for the simple reason that subsidising pollution during a climate crisis doesn't make sense. Alongside that, it is expensive, incompatible with our climate targets, and unfair to everyday households facing the full carbon price.

Without major structural reform, ongoing free industrial allocation will soon be a major direct cost to the government. The development of the Second Emissions Reduction Plan is a crucial moment to properly reform this system, and enable the Emissions Trading Scheme to function as the primary tool for reducing emissions.

The good news is that change is possible in many of the industries currently receiving free carbon credits - we just need the right incentives to be in place.

The European Union is leading the way in this area, by swapping out free credits over time with a Carbon Border Mechanism. Doing the same in New Zealand will help level the playing field, and ensure New Zealand industry can remain competitive while tackling their emissions.

The proposed pathway to do this is using the Second Emissions Reduction Plan to initiate a 5 year transition to a different system for managing emissions leakage and decarbonising emissions intensive industry. **This would involve:** 

#### A) Fully phase out industrial allocation in the Emissions Trading Scheme by 2030

- Increase the industrial allocation phase out rate to 14% per year (from current rate of 1% per year) starting in 2025, to reach zero free allocation by the end of 2030
- Reduce the emissions cap by half of the equivalent reduction in freely allocated units to cut the cost of purchasing offshore credits for NZ's Paris Agreement targets
- Auction the other half of emissions units no longer freely allocated to generate revenue for reinvesting in climate action



#### Summary

### B) Manage the impact on EITE firms through limited upfront investment in decarbonisation

- Use revenue from extra auctioned NZU's to co-fund up-front decarbonisation options for Emissions Intensive and Trade Exposed businesses (in the form of loans or equity stakes) to avoid industries closing or going offshore where they could otherwise adopt zero emissions technologies.
- Link loans to credible emissions reduction outcomes, and in response to verifiable, ambitious industry decarbonisation plans.

#### C) Phase in a Carbon Border Mechanism

• Introduce a Carbon Border Adjustment Mechanism on imports for industries vulnerable to emissions leakage at the same time as an accelerated phase out of industrial allocation (phased in from 2025 to be fully in place by 2030).

## D) Complement a Border Mechanism with climate infrastructure investment and public procurement policy

• Manage demand for locally produced steel, concrete and wood processing through sustainable infrastructure investment and public procurement policy.



## Appendix A: Data analysis of major industrial allocation recipients.

#### The 'Big' 5 industrial allocation recipients.

The latest reported industrial allocation data was sourced from the EPA. Total industrial allocation in 2022: 6,146,079. The total allocation to Methanex, NZ Steel, Ballance, Tiwai Point and Fletcher Concrete = 4,401,085, 72% of the total allocation [34].

#### The emissions footprint of the 'Big 5' recipients of industrial allocation.

- Tiwai smelter emissions in 2022= 600,566 tonnes CO2
- Methanex emissions in 2022 = 952,735 tonnes CO2
- **NZ Steel** Emissions in 2022 = 1,481,654 tonnes CO2
- Ballance Agri-Nutrients Emissions in 2022 = 1,245066 tonnes CO2
- Fletcher concrete Emissions in 2022 = 600,416 tonnes CO2

Together these 5 companies produced 4,880,437 tonnes of CO2 in 2022, or over 6% of New Zealand gross emissions in that year.

#### Method for converting industrial emissions to an equivalent number of cars:

- The average vehicle in New Zealand has CO2 emissions of around 171 grams per kilometre (g/km) = 171g/km [35]
- The average length driven per year = 14,000km
- Average vehicle's annual emissions = 2.394 tonnes per year [36]

Each company's reported emissions were divided by 2.394 to arrive at a number of vehicles that their emissions are equivalent to.

- The 'Big 5' industrial allocation recipients' emissions equivalent in cars = 2,037,670.
- Total vehicles in NZ = 4.6 million. [36]
- These 5 companies therefore create emissions equivalent to 44% of the vehicles in New Zealand.

<sup>[36] &</sup>lt; https://www.ehinz.ac.nz/assets/Factsheets/Released\_2024/NumberOfVehicles24.pdf>



<sup>[33]</sup> Environmental Protection Authority 2022 Final Allocation Decisions <a href="https://www.epa.govt.nz/industry-areas/emissions-trading-scheme/industrial-allocations/decisions/">https://www.epa.govt.nz/industry-areas/emissions-trading-scheme/industrial-allocations/decisions/</a>>

<sup>[34]</sup> Each company's reported emissions in 2022 sourced from the EPA's ETS Participant Data 2022-2023. [35] Beehive.govt.nz, The Clean Car Import Standard, <a href="https://www.beehive.govt.nz/sites/default/files/2021-01/Clean%20Car%20Import%20Standard%20Explainer\_0.pdf">https://www.beehive.govt.nz/sites/default/files/2021-01/Clean%20Car%20Import%20Standard%20Explainer\_0.pdf</a>



energyresources.org.nz energyskills.org.nz energymix.co.nz

PO Box 25259, Wellington 6140

30 September 2024

**Environment Select Committee** 

By email: <a href="mailto:Environment@parliament.govt.nz">Environment@parliament.govt.nz</a>

Petition of Alex Johnson: End free carbon credits by 2030 and undertake other actions to reduce emissions

#### Introduction

- 1. Energy Resources Aotearoa is New Zealand's peak energy sector advocacy organisation. We represent participants across the energy system, providing a strategic sector perspective on energy issues and their adjacent portfolios. We aim to enable constructive collaboration to bring coherence across the energy sector through and beyond New Zealand's journey to net zero carbon emissions by 2050.
- 2. This document constitutes our evidence in response to a request from the Environment Select Committee (the 'Committee') to provide a submission in response to the petition on ending the free allocation of carbon credits *inter alia* from Alex Johnson: Petition of Alex Johnston: End free carbon credits by 2030 and undertake other actions to reduce emissions (petitions.parliament.nz).

#### **Key messages**

- 3. The allocation of free units is a core element of an efficient, well-functioning New Zealand Emissions Trading Scheme (**NZETS**).
- 4. The purpose and effects of free carbon credits (more formally referred to as **industrial allocation**) are often misunderstood by the public and those without a deep understanding of the origins of the NZETS. That misunderstanding is demonstrated clearly in the petition in front of you today from Alex Johnson.
- 5. The primary purpose of industrial allocation, and the basis for its establishment in the NZETS, is to compensate firms operating at the time of the introduction of the NZETS for negative impacts on their property rights and profits.
- 6. Emissions leakage was instead used as the criterion to mitigate the scope of who was eligible for compensation rather than defining its purpose. Free carbon credits were not allocated to subsidise firms for their carbon emissions. The allocation of free units does not dampen the incentive to reduce emissions.

- These units have a market value (or opportunity cost) and facilitate an efficient choice by emitters to sell and abate or keep and emit.
- 7. The use of so-called *complementary measures* should be largely unnecessary in light of a fixed and declining emissions cap. A Carbon Border Adjustment Mechanism (**CBAM**) is unlikely to be appropriate in the context of the NZETS.
- 8. To remain well-functioning, NZETS settings need to be stable and predictable. They should encourage businesses and producers to reduce emissions while encouraging innovation and the development of cleaner alternatives. Decisions should be based on demand and supply fundamentals rather than influenced by incessant political 'smoke' signals.

#### A well-designed emission reduction scheme: a brief explainer

- 9. A well-designed scheme balances the environmental imperative with the cost imposed on consumers, producers and taxpayers. Such a scheme:
  - a signals optimal abatement via an efficient carbon price;
  - b minimises compliance costs, and in doing so, the cost to the economy; and
  - c maintains New Zealand's reputation as a place to invest.
- 10. Key to achieving these outcomes are:
  - a a well-orchestrated and measured transition; and
  - b suitable 'safety-values'.
- 11. These features (and others) led New Zealand (as the second jurisdiction in the world after the European Union ['**EU**']) to adopt an emissions trading scheme ('**ETS**') as part of the Climate Change Response (Emissions Trading) Amendment Act 2008. This was in preference to the original government proposal for a carbon tax set at\$15/t CO<sub>2</sub>.
- 12. The key difference between an ETS and a carbon tax is that the former fixes the quantity limit of emissions (known as the emissions cap) and lets the interaction between demand and supply set the carbon price. In contrast, a carbon tax sets the 'price', and the quantity of emissions adjusts to reflect that price (by being incentivised to reduce emissions up to the level of the tax and emitting if more costly to abate than paying the tax).

#### The role of property rights and compensation

13. When the NZETS was introduced, the rationale for compensation was the need to protect the property rights of existing emitters. This was achieved through the allocation of 'free' emission units. The NZETS increased firms' production costs and, in some cases, lowered asset values substantially in a way that shareholders could not have anticipated at the time of the investment.

- 14. Existing emitters had a legitimate expectation that they should retain their 'first-use' rights, even in the face of a (new) need to constrain carbon emissions. The expropriation of the rights to emit with or without compensation was informed by:
  - a the approach taken to other natural resource issues (such as fisheries), and
  - b the objectives of the NZETS.
- 15. The Labour-led Government that established the NZETS recognised the risk of infringing property rights and that firms would face losses due to its introduction. Box 4 on pages 59 and 60 of 'The Framework for a New Zealand Emissions Trading Scheme' explicitly stated:

"However, some will not be able to pass the bulk of these costs on, resulting in profit impacts for shareholders and (potentially) some loss of competitiveness. The term "stranded assets" is sometimes used in this context."

16. Compensation was given based on this rationale. However, to narrow the scope for potential compensation, it was decided to focus on 'competitiveness-at-risk' as the criterion to determine who received free units. It was always clear that this was not the reason for compensation:

"The government considers it unhelpful to frame discussion on assistance issues in terms of competitiveness-at-risk considerations because the concepts are poorly defined and the impacts often overstated. There are many factors that influence firms' profitability and competitiveness. Emissions pricing would be just one of them, and its impact would be difficult to distinguish from those factors that managers and shareholders must (currently) routinely address."

(emphasis added)

- 17. An important consequence of industrial allocation, but not the reason for, is that it manages the real risk of emissions leakage by reducing the cost impact of the NZETS on Emissions Intensive and Trade Exposed (**'EITE'**) firms and reducing any competitive disadvantage with offshore firms subject to weaker climate policy. For companies that would not be able to pass on costs to their consumers (predominantly commodity exporters or those subject to import competition) 'free' allocation was seen as a market leveller for internationally exposed EITE firms. <sup>2</sup>
- 18. This is significant because the global playing field was at the time of the NZETS' establishment far from level and sixteen years on this unfortunately remains the

The Framework for a New Zealand Emissions Trading Scheme, published by the Ministry for the Environment and The Treasury, September 2007.

On the other hand, petrol and power companies were deemed to be able to pass on the carbon costs and there ineligible to receive free units.

case. Globally, only 23% of greenhouse gas emissions are covered by a carbon price, with carbon prices varying significantly between jurisdictions. Further, only 4% of global greenhouse gas emissions face a direct carbon price within the range needed by 2030.<sup>3</sup>

19. However, it seems even this basic understanding (as set out above) has been lost to time. It is contrary to contemporary views from officials within the Ministry for the Environment who, in response to a letter to their Minister from Energy Resources Aotearoa, said that:

"I would like to clarify that the core purpose of industrial allocation is to mitigate the risk of emissions leakage by reducing competitive advantage. It is not to "compensate incumbent firms for the impact of the NZ ETS on their existing property rights."

#### Some common myths about free units

#### 'Free industrial allocation is a subsidy'

- 20. No. A common criticism of industrial allocation (or 'free' carbon credits, as they have become known) is that they provide a subsidy to a select group of internationally competitive EITE businesses. These firms extract, produce or use fossil fuels in their production processes and are subject to international competition from jurisdictions that do not have a carbon price.
- 21. This view that free allocations are subsidies demonstrates a misunderstanding of the true nature of industrial allocation. A subsidy involves the government providing financial assistance to individuals or firms with the intention of encouraging production or consumption. Compensation to mitigate a loss of property rights does not meet this definition. A subsidy is different. Industrial allocation is not a production subsidy for emissions-intensive output.

#### 'Free industrial allocation prevents emission reductions'

22. No. The mere obligation to trade units delivers the objectives of the NZETS – the abatement effect is achieved by the trading obligation and is independent of whether the recipient is given all necessary units or has to buy them all (or with any intermediate allocation). Officials accepted this point as set out in the Framework, which states:

"Economic theory suggests that the free allocation of emission units (as opposed to auctioning) will typically not affect firms' decisions on levels of production."<sup>5</sup>

23. Moreover, industrial allocation incentivises investing in emissions reductions because firms can sell the New Zealand Units (**NZUs**) they receive or borrow

<sup>&</sup>lt;sup>3</sup> See the World Bank's State and Trends of Carbon Pricing 2022 here: content (worldbank.org).

<sup>&</sup>lt;sup>4</sup> Letter from Minister Simon Watts to Energy Resources Aotearoa dated August 2024.

op. cit, 'The Framework', page 69, Box 6.

against the asset. As such, it is a source of capital that can be used to help fund new low emissions technology.

#### 'Other complementary measures are also needed'

24. No. The carbon price is adequate until credible evidence to the contrary is presented. The Treasury also supported this stance at the time of the introduction of the NZETS. In its 2008 Briefing to the Incoming Minister of Finance, The Treasury stated that:

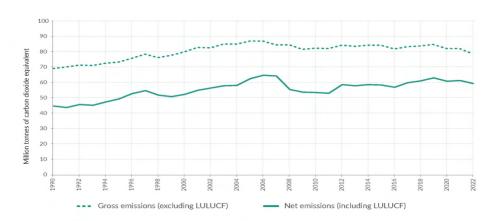
"The adoption of the ETS renders most other abatement policies redundant. Additional policy measures should only be adopted where there are external costs and benefits that are likely to cause an inefficient level of emissions; or information barriers prevent cost effective mitigation from occurring; and the government can take action that would be effective in eliminating or minimising the identified market failure at a cost lower than the cost of purchasing units." <sup>6</sup>

- 25. Our view is that single policy measures should be used so that their effectiveness can be assessed. If responses are inadequate, the original intervention can be intensified, or additional measures can be deployed. If instead (as has been the unfortunate case) multiple interventions are applied to the same problem, then it will not be possible to assess which intervention to intensify if responses are inadequate because the effects of the different measures will not be separable.
- 26. Where interventions cause uncertain but irreversible market changes, policy design should set a higher cost-benefit threshold—holding off intervention (rather than being impatient and hasty) until this higher benefit. This is often referred to as recognising the 'option value of waiting' in making irreversible interventions.
- 27. The Government has time to introduce more aggressive measures progressively should it be shown that the previous ones are failing to deliver the right policy outcomes. Figure 1 below shows this is not immediately apparent from our emission reduction profile.

5

The Treasury document entitled 'Briefing to the Incoming Minister of Finance, Economic and Fiscal Strategy – Responding to your Priorities, 2008, page 29.

Figure 1: New Zealand's gross and net emissions from 1990 to 2022 (in Mt CO<sub>2</sub>-e)



Source: Ministry for the Environment<sup>7</sup>

- 28. This shows that gross emissions peaked in 2006 and have been declining year-on-year since 2019.
- 29. In any case, so-called 'complementary measures' are rendered ineffective under a fixed and declining emissions cap, which is in place in the NZETS. There is a 'waterbed effect' of the declining cap that neutralises most other policies to reduce emissions.<sup>8</sup>
- 30. Complementary measures actively undermine the effective operation of NZETS by blurring or hiding the actual price of carbon from the market. This creates a vicious cycle in which the effectiveness of the NZETS is compromised and further undermined, leading to calls for the greater use of complementary measures.

#### Do we need a carbon border adjustment mechanism?

- 31. The petitioner suggests New Zealand implement a CBAM. A CBAM is effectively a tax or tariff at the border enforced on imported goods and services that do not comply with or embody a sufficient equivalent carbon price faced by domestic producers.
- 32. Several practical issues make the consideration of a CBAM highly problematic to New Zealand. Being:
  - a they tend to be more suitable to jurisdictions where there are only modest overlaps between the domestic sectors covered by a carbon price and those sectors that compete against imports. For example, the EU has a narrowly applied carbon price (power and industrial processes), with much of its industrial base being offshored. New Zealand, on the other hand, has a wide application of its carbon price (all except agriculture), effectively covering all

<sup>7</sup> See <a href="https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902022-snapshot/">https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902022-snapshot/</a>.

For further, fuller detail on the 'waterbed' effect and its implications, see our note entitled 'Perspectives Series – The 'waterbed effect': the most important climate policy you've never heard of', dated 30 November, 2021, accessible via the following link: <a href="https://www.energyresources.org.nz/dmsdocument/202">https://www.energyresources.org.nz/dmsdocument/202</a>.

- domestic manufacturing or processing and is heavily dependent on a wide range of imports some of which it domestically produces (such as urea);
- b New Zealand has spent decades entering into trade agreements that reduce border tariffs and taxes (and it continues to try to do this). The imposition of a CBAM by New Zealand runs counter to this ethos. Our reliance on exports (predominantly agricultural, which are not subject to a carbon price) to pay our way in the world could come under threat if we imposed a CBAM on imports and could be the cause for retaliatory measures by those countries we export to; and
- c a CBAM is only effective in protecting domestic producers (in New Zealand, for example, urea producers) from importers who do not face a carbon cost but does not protect exporters who face a cost of carbon but who are exposed to unequal competition from other jurisdictions who do not, like methanol. Some other form of protection would still be required for our exporters where this occurs.
- 33. These are non-trivial issues that make the application of a CBAM in New Zealand highly problematic. We also understand that its implementation is not going smoothly in the EU, especially concerning its impact on the right to sustainable development for developing countries. For example, importing flowers from Africa has raised several practical issues.

#### Stable and predictable carbon policy settings are essential to a well-functioning NZETS

- 34. The NZETS is the key tool to help New Zealand meet its emissions budgets, the Nationally Determined Contribution (**NDC**), and the 2050 target. The NZETS is the main incentive driving market-led measures to reduce net emissions.
- 35. However, constant changes especially those suggested by the petitioner are destabilising to a well-functioning NZETS capable of delivering predictable market outcomes. Updating NZETS settings every year has already introduced significant price volatility and uncertainty for the market.
- 36. We advise steadying the NZETS with appropriate legislative guardrails and providing much-needed predictability in policy settings. This will enable the NZETS to deliver net emissions reductions in line with the budgets and targets without unnecessary and avoidable emissions leakage offshore or incentivising the premature shutdown of industry within New Zealand.
- 37. We reiterate our feedback to the Ministry for the Environment on their recent consultation on NZETS settings, in which we recommended (among other recommendations):
  - a stabilising the NZETS settings through legislation so that the sinking cap is made visible to the market through to 2050;

- b reducing the frequency of reviewing the NZETS settings annual is too frequent and has created price volatility and market uncertainty;<sup>9</sup>
- c considering a lower price corridor as a stabilising influence when reviewing the cost containment reserve; and
- d ensuring that industrial allocation rights are preserved by legislation through 2050. 10

#### Frequent reviews disincentivise investment in emissions reduction

- 38. The changes suggested by the petitioner would create a massive disruption to the nature and operation of the NZETS.
- 39. We reiterate our concern that regular changes to the NZETS particularly the annual NZETS settings reviews and the discretionary five-yearly review of industrial allocation may undermine future investment in emissions reductions, which conflicts with the purpose of the NZETS. If emitters expect their allocative baseline to be reduced quickly in response to significant emissions reduction investments, their incentive to make these investments is moderated.
- 40. Timeframes such as these may have the unintended consequence of incentivising only incremental improvements in recipients' emissions efficiency, as the rational response may be to reduce their emissions only to their allocative baseline and no further (or to seek subsidies to compensate for this diminished commercial incentive). This could undermine the case for more significant 'step-change' scale investments in emissions reductions.
- 41. Significant emissions reduction investments often have payback periods beyond ten years, so the prospect of an allocative update within five years may, perversely, deter emissions reduction investment. 11
- 42. This is a significant barrier to industrials making gross emissions reduction investments.

The annual reviews also create unessential workload for officials, businesses and commentators who must participate.

Annual updates to NZETS limits and price control settings for units 2024. See our submission here: <u>283</u> (energyresources.org.nz).

If an industrial firm makes a large investment in decarbonisation, it is doing so on the expectation it will continue to receive (and sell) its allocation for the avoided emissions over a given period (usually a 10-15 year investment horizon).

#### **Concluding remarks**

- 43. We would like to thank the Committee for the invitation to submit on this petition and would be more than happy to present our submission to the Committee in person at the appropriate time.
- 44. Stability and predictability are two critical touchstones for an effective and well-functioning NZETS. Constant policy changes and overly frequent reviews are destabilising and should be removed from legislative obligations.