

Emissions Trading Scheme Review

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Te Kaitiaki Taiao a Te Whare Pāremata

Climate change is the biggest environmental challenge we face. Over my term as Commissioner I have made a number of submissions and comments in relation to the Emissions Trading Scheme, including acting as an adviser to the ETS Review Select Committee.¹

The ETS is the main mechanism by which the Government intends to manage emissions and encourage the transition of New Zealand to a low carbon economy. Forestry was the first sector to enter the scheme. Then transport fuels, electricity production and industrial processes came under the regime in July 2010. Agriculture is due to enter in 2015.

The ETS is the right framework for pricing carbon but I have serious concerns about a number of aspects of the legislation. In particular, the subsidies to big emitters will not only impose significant costs on the taxpayer but also distort the carbon market and limit the incentives to reduce emissions.

At Copenhagen New Zealand made an international commitment to reduce its greenhouse gas emissions to between 10% and 20% below the 1990 level by 2020. Yet, we are on track to exceed the 1990 level by 30% (Figure 1). We will need to buy a lot of carbon credits offshore to close this gap. This "gap" is likely to cost New Zealand over a billion dollars per year.²

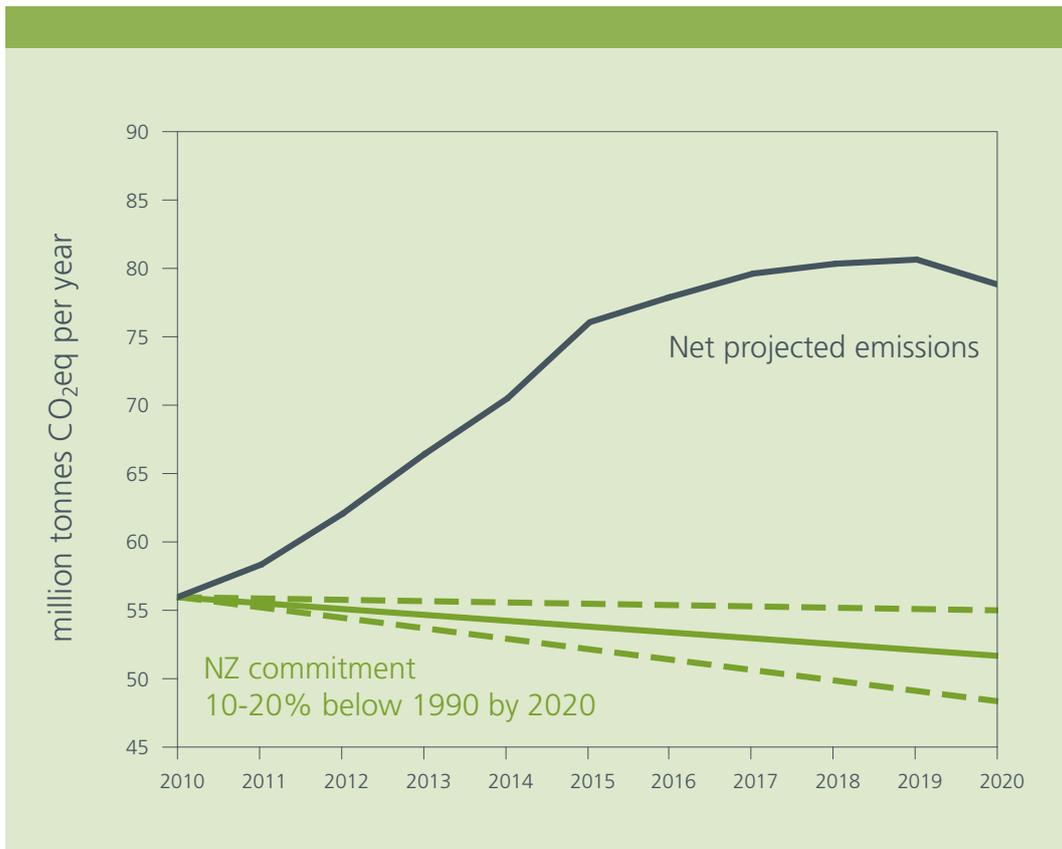


Figure 1: The gap between our international commitment to a 2020 target to reduce greenhouse gas emissions and our current net projected path.³

The Review Panel is required to review the operation and effectiveness of the ETS across a number of different aspects. This submission is focused on the following consultation questions.

Q13 Under what conditions should the ETS scale up to a full obligation?

In particular:

- a) Should the fixed price option of \$25 continue beyond the current transition phase (ie, after 2012)?
- b) Should the one-for-two obligation continue beyond the current transition phase?

Q14 To what extent, if any, should abatement options be relevant in determining the extent of a sector's participation in the ETS?

Q15 Under what conditions should new sectors enter the scheme and incur surrender obligations?

Q16 Should allocation of NZUs continue as planned under current design settings after 2012?

I have made four recommendations in this submission concerning:

1. The price cap and two-for-one deal.
2. The limitless allocation of free carbon credits to some sectors.
3. The allocation of free carbon credits to new activities, particularly those based on lignite.
4. The inclusion of the agricultural sector in the ETS.

1. The price cap and the two-for-one deal

The intent of the ETS is to fairly pass on the cost of greenhouse gas emissions that occur in New Zealand from the Government to the emitters. Those responsible for greenhouse gas emissions are required to give the Government a carbon credit for every tonne of greenhouse gas they emit.

Carbon credits can be bought from the Government or private sources. Much like our tax system, each year participants must file an emissions return detailing their annual emissions. This determines the number of carbon credits which an emitter must give to the Government, called its carbon liability.

The price cap and the two-for-one deal are designed to lessen the impact of the carbon liability in the early stages to provide a smooth transition for industry and the economy as a whole. Specifically, these policies are intended to reduce volatility in the early stages of the scheme, while emitters become “familiar with their obligations and the operation of carbon markets”.⁴

Under the price cap, those responsible for producing emissions can buy carbon credits from the Government at \$25 per tonne of carbon dioxide⁵. This effectively caps the cost of a carbon credit, with the Government meeting the difference between the cap and the price a credit would fetch on the open market.

Under the two-for-one deal, those responsible for greenhouse gas emissions are only required to surrender one carbon credit for every two tonnes of greenhouse gas they produce. Combined, these two policies mean that the obligation emitters face cannot exceed \$12.50 per tonne of carbon dioxide.

These policies are set to expire on 31 December 2012. It might be argued that these policies should be extended due to the uncertain international context. However, while such policies are reasonable in the short-term while the carbon market is being established, they come at significant cost to taxpayers. Extending these policies beyond 2012 would further widen the gap between our international commitment and our likely future emissions, increasing the country's carbon deficit. Therefore, these policies should expire as scheduled.

Recommendation 1:

I recommend that both the price cap and the two-for-one deal expire on 31 December 2012 as currently legislated.

2. Limiting the number of free carbon credits

Allocation is the term used in the ETS for the provision of free carbon credits to some emitters to offset the cost of their carbon liabilities. Some sectors are eligible for unlimited credits whereas others are subject to allocation caps.

Reasons to allocate to firms or individuals include compensating for asset value loss (where assets are devalued by a policy decision), protecting competitiveness, and incentivising desirable behaviour.

However, allocation can also be described as a costly subsidy. Each credit that is given away rather than kept or sold is a real dollar loss to the taxpayer. Further, allocation removes the push to move to a low carbon economy. Generous and unlimited allocation that is promised to last a long time – whether or not it actually does – lessens the incentive to invest in low-carbon technology and emissions reductions. This is probably the biggest cost of all, as long term we need New Zealand to move to a low carbon economy.

Industrial processes, industrial heat generation, petroleum refining and agriculture sectors are to be given credits based on emissions intensity. This means a firm will get more credits if it increases its emissions as long as the carbon intensity of its production is maintained or decreased. Intensity-based allocation removes the marginal cost impact of a carbon price. And the number of credits allocated to these sectors is uncapped.

There are, however, allocation caps for the fisheries and forestry sectors. And households receive no free carbon credits for the electricity and petrol they use.

Such a significant subsidy to certain sectors also dulls the price signal which in turn weakens the incentive to reduce emissions and the incentive to create credits for sale. Few companies will feel compelled to reduce expensive emissions when the Government is picking up the tab for them and few businesses will want to invest in creating credits when the Government is giving them away for free. This increases the likelihood that the Government will have to pay compensation for stranded assets when future tightening of emissions subsidies occurs.

The longer this over-generous allocation goes on, the more embedded the entitlements to it become, making change costly further down the track. This mistake was made when setting up the New Zealand Quota Management System, a cap-and-trade system for fisheries. Initially tradable units were set as tonnes of fish per year rather than as percentages of the total allowable catch. This resulted in the Government facing a \$100 million dollar bill to buy back units when it was realised that too many had been allocated.⁶

Business needs policy certainty. Given the fiscal risk, uncapped allocation of free carbon credits is clearly unsustainable in the medium to long-term.

Although the allocation of free carbon credits is said to be “transitional”⁷ the current phase-out rate under the Climate Change Response Act means carbon credits will be freely allocated to some sectors forever.

The phase-out rate does slow over time, but with a decrease of 1.3 percent of the previous year's allocation each year.⁸ This means that the annual decrease gets smaller and smaller.

In 2050 the New Zealand Government will still be paying for 55 percent of emissions from high emissions-intensive industries, and 37 percent from medium emissions-intensive industries (Figure 2). This is incompatible with the Government's target to reduce 1990 emissions by 50 percent by 2050.

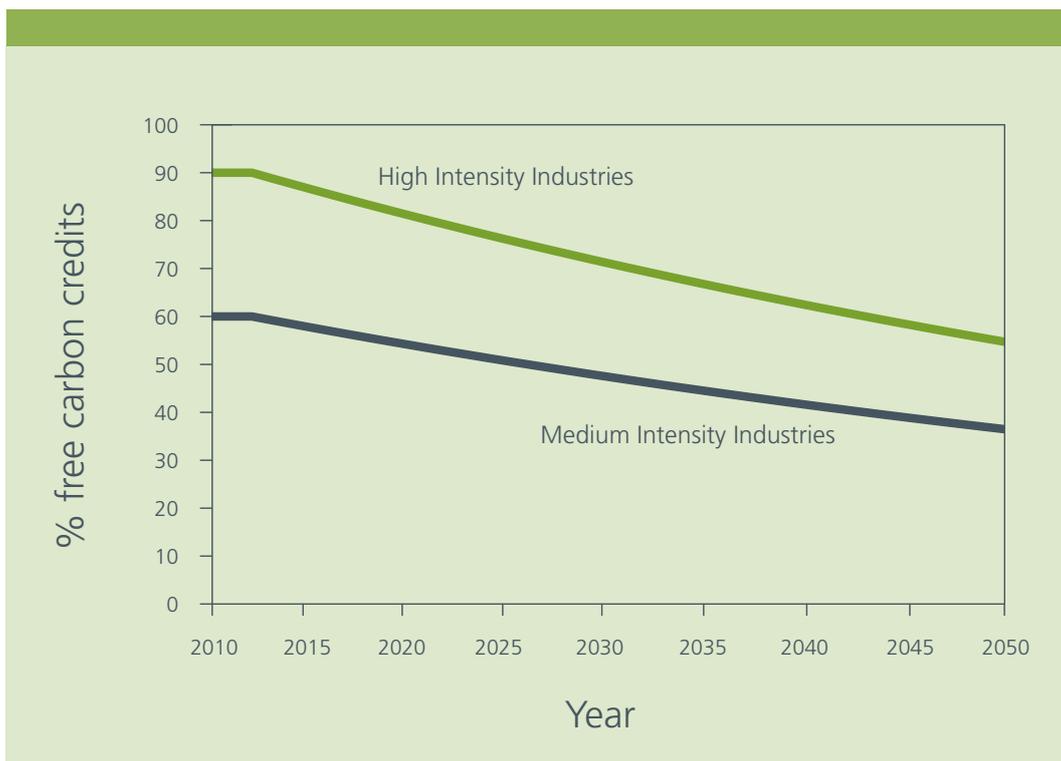


Figure 2: The phase-out of the allocation of free carbon credits to carbon-intensive industries over the next four decades.

Recommendation 2:

I recommend that:

- a) a cap on the number of carbon credits freely allocated be put in place;**
- b) the phase-out rates for allocation be increased, not expressed as a percentage decrease of the previous year, and that the latest year in which allocation of free carbon credits must cease be specified.**

3. Subsidising new activities

My recent report titled “Lignite and climate change: The high cost of low grade coal” brings another substantial flaw in the ETS into sharp relief. All uses of lignite have high carbon footprints. In particular, making diesel from lignite will significantly increase the gap between our promise to reduce emissions and the current path we are on. However, companies that develop products from lignite on a large scale may well be eligible for free carbon credits worth millions of dollars per year.

As long as any free carbon credits are provided by the Government, there will be ongoing pleas for new industrial activities to be defined as eligible for allocation. It is difficult to argue that all new entrants should not receive free carbon credits, particularly since some may be less emissions-intensive than their existing competitors. However, as things currently stand, some new emissions-intensive industries may well receive substantial taxpayer subsidies, in the form of carbon credits.

New activities are not automatically eligible for free carbon credits. The decisions regarding eligibility are made by an Order in Council based on recommendations by the Minister for the Environment, because the law is silent on this matter.

Recommendation 3:

I recommend that the ETS is amended:

- a) so that new industries that use lignite on a large scale are specifically excluded from receiving any free carbon credits;**
- b) to provide criteria for deciding which new activities are eligible to receive free carbon credits, including a requirement that the new activity will reduce New Zealand’s national net greenhouse gas emissions.**

4. Agriculture and the ETS

Agriculture is currently set to enter the ETS in 2015. The agricultural sector is responsible for 50% of New Zealand's greenhouse gas emissions mainly in the form of methane and nitrous oxide.

It is unusual for a developed nation to have such a high percentage of its emissions generated by agriculture. By comparison only 7% of Germany's emissions are agricultural and even Australia's agricultural sector is responsible for only 15% of their total emissions.⁹

Because agriculture is such a key contributor to New Zealand's emissions profile it must be included in the ETS. The emissions produced by agriculture will have to be paid for at a national level. If they are not met by emitters they will have to be met by the taxpayer.

Backtracking on bringing agriculture into the ETS would also send a negative signal to the international community. It would bring into question our commitment to carbon reductions and be likely to affect our clean green image.

There are advantages to agriculture entering the ETS. New Zealand's agricultural science is advanced by international standards and is in a good position to produce innovative emission-reducing technologies. Moving to a low-carbon agricultural model would further enhance our environmental credentials in the international marketplace.

That said, there are many agricultural producers that are particularly sensitive to sudden economic changes including many small, family-run farms and agriculture. As such there is a good case for allocating some free carbon credits to the sector for a transition period.

Indeed, there is a much stronger argument for giving free carbon credits to agriculture than there is for the current industry allocations.

Recommendation 4:

I recommend that agriculture is brought into the ETS by 2015 as currently legislated.

Endnotes

- 1 Available in hard copy or for downloading from the website www.pce.parliament.nz
"Advice on the ETS Review 2009", August 2009.

"Submission on the Climate Change Response (Moderated Emissions Trading) Amendment Bill", October 2009.

"Submission on Industrial Allocation Regulations under the ETS", February 2010.

Parliamentary Commissioner for the Environment, "Submission on Forestry Regulations under the ETS", March 2010.

Parliamentary Commissioner for the Environment, "Lignite and climate change: The high cost of low grade coal", December 2010.
- 2 Based on a carbon price of \$50 per credit. From Covec 2010. Carbon price forecasts, report for the Parliamentary Commissioner for the Environment, Covec, Auckland. Projections in this report for carbon prices in 2020 were \$35 per credit for a relatively low ambition policy scenario (no effective international emission reduction framework), and \$200 per credit for a relatively high ambition policy scenario (where the world is on track to stabilize greenhouse gas levels at 450ppm CO₂eq). The 'best guess' estimate for 2020 was \$50 per credit.
- 3 Figure 1 from Parliamentary Commissioner for the Environment, "Lignite and climate change: The high cost of low grade coal", December 2010.
- 4 Explanatory note. Climate Change Response (Moderated Emissions Trading) Amendment Bill
- 5 Strictly speaking a tonne of carbon dioxide equivalent. CO₂eq is used as a common metric for all the greenhouse gases.
- 6 Kerr, Suzi; Richard Newell and James Sanchirico. 2003. "Evaluating the New Zealand Individual Transferable Quota Market for Fisheries Management," Motu Working Paper 03-02.
- 7 ETS Review. 2011. Issues statement and call for written submissions. Page 13.
- 8 In the Climate Change Response (Moderated Emissions Trading) Amendment Bill, Clause 22, new sections 82(1)(a)(ii), 82(1)(b)(ii), 85(2)(a)(ii), and 85(2)(b)(ii) all state:

"in each year after 2012, the level of assistance from the previous year less 1.3 percent..."
- 9 New Zealand's Greenhouse Gas Inventory 1990–2008. Ministry for the Environment. April 2010.

National Inventory Report For the German Greenhouse Gas Inventory 1990 - 2008. Federal Environment Agency (Umweltbundesamt) May 2010.