

NZ ETS Review 2015/2016 consultation: Priority issues

19 February 2016

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Submission Form

Context and drivers for the review

1. Do you agree with the drivers for the review?

Yes – with the following qualifications:

- *Improving performance of the NZ ETS against its objectives:* The NZ ETS has dual objectives: “assisting New Zealand to meet its international obligations under the Convention and the Protocol; and reducing New Zealand’s net emissions of those gases to below business-as-usual levels.” The purpose of the UN Framework Convention on Climate Change is to achieve stabilisation of global emissions at a level that avoids dangerous human interference with the climate system. As provided by the Paris Agreement under the Convention, meeting the two-degree temperature goal will require countries to achieve net zero global emissions by the end of the century, with peaking of global emissions in the near term. In this context, the performance of the NZ ETS should be assessed against the objective of enabling the strategic decarbonisation of New Zealand’s economy in line with these parameters.
- *Preparing for a more carbon-constrained future:* This should entail providing a cost-effective transition to a net-zero-emission domestic economy during the second half of this century.
- *Increasing certainty about future policy settings:* Policy decisions pursuant to this review should reflect consideration of possible mitigation pathways and policies through at least 2050. Different forms and levels of policy certainty may be feasible for the periods through 2020, 2025, 2030, 2040 and 2050.
- *Managing banked emissions units.* While this issue is definitely relevant, the NZ ETS review needs to address broader and more fundamental issues about unit supply and price management in the different contexts where the NZ ETS continues to operate as a domestic-only system and where the NZ ETS is able to link to international sources of units through other ETS or other market mechanisms.

2. What other factors should the Government be considering in this NZ ETS review?

The scope of the review is not sufficient to address all four drivers of the review. The scope should be broadened to address the following issues: (a) setting long-term NZ ETS ambition for domestic emissions and emission prices, (b) creating an integrated ETS architecture for managing unit supply and price (with and without international linkages) to deliver on the desired ambition, (c) aligning the NZ ETS with broader domestic climate policy and opportunities for international cooperation on mitigation, (d) building enduring cross-party and public support for rising emission reduction and price ambition under the NZ ETS, and (e) considering the inclusion of biological emissions from agriculture in the NZ ETS. A further explanation of these issues is provided in the narrative in **Annex A** to this submission.

Moving to full surrender obligations

3. Should the NZ ETS move to a full surrender obligation for the liquid fossil fuels, industrial processes, stationary energy and waste sectors?

Yes for two reasons. First, the key driver of the emissions price and of costs to sectors is the medium- to long-term supply of units into the ETS. This is currently undefined. The desired level (or corridor) for prices and management of prices are wider issues that should be addressed for the ETS as a whole in an integrated way rather than through one specific and internationally unique mechanism.

Second, arguments for special treatment of non-forestry sectors are no longer compelling given how long the ETS has been established.

A further explanation of these issues is provided in the narrative in **Annex B** to this submission.

4. What impact will moving to full surrender obligations have on you or your business?

No response

5. If full surrender obligations are applied, when should this be implemented?

It would be valuable to have a smooth and predictable administrative process for changing the obligation. Low-emission investment benefits from stronger ETS market confidence. This in turn can be supported by advance notice of changes and, more generally, predictable evolution of policy.

Given reporting is done on an annual basis, it would make sense for the change in obligation to be applied from the beginning of a reporting year.

We can see no reason why the change should be delayed beyond January 2017.

Managing the costs of moving to full surrender obligations

6. If the NZ ETS moves to full surrender obligations, should potential price shocks be managed?

Yes, but any impacts of ETS price changes should be addressed through more general price management policies rather than through gradual movement to full surrender.

7. If potential price shocks associated with moving to full surrender obligations should be managed, how should this be done?

Any impacts of ETS price changes should be addressed through more general price management policies rather than through gradual movement to full surrender.

8. If the \$25 fixed price surrender option value should change, what should it change to and why?

This needs to be addressed during the second round of consultation in the context of broader decisions on ETS ambition and methods for unit supply and price management. A further explanation of these issues is provided in the narrative in **Annex B** to this submission.

Annex A: Narrative on Question 2

The scope of the NZ ETS review would benefit from expansion to address five “A’s” essential to reforming the NZ ETS: Ambition, Architecture, Alignment, Acceptance and Agriculture.

Ambition

Strategically, the first step in ETS design is deciding how quickly to decarbonise the domestic economy and establishing a credible long-term trajectory for reducing emissions in capped sectors with acceptable emission prices and system costs. This trajectory should be set in the context of possible sectoral emission reduction pathways which are informed by technical and economic mitigation potential and aligned with other development objectives. Aiming for corridors for ETS emissions and emission prices, with upper and lower boundaries, could guide cap setting and price adjustment by future governments as circumstances change while providing a basic level of certainty for ETS participants and investors.

In the context of rising domestic emissions and being nested within the Kyoto emission cap with access to international credits, New Zealand skipped this step initially during NZ ETS design. It would serve us to go back and set intended corridors for domestic emissions and emission prices under the NZ ETS with the goal of decarbonising New Zealand’s economy, and translate this into a series of ETS caps as enabled (but not yet applied) under the 2012 NZ ETS amendments.

Architecture

An effective ETS architecture will be required to deliver increasingly ambitious mitigation outcomes. A key decision for the government is whether the NZ ETS will operate in the future as a domestic price maker or an international price taker. The NZ ETS was fundamentally conceived as an internationally linked system where the domestic price was set by the Kyoto market, but it was compelled to delink as of June 2015 because the government did not take a Kyoto CP2 target. The government’s consultation document appears predicated on the assumption that it will be feasible and desirable for the NZ ETS to re-link to an international carbon market in the 2020s. Other jurisdictions with an ETS have chosen to engineer a domestic price with limited or no exposure to international prices. Our future options are open.

Having agreed on the objectives and drivers of domestic carbon prices, the government can then consider whether there are grounds to justify different effective prices for different sectors. In the initial design, all sectors in the NZ ETS were to face the full price of emissions at the margin in order to make efficient investment decisions under growing global carbon constraints. In 2009 (and reinforced in 2012), the government halved the unit obligation for non-forestry sectors with the goal of sheltering them from the full international price in a time of recession. Today’s context necessitates a new architecture for managing unit supply and emission prices in tandem, complemented by strategic allocation and use of auction revenue to manage the distribution of costs. Any decision to apply a partial unit obligation to some sectors should be taken in the context of those other considerations.

Given the large surplus of banked units and the likelihood of other cost containment measures (such as a price cap and free allocation for emissions-intensive, trade-exposed producers), there is a strong case for moving directly into a full unit obligation for all sectors with reasonable advance notice, rather than phasing in a full obligation gradually. This is reinforced by [NZIER’s modelling](#), which shows that switching from a partial to a full unit obligation at \$25 per tonne would shave GDP growth by only 0.1% in 2020, equivalent to eight hours’ worth of GDP.

Alignment

The NZ ETS should be aligned strategically in two ways: with other domestic policies and with opportunities for international cooperation on mitigation. First, it would be useful for the

government to engage with stakeholders on how the NZ ETS price signal could interact with other sectoral policies and regulations to achieve desired sector outcomes. The NZ ETS price signal by itself may not be sufficient to drive rapid step changes in low-emission technology and infrastructure in key sectors.

Second, to help in meeting its 2030 emission reduction target, New Zealand faces a strong incentive to align the NZ ETS with international expectations for credibility and ambition, both to facilitate linking to other ETS and to position New Zealand as a better partner for other forms of cooperation on mitigation. Linking ETS requires harmonisation of key design features affecting unit supply, environmental integrity and price control. The government's NZ ETS design decisions should preserve options to link. From political and practical standpoints, neither a partial unit obligation nor a weak or absent cap will be appealing to prospective linking partners. This is an important area for engagement with both domestic and international stakeholders during the NZ ETS review.

Acceptance

Providing greater certainty over future mitigation policy is a critical enabler of investment in decarbonisation. New Zealand would benefit from both improved and new processes to secure cross-party and public support for ambitious emission reduction pathways and a rising emission price as part of a broader low-carbon development strategy. The NZ ETS review could be used as a platform or a catalyst for such processes.

Agriculture

In this year's review, the government has stated it will explicitly not address the inclusion of biological emissions from agriculture in the NZ ETS. In 2012, [Cabinet agreed](#) to exclude biological emissions from agriculture indefinitely, subject to review in 2015. The government stipulates that its [2012 criteria](#) for inclusion have not been met: "there are technologies available to reduce these emissions; and international competitors are taking sufficient action on their emissions in general." In the absence of market-ready breakthrough technologies for livestock methane, there is still considerable potential for efficiency improvements, using available technologies and practices, which could be incentivised by an emission price. Nitrous oxide emissions could be considered separately from methane emissions. This issue continues to merit discussion, whether within the scope of this review or in a separate process.

Summary

For the potential environmental, economic and social benefits of the NZ ETS to be realised, changes are needed. These relate not just to its architecture but also to its underlying objectives and its relationship with other policies and the evolving international carbon market. Broadening the scope and timing of the review would help both the government and the New Zealand public to make the most of this consultation opportunity.

Annex B: Narrative on Question 3

The government is seeking input on whether all sectors in the New Zealand Emissions Trading Scheme (NZ ETS) should move to 'full surrender' obligations. To address this question, we first need to consider what current NZ ETS price would be consistent (at least in expectation) with an efficient long-term transition to a low-emission economy, and what is likely to happen to the NZ ETS price if full surrender is implemented. We then consider whether there is any case for special treatment of some sectors.

What 'should' the ETS price be?

The fundamental purpose of an ETS is to constrain emissions and hence set an emissions price path that facilitates a gradual, cost-effective transition to a low-emissions economy. This is a long-term objective and the investments and behavioural changes that will drive the transition are long term, so the system has to be thought of over a long period – not just in terms of current issues.

For a cost-effective transition, emission units should be fully bankable with no risk of confiscation. Banking brings forward emission reductions, improves liquidity, reduces price volatility, and creates a long-term constituency for a strong ETS. If units are bankable (and there is a positive bank, as there is in New Zealand), then price is determined by long-term supply, not short-term supply. If the NZ ETS is later linked to a larger ETS (or other source of international units), then that larger system will set the NZ ETS price once the link begins, but will also heavily affect the New Zealand price as soon as a link is anticipated.

Prices are driven by expectations about long-term supply and demand. Long-term supply in the NZ ETS is set by governments both through and in response to New Zealand's international targets. Long-term supply also depends on:

- decisions around the desired rate of domestic decarbonisation and the short-run balance between domestic action and funding credible mitigation action abroad,
- whether ETS participants or the government purchase international units, and
- decisions on reduction targets for sectors covered by the ETS relative to uncovered sectors (currently dominated by agriculture).

Supply is currently highly uncertain even over the next few years (e.g. to 2020) because the government has neither outlined aims for emission prices or domestic emissions (reduction) nor given signals about how many units might be auctioned. Options to link our ETS internationally are highly uncertain.

Long-term demand is also uncertain because it depends on economic activity and mitigation costs, but these are no different than forecasts that affect any other product. In the short term, demand is also critically dependent on the government's decision on whether and how quickly the non-forestry sectors move to a full surrender obligation.

To decide on an appropriate current NZ ETS price we need to think about what price is required to meet New Zealand's goals for both reaching net zero emissions in the long term, but also the total amount of emissions between now and then – the path of reduction. Answering this analytically would require us to predict economic activity, technology change and uptake, responsiveness to emissions prices, and effects of non-price policies. The price required also depends on how we might

contribute to mitigation in other countries – and how New Zealand takes credit for that, allowing temporarily higher domestic emissions. Estimating an appropriate emission price is thus complex and ultimately is a question of judgment not modelling.

One way to think about this price is the '[social cost of carbon](#)' which estimates the climate damages from emissions. [In a 2013 study a central estimate was US\\$37 per metric tonne of CO₂](#) (US\$11 – 109 in 2015) rising to US\$26 - 220 in 2050. These estimates and even the fundamental approach to generating them are contentious. Key uncertainties are the rate at which countries implement policies to reduce emissions and the rate of clean technology change and uptake as well as the impacts of climate change and the ability of humans and natural systems ability to adapt to them. An alternative way to think about price is to consider prices in other jurisdictions such as California, Quebec and the European Union.

New Zealand needs to make its own local judgment and then make investment and policy decisions expecting that the 'best' price is above a minimum level, but also taking into account the possibility that it may be much higher in future.

What is likely to happen to the NZ ETS price if full surrender is implemented?

Simplistically, if full surrender is implemented the effective price paid by non-forestry sectors will double because they need to buy two units where they previously bought one (for activities that are eligible to receive it, free allocation for each unit of output also doubles). In addition, because demand has doubled from these sectors the price can be expected to rise, assuming supply remains the same. Working against this, more mitigation should occur in response to the higher price.

However, the actual effects on price are impossible to estimate in the absence of clear information on medium-term supply. To the extent that a decision to move to full surrender obligations signals a higher level of NZ ETS ambition by government, the impact on price may be higher than would occur only through the changes in demand. It will depend heavily on the effect of the decision on market expectations. Recent NZU price rises seem likely to reflect gradually shifting perceptions of the government's ambition and hence limits on future supply.

Is there a case for ongoing special treatment of non-forestry sectors?

If we have chosen an NZ ETS price (or price corridor) we expect will lead to the most efficient adjustment path for the New Zealand economy, what arguments could there be to treat some sectors more leniently by, for example, extending a partial unit surrender obligation?

Arguments for special treatment could include:

- *Reducing impact on GDP* – NZIER modelling commissioned for this [consultation process](#) (based on specifications provided by the Ministry for the Environment) considers this, but in a very limited way. It is a static model so does not allow gradual adjustment or technological change. They simply consider three NZ ETS price levels (NZ\$10, 25 and 50) none of which are likely to be high enough to achieve New Zealand's Intended Nationally Determined Contribution (INDC) for 2030 through domestic action (see previous reports by [Infometrics](#), and [Landcare Research](#)). They do not model the cost to the country of any effects on our ability to meet our international target (INDC) or the costs of transitioning too slowly (or too quickly) to a low-emissions economy. If these were included, the impact on GDP would almost certainly be positive. Even with these limitations, however, the GDP impact is

estimated by NZIER to be small. New Zealand has previously experienced ETS prices above NZ\$20 without obvious effects on GDP.

- *Learning about operation of the NZ ETS and mitigation options* – This was an important argument for a gradual transition (though not necessarily through a partial obligation) when the system was first created but now seems a weak argument given that the system started in 2008.
- *Alignment with existing contracts* – When the NZ ETS was first established, some companies had existing long-term contracts that did not take an emission price into account and potentially faced heavy losses. Eight years on, we might expect that companies should have built emission price and liability variability into their contracts, especially as the partial obligation was initially introduced as a temporary measure that would end in 2012.
- *Reducing risk of leakage* – The size of these risks is highly uncertain, the loss to New Zealand if some production does gradually move is unclear, and in any case leakage risk is separately addressed with output-based free allocation to trade-exposed producers.
- *Moderating distributional effects*: Emissions costs are already passing through to consumers in most sectors. If there are concerns about impacts on households, those are probably most efficiently addressed directly through the tax-benefit system.

Arguments against special treatment could include:

- *Obscuring the signal about the long-term transition to low emissions* – With an extension of a partial obligation, sectors may expect ongoing special treatment and this could distort long-term investment decisions.
- *Reducing short-term mitigation* – A low effective price reduces the incentive for short-term emission reductions that have long-term climate change consequences.
- *Raising the cost of meeting New Zealand's international commitments* – New Zealand still needs to meet its international commitments. If responsibility for this mitigation shifts from the NZ ETS to the government, it is likely to cost more.
- *Inequitable distributional effects*: The partial obligation places higher costs on taxpayers and creates a cost differential between emitters from forestry and those in other sectors.

A note on forestry: To date, a full surrender obligation has always applied to the forestry sector and there continues to be no basis for applying a partial obligation to the forestry sector. When the partial obligation (where entities surrendered only one unit for each two tonnes of emissions, often referred to as 'one for two') was introduced, most foresters were receiving credits so were pleased to benefit from receiving the full price. In addition, they could not have paid a different liability than they received in credit without perverse incentives. The few forest owners who were deforesting at the time (along with all other pre-1990 forest owners) received some compensation through free allocation. The forestry sector is now moving toward a mix of sequestration credits and harvest liability as post-1989 forests mature and allocation of compensation is complete.

Is a gradual transition to a full unit obligation warranted?

Managing adjustment to a changing NZ ETS price is not an issue that is specific to the movement to full surrender obligations. With a highly uncertain supply of NZUs in the medium term, movement from partial to full surrender is only one of many things that will drive price (and the effective price companies face when partial obligation is taken into account). We will provide a submission on the broader question of NZ ETS price management in the second round of the consultation.

When your submission is complete

Email your completed submission to nzetsreview@mfe.govt.nz or post to NZ ETS Review Consultation, Ministry for the Environment, PO Box 10362, Wellington 6143.

Submissions on Priority issues close at 5.00pm on 19 February 2016.

Submissions on Other matters close at 5.00pm on 30 April 2016.