

Topics for NZ ETS Review 2015/2016 consultation

About the consultation

The Government is reviewing the New Zealand Emissions Trading Scheme (NZ ETS) to assess how it should evolve to support New Zealand in meeting future emissions reduction targets and its ongoing transition to a low emissions economy. This follows the announcement by the Government in July this year that New Zealand's post 2020 target is to reduce greenhouse gas emissions to 30 per cent below 2005 levels by 2030.

The Ministry for the Environment is leading the consultation and welcomes your feedback on how the NZ ETS is working and how it might work better in the future.

The review will focus on:

- some transitional measures introduced to moderate the impacts of the NZ ETS
- what is required for the NZ ETS to evolve with changing circumstances including future targets
- operational and technical improvements.

Discussion document

For more information about the consultation, read our [discussion document](#). It sets out the issues on which the Government is consulting, the objective and drivers for the review. It also contains the terms of reference for the review.

See the following two technical notes for information on specific issues relating to forestry and on operational matters that could be improved. Submissions on these matters close at 5pm on 30 April 2016.

- [Operational matters technical note](#)
- [Forestry technical note](#)

The following three technical notes were made available to support submissions on the NZ ETS review's priority issues. Submissions on priority issues are now closed.

- [The New Zealand Emissions Trading Scheme evaluation report 2016](#)
- [Economic impacts of removing NZ ETS transitional measures](#)
- [Afforestation responses to carbon price changes and market certainties.](#)

Closing dates for submissions

- Submissions on priority issues closed at 5pm on 19 February 2016
- Submissions on other review matters close at 5pm on 30 April 2016.

Publishing and releasing submissions

All or part of any written submission (including names of submitters), may be published on the Ministry for the Environment's website www.mfe.govt.nz. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this consultation under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Contact for queries

Please direct any queries to:

Phone: +64 4 4397400

Email: nzetsreview@mfe.govt.nz

Postal: NZ ETS Review Consultation, Ministry for the Environment, PO Box 10362, Wellington 6143

Questions to guide your feedback

The questions below are a guide only, and all comments on topics are welcome. To ensure your point of view is clearly understood, please explain your rationale.

Contact information

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Submission Form

Landcare Research is New Zealand's leading science and research agency focused on the land environment. Our primary purpose is to enhance New Zealand's environmental performance while achieving sustainable economic development.

Landcare Research's work is very broad and includes soils, sediment and erosion, land resources, biodiversity, iconic and taonga species, wetlands, biosecurity, pests and weeds, cultural and other

values for the environment, resource economics, greenhouse gases and a raft of other research which, collectively, ensures New Zealand can develop within environmental limits. Much of our work indirectly reduces the effects of land use on greenhouse gas emissions, and supports land managers and land owners to take action to adapt to a changing climate.

Our approach is multidisciplinary, integrating the human, economic and physical dimensions of complex national, regional and catchment scale environmental challenges. Much of our work enables central and local government, with whom we work very closely, to meet their own objectives, using credible science. We also work with Māori and primary industry entities to support their aspirations for development within environmental limits, meeting the expectations of communities and markets.

Landcare Research has approximately 330 staff at sites across New Zealand, with headquarters at Lincoln, Christchurch. We lead a wide range of collaborative projects and host the NZ Biological Heritage National Science Challenge. Our collaborations extend to over 60 countries and our science excellence ranks among the top 10% of institutes worldwide in our major areas of research.

OUR INTEREST IN THE ETS REVIEW

The Government's review of the ETS is also directly relevant to several specific research activities undertaken by Landcare Research:

- Landcare Research provides leadership in several areas of greenhouse gas research to develop technologies and strategies to mitigate GHG emissions in support of New Zealand's sustainable economic growth. Ongoing investment in research to reduce or mitigate GHGs must be a complementary element to a refreshed ETS package within wider national climate change policy and programme settings.
- Landcare Research plays a leading role in improving the accuracy of the National Inventory, particularly in terms of the National Agricultural GHG Inventory, forestry sequestration measurements, and soil carbon stock changes. Accurate science and reductions in uncertainty in our National Inventory is critical to ensure New Zealand's reporting on the effectiveness of a refreshed ETS is defensible to international scrutiny and review. We encourage ongoing investment in methodology improvements to ensure New Zealand can maintain integrity on the world stage.
- Landcare Research's science underpinned the development of the Permanent Forest Sinks Initiative (PFSI). We consider this continues to be an important initiative in New Zealand's climate change toolbox, and we remain ready to apply our research capabilities to expand its scope and adoption.
- Through our subsidiary, Enviro-Mark Solutions, we also work actively in New Zealand and globally with businesses, local government and resource management agencies, and communities to reduce GHG emissions. As MfE's earlier consultation document notes, Enviro-Mark Solutions' carboNZero programme provides a number of benefits to businesses systematically working to reduce their emissions.
- We encourage new ETS settings to build on and leverage earlier investment from NZInc in local (globally-leading) schemes such as carboNZero, rather than reinvent the wheel or invest in offshore capability or programmes. New Zealand can - and should - capitalise on its position as a global leader in emissions reductions measurement, monitoring, verification and certification.
- We remain ready through our carboNZero programme and wider resource economics research expertise to support:
 - the business community to identify cost-effective ways to move to a low-carbon economy, and to verify and market GHG reduction achievements credibly and from a science-based perspective; and

- design economically efficient market-based instruments to support a refreshed ETS.

Our role as a national provider of independent, authoritative science advice to inform policy, regulation and land management practices, is also highly relevant. In that role, Landcare Research is looking to ensure that New Zealand has in place an ETS that:

- is credible and defensible from a science-based perspective
- supports New Zealand’s ability to operate with high integrity on the world-stage, including in the diplomatic, trade and science spheres
- delivers meaningful emissions reductions targets to support global efforts
- reduces the impacts of climate change on New Zealand’s native ecosystems, productive landscapes, valued biodiversity and taonga species, and in urban areas
- builds on existing programmes, schemes and incentives to enable New Zealand sectors, businesses, local government and communities to reduce their greenhouse gas emissions;
- effectively manage risks to New Zealand businesses and exporters; and
- helps New Zealand transition effectively to a lower-carbon, more sustainable economy.

From our perspective, it is also important that the ETS must underpin a credible ‘licence to operate’ for New Zealand domestic and global companies in communities and offshore markets.

Discussion Document

Context and drivers for the review

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

Yes

No

Unsure

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

We recommend that the drivers of both emissions and emissions reductions should be more explicitly included in terms of the scope and nature of the ETS Review.

The Discussion Document indicates that submissions will serve as the (primary?) basis for the policy review, but we would recommend that at least the major issues identified in Ministry for the Environment (2015) should also be considered within the scope of the Review.

Moving to full surrender obligations – submissions on these priority issues closed on 19 February 2016.

Managing the costs of moving to full surrender obligations– submissions on these priority issues closed on 19 February 2016.

Other issues: business responses to the NZ ETS

9. Do you consider the future cost of emissions in your business planning?

Yes

No

If no, please explain your answer?

10. What would improve your ability to take into account the future cost of emissions in your business planning?

A clear signal about carbon price in the market.

Other issues: protecting competitiveness through free allocation

11. Under what conditions should free allocation rates start to be reduced after 2020?

Reducing free allowances would increase the contribution of the ETS to meet New Zealand’s national reduction targets (Ministry of Agriculture and Forestry 2011).

Landcare Research’s resource economics unit recommends that free allocation should be reduced gradually each year for 3 years, until reaching a minimum amount equivalent to, say, 10%. This residual allocation is likely to serve as buffer in case of pronounced volatility of carbon price or other non-carbon markets. However, research and wider analysis is needed to identify the role of this “buffer allocation” for decision makers and its expected effectiveness.

Reference: Ministry of Agriculture and Forestry (2011). Forestry Accounting Options. MAF Technical Paper No: 2011/27

12. What impact would it have on your investment decisions over the next few years if there was a clear pathway or criteria for phasing out of free allocation after 2020?

A clear pathway for phasing out free allocation would reduce uncertainty about the functioning of the ETS and enable more effective business planning, including for emissions reductions activity. In other words, with a phasing out of free allocation, the ETS would operate more as a ‘market’ where the polluter-pays principle applies, carbon price signals the true cost of carbon, non-carbon markets accommodate the cost of carbon, distortions are reduced and the future behaviour of the

ETS may be more predictable. Overall, these factors will help sectors covered by the ETS to plan resource allocation more effectively.

Other issues: managing unit supply - forestry

13. How does the carbon price impact your forestry investment decision-making?

In your answer, we are interested in the:

- a) extent to which the NZU price impacts decisions, compared to other factors
- b) impacts of the current price, and of your expectations for future prices.

Not Applicable

14. Are there opportunities for the NZ ETS to increase incentives for forestry investments, outside of NZU price?

Yes

No

Unsure

15. What are your reasons for the above answer? If you answered yes, we would be interested in comments on:

- a) any barriers to participating in the NZ ETS that could be reduced
- b) other factors.

Landcare Research’s resource economics unit analysis indicates that factors that would increase incentives for forestry investments include:

- (i) Equivalence of forestry-generated units with NZ units purchased from the government. This would facilitate trade and make the ETS mechanisms easier to understand;**
 - (ii) Accounting for forest carbon sequestration in the calculation of net emissions to count towards the 30% below 2005 national target. Given the terms of the Paris Agreement, forests play a significant role on determining the extent to which New Zealand will comply with its commitments. Thus, there would be an incentive for foresters to participate if a clear opportunity is signalled about their potential contribution;**
 - (iii) Restrictions of the participation of Kyoto units in the ETS. Prior experience has shown that sharp price decreases destroy the incentives for foresters, in addition to the elimination of the price as a signal for environmental protection;**
 - (iv) The ETS may also signal that participating forests (different to plantation forestry) are both permanent and additional, which may open possibilities for participation in other carbon markets where prices and conditions may be more advantageous than in New Zealand.**
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Other issues: managing unit supply – international units

16. If international units are eligible for NZ ETS compliance in the 2020s, should any of the following restrictions be placed on their use?

a) restrictions on where units can be sourced from (location of and/or types of projects)

b) restrictions on how many units can be surrendered

c) others

Please explain your answer.

We have checked the box 'A' above as Landcare Research is looking to ensure that New Zealand has in place an ETS that:

- is credible and defensible from a science-based perspective
- supports New Zealand's ability to operate with high integrity on the world-stage, including in the diplomatic, trade and science spheres
- delivers meaningful emissions reductions targets to support global efforts
- reduces the impacts of climate change on New Zealand's native ecosystems, productive landscapes, valued biodiversity and taonga species, and in urban areas
- effectively manage risks to New Zealand businesses and exporters; and

In addition, past experiences with CDM or Kyoto Units involved carbon permits being sold at very low prices which led to sharp declines in the NZU price. As setting bottom prices may be fiscally expensive, there is no policy alternative to reduce downward volatility in the price. The ultimate outcome is to reach harmonised prices between the linked systems so that elimination of financial arbitrage between NZ Units and imported Units is eliminated.

It should be considered that the added flexibility, given the larger pool of carbon permits, may be outweighed by imported volatility of other markets. Thus, a careful analysis should be undertaken to identify the match between NZ ETS and other markets. As Australia has repealed its carbon market scheme, the next natural option that arises is the EU ETS. Linking with the EU ETS should be approached with caution because the EU's own commitment may increase the price excessively and render the linking as counterproductive compared to remaining in isolation. Other options are regional markets in the US. We expect that abatement costs in the US may be significantly lower than NZ's, thus a close evaluation should be undertaken to identify the effects on forestry incentives.

Furthermore, Fernandez and Daigneault (2016) has shown that accounting of forest carbon sequestration may play a significant role for NZ to meet its international commitments. Interaction of sequestration with market-linking is not trivial. That is, most likely sequestration will be a cost-effective means to meet reduction targets and render market linking as redundant.

Finally, there should not be restrictions on how many international units may be surrendered. A basic assumption for the functioning of the NZ ETS is the equivalence between international and NZ units. This equivalence will be signalled through price harmonization of linked markets.

References: Fernandez and Daigneault (2016). The Paris Agreement and its Economic Impact on New Zealand. Manuscript in Preparation.

Other issues: managing unit supply – auctioning

17. Should auctioning be introduced in the NZ ETS?

Yes

No

Unsure

If yes, when?

a) in the next two to three years

b) within five years (before 2020)

c) after five years (post 2020).

18. What should be the role or purpose of an auctioning function in the NZ ETS, if one were introduced?

a) to align supply in the NZ ETS more closely with our international target

b) to more actively manage NZU prices

c) other

Please explain your answer.

Auctioning would create an adequate signal on the marginal cost of abating GHG emissions within NZ. Thus, there will be increased transparency of the actions initiated by firms or sectors priced under the ETS.

19. How should auctioned NZUs relate to other sources of unit supply in the NZ ETS, especially NZUs generated through forestry removals and/or international units?

Auctioned and forestry-generated NZUs should be equivalent: that is both fungible and tradable. Creating a different type of NZU with different prices or characteristics would create arbitrage between the units. A similar case arose when Kyoto Units from Russia and Ukraine were allowed for surrender in the ETS (Ministry for the Environment 2014).

Reference: Ministry for the Environment (2014). Re-registration arbitrage by post-1989 forest land participants in the ETS. Regulatory Impact Statement

Other issues: managing price stability

20. What impact has carbon price volatility in the NZ ETS had on your business?

a) minor

b) moderate

c) significant.

Please explain your answer.

21. Do you think measures should be in place to manage price stability?

Yes

No

Unsure

Please explain your answer

Government intervention to stabilise prices may be fiscally expensive. For example, setting a lower limit would require the Government purchasing Units to remove them from the market.

We recommend other financial instruments and private market mechanisms exist (futures, financial derivatives) should be explored.

22. What do you consider are important factors for managing price stability?

a) upper price limits (eg, fixed price option, or a price ceiling implemented through an auctioning mechanism)

b) lower price limits (eg, price floor)

c) other

Please explain your answer

Lower price limits may be fiscally expensive, and it may not be a feasible means to manage price stability. Once the terms of the Paris Agreement come into force, the price of carbon may rise above the current upper price limit of NZ\$25. Further distortions may also be introduced as the stringency of the reduction target may lead to the carbon price to exceed this limit. Thus, the price may not signal the true cost of carbon. Other price stability mechanisms should be explored, such

as enhanced market conditions and the use of other financial instruments.

23. What should the Government consider when managing price stability?

Market conditions are highly dependent on the uncertainty around ETS rules. The key for managing price stability is the very existence of only one carbon price.

As noted earlier, we recommend the Government consider the phase-out of free allowances, equivalence between NZ Units and forestry-generated units, restrictions on Kyoto Units, linking with other carbon markets and price harmonization (provided a good match for NZ is found - see Fernandez and Daigneault 2016), and use of financial instruments to expand the scope of the ETS.

Other issues: operational and technical matters

24. Are you aware of ways the administrative efficiency of the NZ ETS could be improved?

Yes

No

Unsure

25. Can you provide further information to support your answer?

We would be interested in comments on:

- a) complexities involved in NZ ETS participation
 - b) penalties for breaching NZ ETS obligations
 - c) any technical or operational changes that could be made to the NZ ETS to improve efficiency.
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Other issues: addressing barriers to the uptake of low emissions technologies

26. Are there any barriers or market failures that will prevent the efficient uptake of opportunities and technologies for reducing emissions?

Firms will uptake opportunities and technologies if those are profitable compared to conventional or existing technologies.

We consider the Government has taken appropriate steps to correct the market failure around NZU prices close to zero. Other steps to guarantee that this price truly reflects the marginal cost of reducing GHG emissions will motivate firms to assess investment in the long-run on technologies that are not currently competitive. Such steps are mentioned on our response to question 15.

27. If so, is there a role for the Government in addressing these barriers or market failures and how should it do this?

The Government plays a decisive role on setting the rules and institutional framework for the functioning of the ETS. We recommend that the Government should not pick ‘winners’ in terms of technology, but rather let firms decide the most cost-effective and efficient mitigation options.

Any other comments related to issues set out in the discussion document

28. Please comment here

NZ ETS review: Forestry technical note

The following questions relate to information presented in the Forestry technical note.

Existing structural design settings

F1. What do you consider are the strengths and weaknesses of the NZ ETS forestry settings?

Strengths: (i) Comprehensive covering of forestry; (ii) Complementarity with other programmes such as the Permanent Forest Sink Initiative, Afforestation Grant Scheme, and Erosion Control Funding programme

Weaknesses: (i) uncertain link between forestry-generated units and NZ units; (ii) complexities on the accounting rules forestry carbon sequestration

F2. Do the NZ ETS forestry settings discourage deforestation? If not, what settings do you think would?

Yes

No

Unsure

Please explain your answer

We assess the effects of the ETS on deforestation have been weak. The very low prices have not signalled the true cost of carbon so that it may be incorporated on decisions of polluters and foresters.

As has been noted above, allowing the importation and surrender of Kyoto Units potentially hinder the operation of the ETS within a ‘proper’ market setting. Thus, forestry decisions in general may have been influenced more by other factors more than by ETS forestry settings.

F3. Do the NZ ETS settings incentivise afforestation and replanting? If not what settings do you think would?

Yes

No

Unsure

Please explain your answer

The explanation in question F2 also applies to this question.

F4. Does the NZ ETS provide effective incentives for smaller foresters to participate in the scheme? If not, what settings do you think would?

Yes

No

Unsure

Please explain your answer

Not sure as entry costs appear to be similar to larger foresters, however, small foresters may not have the same flexibility to accommodate uncertainty on carbon price behaviour and ETS rules. Thus, the incentives are not similar. There may also be limitations to including other types of afforestation practises (such as riparian planting) due to the nature of that activity.

F5. Does the NZ ETS work well alongside other forestry programmes? If not, how do you think these programmes could be better aligned?

Yes

No

Unsure

Please explain your answer

Forestry also affects other ecosystem services beyond carbon sequestration, e.g., erosion control and protection of biodiversity. Thus, the ETS works well alongside the Erosion Control Funding Programme. However, it is reported that tree planting for erosion control may fail after two or three years (Marden and Phillips 2014), which carries additional financial costs to new forest/stands.

Reference: Marden and Phillips (2014). Survival of Poplar and Willow Plantings: Implications for Erosion Control. Presentation at the IPC Working Party in Gisborne.

F6. What changes could be made to NZ ETS forestry sector provisions to improve the scheme?

Future forestry accounting in the NZ ETS

F7. What are important factors when considering changes to forestry accounting settings in the NZ ETS?

Some factors we identify are as follows:

(i) Accuracy not only on the magnitude of forest carbon sequestration, but also on location of emissions and removals. This allows better identification of GHG pollution sources;

(ii) Alignment between private and public interests. Accounting may be undertaken through different approaches, and thus methodological consistency is needed to avoid uncertainty on the contribution of forestry to compliance with environmental policies;

(iii) Scientific validation of the accounting approach.

F8. Do you think a different forestry accounting approach in the NZ ETS would change the scheme's incentives for afforestation?

Yes

No

Unsure

Please explain your answer

A more accurate accounting approach would make more transparent the contribution of forestry as source of carbon removal, and, consequently, as a mitigation option.

Furthermore, accounting would help on explaining the equivalence between NZ Units and forestry-generated units, and, consequently, to international units if linking the ETS is considered. Ultimately, uncertainty around the ETS is mitigated with clear and consistent forest accounting rules.

Averaging

F9. Do you think averaging should be introduced for post-1989 forests? If so, why?

Yes

No

Unsure

Please explain your answer

Averaging would smooth usage and surrender of units in case of harvest, facilitating planning and investment. Thus, financial risk of liabilities is spread over the years and adds flexibility to the decision-making environment of foresters, which would also provide more incentives to small foresters to enter the ETS.

Potentially, averaging will incorporate the components of forest-related carbon cycle and improves accuracy of accounting over the lifetime of the stand, which ultimately would provide more liquidity given the intertemporal use of units and slow sink of afforestation (Ministry of Agriculture and Forestry 2011).

Some issues where research may be needed are:

- (i) Averaging approach for young stands or until reaching long-term sequestration;**
- (ii) Averaging may complicate the calculation on how many units are circulating in the ETS and how many are banked;**
- (iii) other technical considerations to take account is the methodological approach for averaging, that is, data sources and modelling required that need to be scientifically validated.**

Ministry of Agriculture and Forestry (2011). Forestry accounting options. MAF Technical Paper No: 2011/27

Do you think it should it be optional or mandatory?

As complexity arises for foresters owning multiple age-class forests or where deforestation is not likely, then averaging should be optional provided permanence criteria are met (Kim et al, 2008). This rule is sensible given the heterogeneity of age classes and types of foresters.

Reference: Kim, M. K., McCarl, B. A., & Murray, B. C. (2008). Permanence discounting for land-based carbon sequestration. Ecological Economics, 64(4), 763-769.

F10. Should there be limits on the types of forests that can use an averaging accounting method? For example, new forests only or forests under a size threshold.

Yes

No

Unsure

Please explain your answer

We recommend averaging should be available not only for forests under a given size threshold but also above an age-class. Therefore a forest being admitted for averaging is signalled as permanent, eligible to participate in the ETS, and may add value to the business.

F11. How might averaging impact on your business decisions?

Harvested Wood Products

F12. Do you think deferred liability for emissions from Harvested Wood Products (HWPs) should be recognised domestically? If so, how?

Yes

No

Unsure

Please explain your answer

Including HWPs as part of the forest carbon accounting would incorporate more of the lifecycle of carbon. Thus, it a more clear reflection of that amount of carbon sequestered in forest biomass compared to just measuring carbon in the tree as it grows on the stump.

F13. How might the options for deferred liability for emissions from HWPs impact on your business decisions?

N/A

Other

F14. Do you have any other comments or things you think are important?

N/A

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.

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Submissions on other review matters close at 5pm on 30 April 2016.