

MPI response to Hughes and Molloy on the ETS for small-scale forest owners

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This is a response by the Ministry for Primary Industries (MPI) to a professional paper by Robert Hughes and Paul Molloy in the New Zealand Journal of Forestry, 61(4):33–36 entitled 'Is the ETS worth the carbon it is written on for small-scale forest owners?'

Abstract

MPI responds to a recent professional paper in the *New Zealand Journal of Forestry*, which posed the question – is the ETS worth the carbon it is written on for small-scale forest owners? This paper discusses and clarifies the key points raised by Robert Hughes and Paul Molloy. It explains the liabilities foresters face when trees are harvested and clarifies the costs, benefits and risks of participating in the New Zealand Emissions Trading Scheme (NZ ETS). There is no compulsion to enter post-1989 forest land in the ETS. Post-1989 forestry participation in the NZ ETS is a business decision, like any other, which requires informed decision-making and sound advice based on a participant's specific situation. In addition, work emerging from the recently concluded review of the NZ ETS is likely to result in changes to the scheme that will reduce complexity and improve incentives for all post-1989 forestry participants.

Introduction

We acknowledge that while the NZ ETS can provide economic return from forestry prior to harvest, there are challenges with the operation of small-scale forestry in the NZ ETS. The authors provide some valid commentary about some of these challenges, but this response also provides important points of clarification.

We agree that the incentives that the NZ ETS provides for afforestation, particularly of small-scale forests, is an important issue. Small-scale forests (those less than 1,000 ha) are a significant resource and there is considerable potential to increase this area. They account for 30% (over 500,000 ha) of New Zealand's total plantation forest estate and 45% (or nearly 130,000 ha) of registered post-1989 forest land in the NZ ETS (as at 10 May 2017). These forests help offset New Zealand's greenhouse gas emissions. A high proportion of the harvest over the next 10 years is expected to come from this source, meaning small-scale forestry will make an important contribution to the New Zealand economy through the forestry and wood processing sectors. It is also part of an important conversation about optimal land use and how best to sustainably manage our soil and freshwater resources.

The NZ ETS is not a 'zero-sum game'

The authors of the recent paper are critical of the fact that in some cases foresters have to relinquish all emissions units when their forest is harvested. However,

a range of factors can influence whether or not this occurs. A reminder of how the NZ ETS works follows. Post-1989 forests are eligible to earn units for carbon sequestered by their trees from the most recent of either the start of the Mandatory Emissions Return Period (MERP), the forest establishment date, or the date at which a post-1989 forest is legally transferred to a forest owner. Following harvest, at the time of the next Mandatory Emissions Return (MER), the participant must surrender units equivalent to the net CO₂ emitted.

If registered post-1989 forest is deforested (trees removed and land use changed), then participants must surrender all units issued against that land and remove the land from the NZ ETS. Importantly, the liability is capped at the amount of units received for each carbon accounting area. This means that a participant who has owned the forest since it was registered will never be liable for more units than they have received within that rotation.

However, not every unit allocated to foresters under the NZ ETS may need to be returned as a result of harvest, or if trees are destroyed due to adverse weather or other adverse events. There are situations where participants will face no harvest liabilities for up to 130 to 300 tonnes of CO₂/ha, roughly equivalent to the carbon stored in a new forest after eight to 10 years, provided the forest is replanted. This is because not all carbon stored in a forest is considered to be released immediately following harvest. Residual carbon is contained in branches and roots that remain on-site after harvest, and are considered to decay over 10 years.

The decay of residual carbon dictates when forest owners begin to receive carbon earnings in the subsequent rotation. Specifically, units will not be received until the accumulated carbon from growth in the replanted forest exceeds the accumulated emissions from decay of residues from the previous rotation. This occurs approximately eight to 10 years after harvest.

Two factors determine whether (or how many) emissions units representing residual carbon will be retained by a participant after harvest:

- When a forest was established. As the authors note, post-1989 forestry participants cannot claim units for carbon sequestered in their forest prior to 2008. The NZ ETS is designed this way so that it is consistent with international rules and the commencement of New Zealand's first international accounting obligation in 2008. It also encourages and rewards new forest establishment, rather than simply rewarding those who have established forests in the past. This explains why NZ ETS participants who are currently harvesting trees planted in the 1990s must surrender all the units that

they have received in that rotation – though not more, due to the liability cap that exists. By contrast, forests first established after 2008 and promptly registered in the NZ ETS after planting will retain all emissions units representing residual carbon after harvest, subject to timely re-establishment of the forest. Although ongoing decay may reduce the amount of units held, the time value of money provides an additional return to those with recently-planted forests.

- When a forest is registered. A forest needs to be registered in the NZ ETS early in its first rotation for the participant to maximise the emissions units retained after harvest and forest re-establishment (i.e. so that the number of units received during the rotation will be greater than the liability due to harvest).

Finally, there are a number of ways forests can be managed to minimise the number of units that have to be surrendered at harvest. For example, this can be done by:

- Having trees of multiple age classes in a forest. This allows harvest emissions from one age class to be offset by removals from other age class(es). To take best advantage of this and the liability cap mentioned above, each age class (at a minimum) should be registered as a separate Carbon Accounting Area (CAA), and ideally split into further CAAs in accordance with harvest plans.
- Staggering the timing and area of harvest to spread the quantity of emissions units to be surrendered over time, and improve the net carbon position in a single-age forest.
- Not submitting voluntary emissions returns for carbon accounting areas that contain harvesting (these must be accounted for in MERs).

Size is not a barrier to NZ ETS participation

A number of factors, including forest size, influence the costs and benefits of NZ ETS participation. Just as with any business decision, it is the responsibility of those contemplating joining what is a voluntary scheme to weigh up the costs and benefits of participating in their particular situation. In this regard, we would like to respond to a few points raised in the recent paper.

First, the MPI costs of entering the NZ ETS are generally the same, regardless of forest size. There is a standard application fee of \$562.22, although additional processing fees may apply for larger or more complex applications. A standard fee of \$102.22 applies for emissions returns, which must be filed every five years at a minimum or when ownership of the forest changes.

Second, foresters face additional costs if they are required to use the Field Measurement Approach (FMA) to assess carbon stocks. Only participants with a combined forest area of 100 ha or more in the NZ ETS are obligated to use the FMA. Currently, only 14% of small-scale forestry participants in the NZ ETS have forests over this size. The remaining participants instead use the default growth tables, which are free of charge.

For forests over 100 ha, use of the FMA does increase the costs of NZ ETS participation. During consultation on the introduction of the FMA, there was strong support across the sector (including from small-scale foresters) for the introduction of the FMA due to the benefits of receiving emissions units for all carbon sequestered in their forest. FMA costs vary by forest type, location and size, as these factors determine the plot density required for the forest. Larger forests require more plots, but at a lower density, and therefore a lower cost/ha than smaller forests. There is flexibility within the FMA rules that allows participants to lower their costs. For example, you may elect a lower plot density for indigenous forests and you may choose to only collect information for key nominated species.

Finally, the recent paper includes the services of consultants and the annual submission of voluntary emissions returns in the costs of NZ ETS participation. Neither are compulsory. As a result, the annual cost estimate is at the high end of what is likely, particularly for a forest under 100 ha where default look-up tables are used and no forest measurement is required. However, although NZ ETS participants are not formally required to use consultants to manage their participation, for FMA participants we do suggest seeking professional advice to help manage the complexity and improve the accuracy of data collection.

Maintaining the integrity of the scheme

The authors of the recent paper write of errors occurring under the NZ ETS in relation to emissions returns and the determination of pre-1990 forest land status/post-1989 eligibility. This requires some clarification.

First, the authors assume that MPI has the information necessary to complete the calculations required for emissions returns for participants and/or to verify the accuracy of returns. In reality, MPI does not have all of that information. MPI checks all returns to ensure the submitted carbon stock changes are as expected, given the size and nature of the participant's registered land, and based on such information that is held. We check the look-up tables relevant to each participant, and take a risk-based approach to compliance, which includes field inspection when required. However, MPI does not hold any information about harvesting or clearing on this land, so the participant is best placed to calculate their emissions return with certainty. Some participants choose, as is currently permitted, to provide only limited information on their forests for commercial sensitivity reasons. That said, in addition to having put additional resources into checking submitted emissions returns, MPI is also considering options to provide a calculator for simpler emissions returns.

Second, although there can be challenges in determining the NZ ETS status and post-1989 eligibility of forest land, it is critical that MPI be rigorous in these determinations as these decisions could impact the integrity of the scheme, including how the units from

forests are viewed in New Zealand and by international partners. As such, it is important that the Crown be completely satisfied that only eligible land is registered in the NZ ETS. Under the Climate Change Response Act, the burden of proof has to remain with the applicant.

Finally, the authors allege inconsistency of NZ ETS processes when assessing the eligibility of post-1989 forests, especially where land was previously registered. Areas of forests are occasionally found to be ineligible on re-registration despite previously being considered eligible. This is because MPI has invested significant resources to improve both the technology and historical imagery used as evidence in making assessments. As such, the accuracy of GIS assessments to determine NZ ETS eligibility has improved over time and will continue to do so.

The NZ ETS is complex but participants need to manage their own risk

The authors of the recent paper refer to the complexity inherent in participating in the NZ ETS. We acknowledge that there is complexity in participating in the NZ ETS, and that may pose some barriers, particularly for small-scale participants. Ultimately, this is no different to dealing with the other complexities confronting property owners for which legal and accounting advice must usually be sought. Some complexity is inevitable as the NZ ETS deals with biological accounting methodologies that encompass a range of factors relating to the forest and its management. The sector has already responded to this by developing schemes to aggregate individual forests for the purposes of carbon management, bringing scale and greater expertise, and lowering the cost of NZ ETS participation.

Participation is not more complex for small-scale forests. Rather, the capability of small-scale participants to manage the inherent complexity that exists for all forest owners may expose them to greater risk. As the authors rightly point out, this is the key challenge for small-scale forest owners participating in the NZ ETS. However, participants need to actively manage this risk.

We acknowledge that small-scale forestry participants often do not carry out forestry activities as their primary business and may rely heavily on professional advice or, in the absence of full recognition of the risk, conduct their own NZ ETS affairs. Regardless of their approach to risk management, under the NZ ETS the obligation is on the participant to provide accurate and correct information about their forest land. Our experience administering the NZ ETS suggests that the professional community needs to build on its existing capability to support and advise on the more complex aspects of NZ ETS participation, particularly for small forest owners. Areas such as transmissions of interest, and emissions returns following harvest, currently have lower (sometimes very much lower) compliance rates than is expected.

MPI operates a NZ ETS contact centre (see contact details below) and has analysts who can support participants in complying with their obligations. We encourage forestry participants, as well as consultants and advisors, to contact us if you need any clarification. If an error is made, MPI is

keen to help resolve it. However, there are circumstances in which the legislation requires that penalties need to be considered and as regulators MPI must adhere to legislative requirements. Although penalties can often be reduced in mitigating circumstances, or under voluntary disclosure, it is much easier for all parties if errors are avoided in the first place. We are more than happy to work with participants at an early stage in the process to overcome any challenges or uncertainties and help prevent potentially costly errors.

Following the recently concluded NZ ETS review, and as a result of stakeholder feedback, we are looking at specific options to improve the operational aspects of the scheme and potentially introduce a new accounting approach for post-1989 forests. Some specific areas that the authors identify for improvement are being actively considered as part of this work. Some of these options, such as 'averaging accounting', have the potential to simplify NZ ETS participation, particularly for small forest owners. Introducing averaging accounting for post-1989 forests in the ETS would allow foresters to receive NZUs as their forest grows to the long-term average carbon storage for that forest. An averaging approach would mean that foresters would not have to surrender units at harvest, provided forest is re-established (i.e. is not deforested).

Conclusion

We hope that the clarifications given above provide a useful explanation of the obligations, costs and implications of joining the NZ ETS, particularly for small-scale forest owners. We are confident that the work emerging from the recent review of the scheme will reduce the administrative complexity of participation in the NZ ETS and improve the incentives for small-scale forestry. These changes will enhance forestry's contribution to New Zealand's climate change response.

Finally, whether or not participation in the NZ ETS will be beneficial for individual small-scale foresters is a matter for each to decide. Every forester considering participating in the scheme needs to look at the costs and benefits that will apply in their particular case. This is a business decision, like any other, and should be treated as such. Like most other business decisions, professional advice may be required.

How to contact us

If you own post-1989 forest land or represent someone who does, and would like to find out more about how the NZ ETS operates, MPI has a range of guidance materials on its website: www.mpi.govt.nz/growing-and-producing/forestry/forestry-in-the-emissions-trading-scheme/. Or, if you have questions about managing your forest under the NZ ETS, you can contact MPI by:

- Emailing climatechange@mpi.govt.nz, or
- Calling 0800 CLIMATE (0800 25 46 28) and selecting option 3.

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