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Treatment of Pre-1990 Forests in the New Zealand Emissions Trading Scheme

Briefing for the Climate Change Leadership Forum

Prepared by the Emissions Trading Group

New Zealand Government

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Overview

The NZ ETS contains separate policy provisions for forests planted before 1 January 1990 (pre-1990 forests) and forests planted after 31 December 1989 (post-1989 forests). During engagement, some stakeholders have raised concerns about perceived inequities of the proposed treatment of pre-1990 forests.

This paper focuses on that proposed treatment of pre-1990 forests in the NZ ETS, and provides further rationale for the government's approach outlined in the *Framework for a New Zealand Emissions Trading Scheme* and the supporting document *Forestry in a New Zealand Emissions Trading Scheme*.

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1 The Government's Proposal for Forestry under the New Zealand Emissions Trading Scheme

Context

The Kyoto Protocol creates a distinction between forests established before and after 1 January 1990. The NZ ETS maintains that distinction, and largely mirrors the rules in the Protocol.

For post-1989 forests New Zealand has no choice under the Protocol but to fully account for net carbon stock changes over the commitment period. However for pre-1990 forests we had the choice to fully account for net carbon stock changes resulting from forest management and harvesting (accounting for deforestation – a change in land use away from forestry – is compulsory for both pre 1990 and post 1989 forests). New Zealand elected not to account for pre 1990 forests, other than deforestation, as the government's analysis suggested that the option of fully accounting for carbon stock changes would see New Zealand facing a considerably larger liability (especially after CP1), and would threaten the viability of ongoing commercial management of the pre-1990 forest estate (due to significantly increasing the cost of harvesting).

This decision on New Zealand's treatment under the international rules can be revisited for the second commitment period, depending on what accounting rules are decided, but is now fixed for the first commitment period.

While the ETS proposals have been released relatively recently, the government first signalled an intention to introduce some form of deforestation control in 2002. At that time, the government indicated that it was willing to meet the cost of deforestation emissions in the 2008–2012 period up to a cap of 21Mt of CO_2.

Government's in-principle decisions

As noted, the Kyoto Protocol creates a distinction between forests established before and after 1 January 1990. The ETS maintains that distinction, and therefore includes different rules for 'pre-1990 forest' and 'post-1989 forest'.

Pre-1990 exotic forest

All owners of pre-1990 exotic forest land will be automatically included in the ETS (but some can apply to be exempted). Where they are covered by the scheme, owners will be responsible for any emissions that occur as a result of the deforestation of their land: the conversion of forested land to non-forest uses, such as farmland, roads, or housing developments.

Changes in the net carbon stocks in pre-1990 forests resulting from ongoing forest management (including harvesting) will not be covered by the ETS. As such, owners will not be required to take responsibility for the emissions that occur when a forest is harvested and then replanted. Similarly, they will not be eligible to receive credits if they are able to increase the levels of carbon stored in their forests through practices such as increased rotation lengths, or as their forests grow.

An assistance package equal to 55 million units will be available to the owners of pre-1990 exotic forest to offset some of the economic impacts of the ETS. Assistance will be provided through the free allocation of units and exemptions from the scheme. The key exemptions proposed for pre-1990 forests are: an opportunity for owners of less than 50 hectares of forest to apply to be excluded from the scheme; and an exemption for anyone who deforests less than two hectares of their forest land in each phase of the scheme.

In addition, the fact that the government signalled an intention to introduce deforestation controls in 2002 (which was confirmed several times in later years) has essentially provided a transition period where deforestation could be carried out 'free of charge' prior to 2008. Deforestation is unique in this respect, as emissions in most other industries cannot be 'brought forward' in order to avoid emission liabilities. There is clear evidence that this transition period has been taken advantage of, with deforestation levels increasing significantly in recent years.

It has not yet been decided if pre-1990 indigenous forests should be included in the ETS. If they do come in, owners will receive 8.1 million units (a lower rate than that for exotic forests reflecting lower historical rates of deforestation).

Post-1989 forest

Owners of land that became forest on or after 1 January 1990 can join the ETS if they wish, and will gain credits and incur liabilities if they do so. Where they choose to join, participants will be entitled to receive one NZU for each tonne of carbon dioxide stored in their forests after 1 January 2008, and in turn will be required to surrender a unit for each tonne released.[1] This requirement is not limited to carbon stock changes resulting from particular activities. The emissions impact of planting, forest management, harvesting, deforestation and natural events (such as fire or flood) will all be covered.

Those with post-1989 forest who choose to join the ETS will have to submit a carbon stock assessment at the end of the period 2008–12 and any periods post-2012 or, alternatively, at shorter intervals of not less than one year. Various methodologies for assessing carbon stock will be made available by the administering agency and paid for by the landowner.

The government recognises that, for a variety of reasons, participation in the scheme may not be attractive to all post-1989 forest owners. Those who do not wish to join, but still want to plant new forests, can consider use of the Afforestation Grant Scheme or Permanent Forest Sinks Initiative.

[1] The Kyoto Protocol does not recognise carbon stock increases or decreases that occurred prior to 1 January 2008 (the start of the first commitment period).

Stakeholder response to date

The proposed treatment of pre-1990 forest in the ETS has met with relatively heavy criticism from elements of the forestry industry. The key underlying elements to that criticism are that:

- the proposed level of compensation (through free allocation) is insufficient where landowners have viable alternative commercial land uses available (the estimated level of free allocation – 39 units per hectare – is small relative to the likely deforestation charge for a mature radiata forest of approximately 800 units)
- owners of pre-1990 forest should be able to receive credit for increasing the level of carbon in their forests (regardless of whether the Kyoto Protocol recognises this)
- owners of pre-1990 forest will in practice be 'locked in' to their current land use in perpetuity
- some owners either were not aware these changes were coming, or were unable to deforest prior to 2008 due to being tied into long term forest contracts
- the relative treatment of post-1989 forest owners is substantially more generous, leading to inequities within the sector
- the treatment of pre-1990 forest is driven off the rules in the Kyoto Protocol, rather than environmental integrity and New Zealand's national interest.

In contrast, the proposed treatment of post-1989 forests, and the design of the complementary forestry measures – the Permanent Forest Sinks Initiative (PFSI), Afforestation Grant Scheme (AGS) and East Coast Forestry Project – have received relatively broad support.

2 Rationale for the Government's Proposed Approach

Differential treatment of pre-1990 and post-1989 forests

As noted, the Kyoto Protocol creates the distinction between pre-1990 and post-1989 forest. While the division date of 1 January 1990 is arbitrary, some differential treatment between 'old' and 'new' forest is necessary to allow the scheme to simultaneously discourage deforestation of existing forest and incentivise afforestation.

The government has the right to build different rules into the NZ ETS than exist in the Kyoto Protocol. However, where it does, the government will be required to meet the cost of any shortfall in the number of NZUs surrendered under the ETS, and New Zealand's obligations under the Protocol (as pressures are typically to adjust the ETS rules to favour business, any divergence in rules will normally largely result in a cost rather than gain to the taxpayer). A divergence in the rules is also likely to increase the risk that NZUs issued under the NZ ETS may not be accepted in other trading systems internationally.

There are two ways the government could improve the treatment of pre-1990 forest under the scheme, relative to that of post-1989 forest. Both have been rejected by the government, and are briefly discussed below.

Exemption of pre-1990 forest from the ETS

Any decision to exempt pre-1990 forest from the ETS altogether would be very costly for the government, and ultimately taxpayers, as it would remove the incentive on participants to reduce their levels of deforestation. There are approximately 1.2 million hectares of pre-1990 forest in New Zealand. If, 200,000 ha (17 per cent) of that total estate were deforested the cost to the Crown would be in the order of $2.4 billion (assuming a price of carbon of $15/t CO_2-e).

This option would also increase the broader economic costs facing New Zealand in meeting its Kyoto obligations, as the reduction of deforestation is considered to be one of the lower cost options available for reducing emissions in the short term.

Full carbon stock accounting for pre-1990 forests

New Zealand no longer has the option to fully account for net carbon stock changes in its pre-1990 forests under the Kyoto Protocol for the first commitment period. However it could, in principle, still require that under the ETS. This approach would see pre-1990 forest and post-1989 forest treated in the same way (with the key exception of the 'fast forest fix' rule, discussed below). If introduced, it would need to be compulsory for all owners, in order to avoid only those with increasing carbon stocks from joining.

This option offers some benefits. Most importantly, it would allow pre-1990 forest owners to earn credits (funded from taxpayers) from changes to their management techniques that increased the levels of carbon in their forests, such as by increasing rotation lengths.

However, this option has very significant disadvantages which the government considers clearly outweigh its benefits. Most importantly, the requirement to surrender emission units whenever harvesting occurs would be likely to undermine the commercial viability of a number of forestry operations. Under this option, the regular harvesting of forests would create a significant liability, even where they were immediately replanted. However, in contrast to post-1989 forests, it may not be possible for the government to limit the liabilities incurred on harvesting to the level previously earned through sequestration (sometimes referred to as the 'fast forest fix'), as the cost of doing so could be unsustainably high.[2]

This option would therefore disrupt the ongoing commercial operations of many forest owners, leading to their being forced to leave their trees *in situ* in perpetuity, or to manage the forests on a rolling, selective harvesting basis. This option would therefore lead to the owners of pre-1990 forests being locked into a lower-value commercial use.

More generally, scientific analysis indicates that the carbon stocks in New Zealand's pre-1990 forest estate are declining through time until about 2020, further reducing the desirability of this option from an economy wide perspective. And the option would also create considerable operational and fiscal difficulties for the Crown, as there would be a high risk of relatively significant mismatches in the flows of credits and liabilities provided for pre-1990 forests under the ETS, and New Zealand's obligations under the Kyoto Protocol.

Level of assistance

The overall level of assistance proposed for pre-1990 forest owners has been based on the sector's historical emissions, in the same way as is proposed for the agriculture and industrial sectors.

The proposed level of assistance of 55Mt of emissions is equivalent to the level of carbon stored in slightly over 5.2 per cent of the pre-1990 forest estate – the estimated level of deforestation over the 1995–2005 period. As the bulk of the pre-1990 forest will be harvested once in the next 28 years, the proposal to provide total assistance equivalent to 55Mt of emissions would see the government meeting the cost of the industry's full historic rate of emissions for a 28-year period. This is in addition to the six-year transition period most pre 1990 forest owners have had available, which has been substantially used.

The government considers that this overall level of assistance is fair in absolute terms, as the industry will only be responsible for any increases in emissions over and above historic levels for a 28-year period. This approach is also broadly comparable with the proposed level of assistance to the agriculture and industrial sectors, both of which will initially receive assistance equal to 90 per cent of their 2005 emissions, and then face a gradual phase-out of that assistance to zero by 2025.

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[2] The pre-1990 forest estate is older on average than the post-1989 estate, so has less ability to sequester carbon after 2008, and New Zealand's overall liabilities under the Kyoto Protocol would not be limited commensurately.

Targeting of assistance

The government is proposing to distribute this assistance equally between all owners of pre-1990 forest land on the basis of land area. However, it recognises that the costs of the ETS will not fall equally on all landowners; those with high-value alternative uses will be significantly more heavily affected than those whose land has limited commercially viable alternative uses. As a result, the government has assessed the desirability of the alternative option of allocating allowances more heavily to the owners of the higher quality land (as assessed by Landcare's Land Use Category assessments). This approach was ultimately rejected because of concerns about the robustness of the available data (which were not developed for this purpose).

Similarly, the government recognises that the impact of the ETS on landowners will differ across a number of other parameters. Importantly, not all landowners had the opportunity to deforest during the 2002–2008 period. A number were constrained by the existence of long-term contractual arrangements with forest owners, such as forestry rights and leases. Equally importantly, parties that purchased their forest land after 2002 are likely to have paid a price that reflected the government's announced intention to introduce deforestation controls of some form, and will therefore arguably not face any additional adverse effects under the ETS. A proportion of the proposed assistance package could, in principle, be prioritised towards groups which bought their land prior to 2002 and/or were limited in their ability to deforest between 2002 and 2008.

While it recognises the fact that its free allocation proposals will see some landowners being under compensated relative to others, the government has not been able to identify a workable process for targeting that assistance more tightly. It has therefore drafted the Bill on the basis of an equal distribution of units across all landowners. However, the government remains open to exploring possible targeting options further. If a clearly preferred, and workable, approach is identified it could be included in the Bill at a later stage.

Weaknesses in the Kyoto Protocol rules

There are several aspects of the Kyoto Protocol rules around forestry that the government would like to see improved (although it rejects arguments that the Protocol's treatment of forests is fundamentally flawed). In certain key areas the government has therefore designed the ETS in a different way to the Protocol. For example, it has given post-1989 forest owners the right to claim NZUs annually, despite New Zealand only being able to claim them after the end of the first commitment period.

However, for fiscal and administrative reasons, it was not possible for the government to adjust the design of the NZ ETS in all instances where it would ultimately like to see changes to the Kyoto Protocol. Other areas where improvements to the international agreement may be desirable include:

- a change in the assumption that all of the carbon stored in a forest is released on harvest, even where the timber is used to produce wood products such as building materials and furniture
- the introduction of an ability to 'move' pre-1990 forests.

With the devolution of the costs of meeting New Zealand's climate change responsibilities under the NZ ETS, the government and industry are well placed to work together to identify priorities for future negotiations on the design of the successor to the Kyoto Protocol. However, it is important to recognise that there are likely to be limits on New Zealand's ability to secure all of the changes it would like to occur. In some areas, such as the introduction of the ability to 'move' pre-1990 forests, other countries are likely to be pushing equally forcefully for restrictions on the current rules, rather than the loosening New Zealand would like to see.