

The Emissions Trading Scheme and carbon forestry – a legal update

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Abstract

The political environment for forestry has in recent times been dynamic, particularly in terms of changing law and regulation. These changes have had flow-on effects on the nascent carbon forestry sector. In particular, a number of amendments were made to the Climate Change Response Act (CCRA) in June 2020 through an Amendment Act. The aim of these amendments is to simplify New Zealand’s Emission Trading Scheme (ETS) and encourage the planting of new forests. In addition, the Climate Change (Forestry Sector) Regulations 2022 (the Regulations) were recently passed into law and will apply from 1 January 2023.

This paper looks at four of the key changes made as part of these legislative changes: averaging accounting; permanent forestry; the temporary adverse events pause option; and changes to the forest offsetting regime.

Averaging accounting

One of the key changes to the ETS being introduced from 1 January 2023 is averaging accounting. This carbon accounting method determines a forest owner’s NZU allocation by reference to the nominal long-term

average carbon stock of their forest over multiple forest rotations.

Under averaging accounting, a forest owner will earn a greater quantity of ‘safe carbon’ than is available under stock change accounting, and upon harvest (within limits) will have no NZU surrender obligations. The forest owner will earn NZUs until the forest reaches its nominal average age.

Overall, averaging accounting of carbon sequestration will make the ETS for forestry simpler.

Figure 1 demonstrates how averaging accounting works and differs from the previous ‘stock change’ accounting regime.

As shown in Figure 1, the carbon stock increases while the forest matures, earning carbon units until the forest reaches its nominal average age, as determined by the Regulations. For *Pinus radiata*, the nominal average age for a stand with a typical harvest age of 28 years is 16 years. This is the age equivalent to its long-term average carbon stock. The forest stops earning units from this point. When the forest is harvested no units need to be paid back, provided the forest is replanted and managed in a like manner.

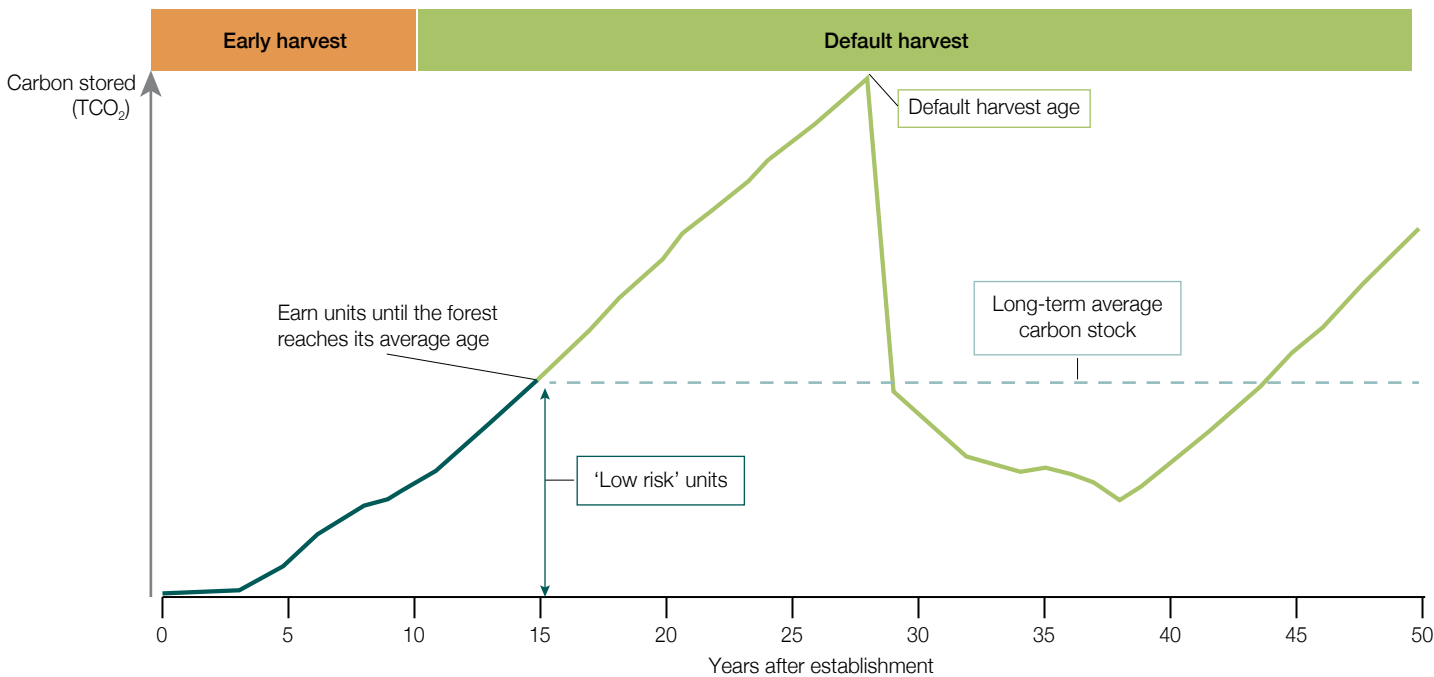


Figure 1: Averaging accounting process. Source: Ministry of Primary Industries ‘Line graph’ www.mpi.govt.nz/forestry/forestry-in-the-emissions-trading-scheme/averaging-accounting/

All first rotation post-1989 forests registered in the ETS from 1 January 2023 must use averaging accounting unless they elect to register or switch to the ‘permanent forestry’ option. Forests registered in 2019 through to 2022 may elect to switch from stock change to averaging accounting, provided this election is made before 30 June 2023.

The Regulations have adopted a simple methodology for determining the nominal average age based on three tree age bands. For *Pinus radiata*, the age bands are 0–4, 5–15 and 16 or more years. Provided the forest owner grows their forest beyond age 16, they will be deemed to be adopting a nominal clearfell age of 28 years and will be credited carbon units up to the nominal average age of 16 years.

Average ages have also been determined:

- 16 years for *Pinus radiata*
- 26 years for Douglas fir
- 22 years for exotic softwoods (redwood)
- 12 years for exotic hardwoods (cherry, walnut, mahogany)
- 23 years for indigenous forest.

The manner of calculating carbon stock has also been determined in the Regulations – it largely relies on stock change methods but with some tweaks. The Regulations also clarify that in order for a forest to be considered ‘first rotation’, it must be non-forest land for a stand-down period of 15 years after the year of deforestation. This will not be affected by the growth of naturally regenerating scrub or trees on the deforested land, provided the regenerated forest land has not reached its nominal average carbon stock age.

Permanent forestry category

A new ‘permanent forestry category’ has been introduced, which any post-1989 forest owner can elect to join, whereby they will be prohibited from clearfelling the forest for 50 years without incurring an emission liability and penalty, and can enjoy the benefits of the stock change accounting approach for that 50 years. This replaces the previous ‘Permanent Forest Sink Initiative’ (PFSI), which was considered overly complex and unaffordable for participants to use. The new permanent forestry category is intended to be simpler.

Forests registered as a permanent forest will use the ‘stock change’ method of accounting for NZUs, meaning they will continue to accrue NZUs as long as the forest is sequestering carbon. Figure 2 demonstrates the predicted carbon stock of a typical permanent forest versus a harvested production forest.

Existing participants in the PFSI will need to decide before 31 December 2023 whether they join the ETS under forest averaging or automatically convert to the permanent forest category. Alternatively, they may request to leave the PFSI and surrender all of the units they have previously received.

The Regulations specify the proposed penalty for harvesting a permanent forest where such harvesting reduces the forest below 30% tree crown cover across a hectare during the 50-year period. The penalty is additional to any NZU surrender liability and is based on the carbon stock of the forest that was felled, using the age of the trees that were felled. The Regulations set out various \$/tonne values, which differ depending on the tree and geographic location, ranging from \$5 to \$15 per tonne. Carbon surrender and penalties obligations

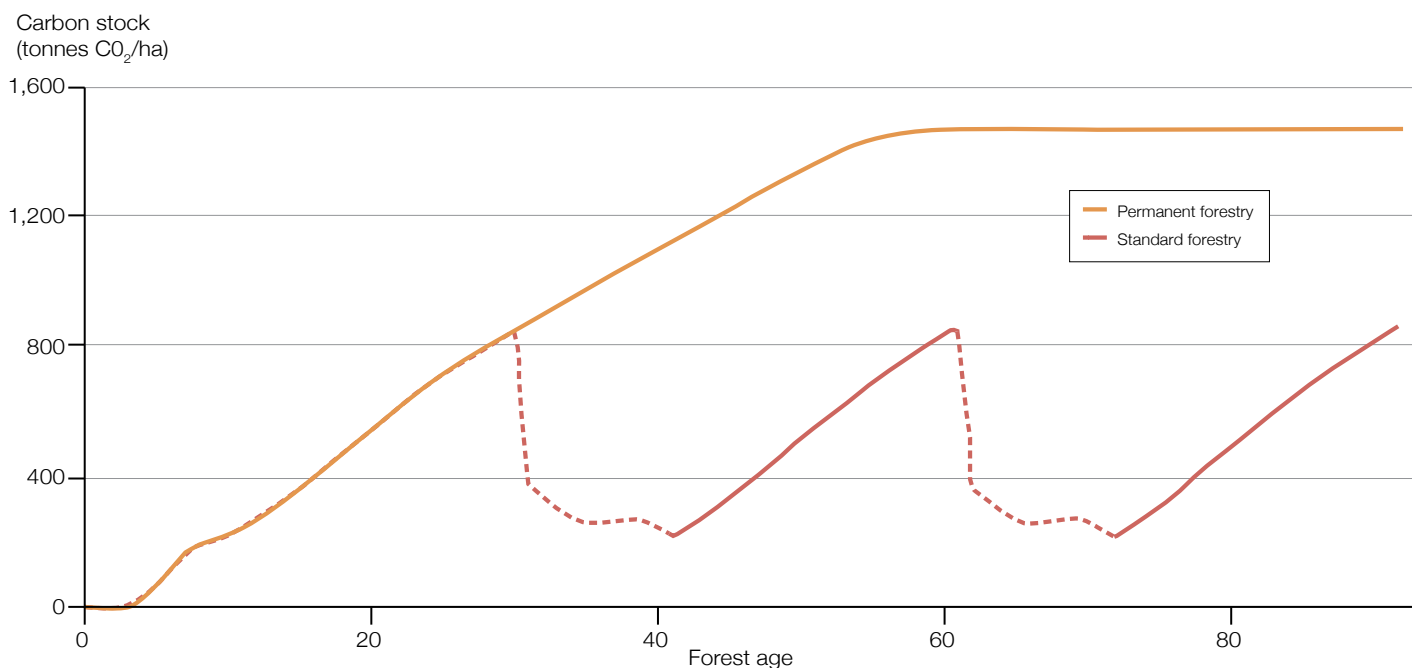


Figure 2: Predicted carbon stock of typical permanent forest versus harvested production forest. Source: Motu Economic and Public Policy Research ‘Decision Trees: Forestry in the New Zealand Emissions Trading Scheme Post-2020’ (2021: 12)

may not apply if the clearing or deforestation was beyond the forest owner's control and they could not have prevented it.

The Regulations also provide that notices will be registered on title recording that part of the land is registered in the permanent forestry category.

Once the forest reaches the end of the 50-year period the forest owner can elect to:

- Sign up the forest for another 25 years and continue to earn NZUs under stock change accounting (with this right applying every 25 years onwards)
- Transition to the averaging accounting under the ETS – this would require the surrender of some of a participant's NZUs, but harvesting will subsequently be permitted as long as the participant replants, or
- Remove the forest (or parts of it) from the ETS, surrendering the NZU balance for the area removed.

Temporary adverse event exemption

Under this change, where there are temporary adverse events (such as fire, windthrow), instead of suffering a surrender liability a post-1989 forest owner can apply to pause the relevant affected land until the trees have been replanted and reach the age they were at when damaged/destroyed.

The Regulations define adverse events as:

- a natural event, including but not limited to:
 - windthrow
 - snow
 - flooding
 - landslide or slip
 - drought
 - disease
 - damage by pests, including insects and animals
 - naturally caused fires
- an accidental event that causes clearing, including but not limited to:
 - controlled burns which become uncontrolled
 - herbicide application on adjacent land which blows into the forest
 - browsing by animals.

For the purpose of emission returns, the Regulations set out how to determine the event date of an adverse event.

Offsetting

The CCRA already contains an offsetting regime, whereby pre-1990 forest owners can offset their deforestation liability by planting forests elsewhere.

Under the new changes, certain types of post-1989 forestry participants, including those using average accounting, can use offsetting. Where a forest owner converts their forest to another use, that participant will not have to repay the NZUs they had earned for their forest, provided the forest owner can plant and actively establish an offsetting forest in another location that has the same carbon storage.

There have also been a number of changes included in the draft regulations to make offsetting easier to use:

- There are now defined 'usual rotation periods' to determine carbon equivalence
- A time extension for offset establishment
- Recently planted forest is now able to be used in an offsetting application (i.e. you can include planting that was completed prior to the application being made)
- Excess land from previous applications can be re-used in a new application.

These changes are intended to be beneficial for owners, such as Māori landowners and farm foresters, who hold large areas of pre-1990 forest land that could be suited to another land use but would suffer significant deforestation/harvesting liabilities as a result of a change in land use or unintentional and sometimes unavoidable non-compliance of the original offsetting regime. The improvements are intended to provide more flexibility around how to achieve an offset forest, the ability to adjust an offsetting application after it has been approved, and only apply enforcement action to the specific areas of forest land that are not offset (as opposed to liability for all deforestation from the original application/revocation of the entire application).

Carbon forestry

The changes referred to above will undoubtedly have flow-on effects on carbon forestry. In particular, the introduction of the permanent forestry option means that both first rotation post-1989 forests under averaging accounting and existing post-1989 forests under stock change accounting now have the option of converting to the permanent forestry option when and if the carbon and log price signals warrant the change.

At Anderson Lloyd, we are seeing a range of different groups seeking to explore carbon forestry projects, including private investment syndicates, iwi groups, conservation trusts and emitters looking to secure an off-market supply of NZUs. This increase in interest in carbon forestry is almost certainly being driven by the dramatic increase in the price of an NZU, which has more than doubled in the last two years.

A number of factors have caused prices to lift, but the most important reason was the structural changes in the ETS to meet obligations made under the Paris Agreement. This resulted in the elimination of the

fixed price option (where emitters can buy NZUs directly from the Government) to a system where the number of NZUs is capped and supply is allocated via an auction system.

The increase of the NZU price has suddenly made farm land acquisition (or leasing) for carbon forestry projects viable and potentially lucrative investments. At current pricing (using conservative modelling) the payback period for such investments is in the order of 10–15 years, depending on the price paid for the land.

Legal structures – key benefits and risks

We have noticed that a range of different legal structures are being adopted, each having their own particular advantages and disadvantages. The structure adopted will depend on:

- The participant’s own risk appetite
- Their familiarity with the practicalities of forest management
- Their economic profile.

Set out below is a list of legal structures and the key benefits and risks of each:

1. **Freehold ownership:** This is where the participant purchases a freehold interest in land on which it will plant a carbon forest, or where there is an existing carbon forest.

Benefits	Challenges
<ul style="list-style-type: none"> • Indefeasible title • Control of activities and granting of interests • No limit on tenure • Can grant registerable security over the land 	<ul style="list-style-type: none"> • Large capital outlay for land acquisition, afforestation and management • Sole risk and responsibility

2. **Forestry lease:** This is where a participant leases land for a carbon forestry project from a landowner and the participant owns the trees, whether planted by the participant or the landowner.

Benefits	Challenges
<ul style="list-style-type: none"> • Exclusive possession • Can be registered on title • Can grant registerable security over the lease • Lessee can be ETS participant 	<ul style="list-style-type: none"> • Rent payments may be required even though no income in initial years • Potential capital outlay for planting • Risk of termination of the lease – may not be able to recover planting cost • Risk of damage to trees borne by lessee

Benefits (Continued)	Challenges
	<ul style="list-style-type: none"> • Landowner approvals may be required for activities, sale/transfer • Lessee responsible for planting and management of trees • Survey required to register on title if the leased area is less than the title area, which is often the case • Tenure limited to 35 years if leased area less than title area, as any longer period would be deemed a subdivision requiring subdivision consent

3. **Carbon lease:** This is similar to a forestry lease, except it usually relates to an existing crop of trees or the landowner is responsible for planting the trees and the landowner retains ownership of the trees. The purpose of the carbon lease is solely to use the trees for generating NZUs and no harvesting by either party will be allowed.

Benefits	Challenges
<ul style="list-style-type: none"> • No capital outlay • Exclusive possession • Can be registered on title • Can grant registerable security over the lease • Lessee can be ETS participant • Less risk of damage • No planting or management responsibility 	<ul style="list-style-type: none"> • Risk of termination of the lease • Landowner approvals may be required for sale/transfer • Survey required to register on title if the leased area is less than the title area, which is often the case • Tenure limited to 35 years if leased area less than title area, as any longer period would be deemed a subdivision requiring subdivision consent • Payment structure may require more rent/NZUs to be transferred to the landowner to compensate them for planting/tree cost • Less control over planting, forest management • Lease termination may include the requirement to de-register the land from the ETS

4. **Forestry right:** This is an instrument that can be registered on title under the Forestry Rights Registration Act 1983 for establishing, maintaining and harvesting a crop of trees. The holder of the forestry right will own the trees subject to it.

Benefits	Challenges
<ul style="list-style-type: none"> Participant owns the trees Can be registered on title with minimal cost (no survey) Long terms are possible Can grant registerable security over the forestry right The forestry right holder can be the ETS participant 	<ul style="list-style-type: none"> Not exclusive Rent payments may be required even though no income in early years, although it is not unusual for this to be deferred until income is being generated by the forestry right holder Capital outlay for planting Risk of termination of the forestry right – may not be able to recover planting cost Risk of damage to trees borne by lessee Landowner approvals may be required for activities, sale/transfer Forestry right holder responsible for planting and management of trees

5. **Licence:** A contractual right to enter onto land and undertake planting and forest management activities.

Benefits	Challenges
<ul style="list-style-type: none"> Long terms are possible Flexibility of terms and conditions 	<ul style="list-style-type: none"> Not exclusive Capital outlay for planting Risk of termination of the licence – may not be able to recover planting cost Landowner approvals may be required for activities, sale/transfer Licensee responsible for planting and management of trees Not able to be registered on title – unless separate covenant/encumbrance agreed No ability to grant registerable security Landowner would retain ETS registration

6. **Offtake agreement:** A contractual right to receive NZUs in exchange for cash payments. No actual rights to access or operate within the forest.

Benefits	Challenges
<ul style="list-style-type: none"> No capital outlay Flexibility of terms and conditions Long terms are possible Limited risk from destruction events 	<ul style="list-style-type: none"> No interest in the land Risk of termination of the agreement Less control over planting, forest management Not able to be registered on title – unless separate covenant/encumbrance agreed No ability to grant registerable security Landowner would retain ETS registration Credit and supply risk concerns – reliant on forest owner performing and delivering NZUs

Currently it is much easier for New Zealand groups to invest in carbon forestry, given that overseas buyers will need to obtain consent under the Overseas Investment Act 2005 (OIA). Recent amendments to the OIA have clarified that the ‘special forest test’ is not able to be used for carbon forestry, and instead a modified benefits to New Zealand test (which requires Ministerial approval) must be used.

At the time of writing, the Overseas Investment Office had not yet received an application under the new modified benefit test criteria, although we are aware of an application to acquire a carbon forest being declined under the previous benefits test. It will be interesting to see whether Ministers believe planting farm land is of benefit to New Zealand, and whether overseas investors are able to obtain consent under the amended overseas investment regime to acquire farm land for afforestation purposes.

Disclaimer

This article does not, and is not intended to, constitute legal advice and should not be relied upon as specific advice relevant to any particular circumstances.

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