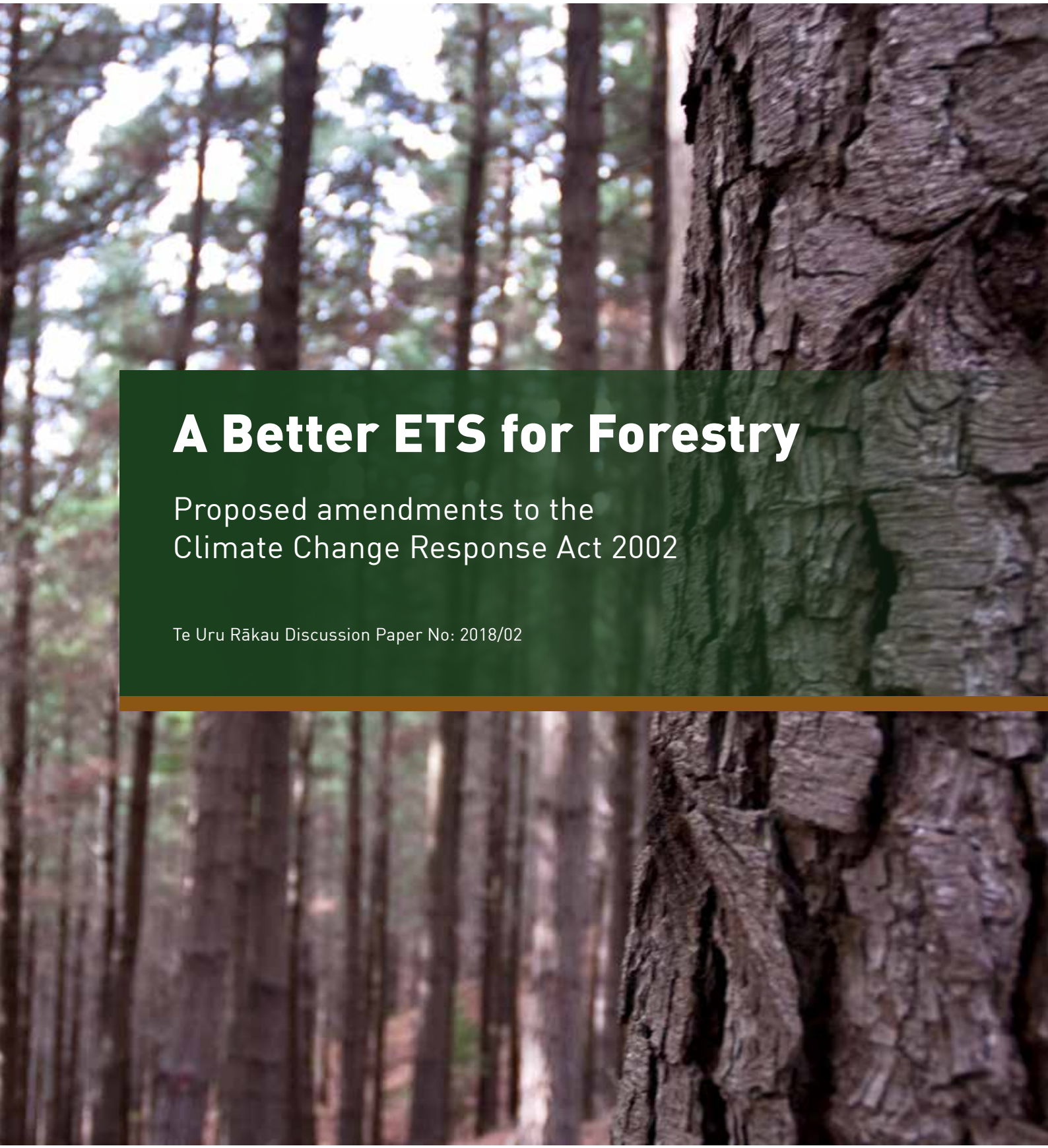
Te Uru Rākau
Forestry New Zealand



A Better ETS for Forestry

Proposed amendments to the Climate Change Response Act 2002

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1. Minister's Foreword

New Zealand, and the world, needs more trees. The One Billion Trees Programme will help us to achieve our climate change goals, improve the quality of our environment and support economic development across the country. We want the right trees, in the right place, for the right purpose, and we want New Zealanders engaged in this process.

The Government knows that a strong and successful forestry sector will create jobs, lift productivity and incomes, and help diversify land use across the country whilst continuing to make a strong contribution to our environmental objectives.

We are committed to New Zealand becoming a global leader in climate change action. Forestry is one of New Zealand's largest and most cost-effective carbon reduction options, and planting trees remains one of the most effective means of drawing carbon dioxide from the atmosphere.

A hectare of trees absorbs enough carbon dioxide over one year to equal the amount produced by driving a car over 80,000 kilometres. We need to encourage everyone, from city dwellers to farmers and foresters, to plant more trees.

The New Zealand Emissions Trading Scheme (ETS) is our key tool to help us achieve our climate targets. The ETS works to address climate change by incentivising the reduction of greenhouse gas emissions. It puts a price on greenhouse gas emissions from most sectors of the New Zealand economy, encouraging investment in lower emissions technologies and practices, including forestry as a carbon sink.

In 2017, a review of the ETS found the scheme could be more effective in supporting forestry participants and encouraging new forests to be planted. The carbon accounting approach for forests is challenging for many forestry participants. This issue, combined with the complex operating system, are barriers preventing people from entering the scheme.

This discussion document contains a range of proposals to help overcome these challenges and take another step towards making investment and participation in forestry easier and more profitable. They aim to ensure that the ETS can better support New Zealand to meet our targets.

We want to encourage farmers, Māori and other land owners to see the benefit of ETS participation in helping them plant and grow even more forest.

I believe that with these improvements we can work towards supporting and promoting a flourishing forestry sector, delivering sustainable jobs in our regions and encouraging economic growth while helping meet our country's climate change targets.

To make sure we get this right, we want to hear a wide range of views on these proposals from all stakeholders across the forestry sector including farmers, Māori land owners, investors, wood processors, as well as the general public. We invite you to be part of this conversation.

Hon Shane Jones
Minister of Forestry

2. Setting the Scene and Summary

ABOUT THE EMISSIONS TRADING SCHEME

Introduced in 2008, the New Zealand Emissions Trading Scheme (ETS) is New Zealand's key climate change policy tool to reduce greenhouse gas emissions. The scheme aims to help New Zealand to meet its emission reduction targets by driving reductions in emissions below "business as usual" levels.

One of the main reasons the ETS was introduced was to help New Zealand to meet our climate change commitments under the Kyoto Protocol, and support global efforts to reduce greenhouse gas emissions[1].

HOW THE ETS WORKS

Emissions pricing is a key tool for achieving emissions reductions because it encourages businesses to take the cost of their emissions into account when making investment decisions. This encourages investment in lower emissions technologies and practices, including forestry.

In New Zealand, we price emissions through the ETS. The ETS requires all sectors of New Zealand's economy to report their emissions and, if needed, buy emissions units that they can surrender to the government to cover their emissions.

The scheme puts a price on emissions by creating obligations and options to buy and sell New Zealand Units (NZUs). This means that emitters must either reduce their emissions or buy emission units from others – e.g. from foresters who have earned units for removing emissions. The price of emission units depends on the supply and demand for units. This is underpinned by the cost of actions to reduce emissions, and the strength of New Zealand's targets to reduce emissions.

The scheme encourages forest planting by allowing eligible foresters to earn NZUs as their trees grow and absorb carbon dioxide. Each emissions unit represents one tonne of carbon dioxide equivalent of greenhouse gas emissions (CO_2 equivalent). Currently, the only eligible emissions units in the ETS are the NZU, and New Zealand originated Assigned Amount Units (AAU).

PURPOSE OF THIS ETS CONSULTATION

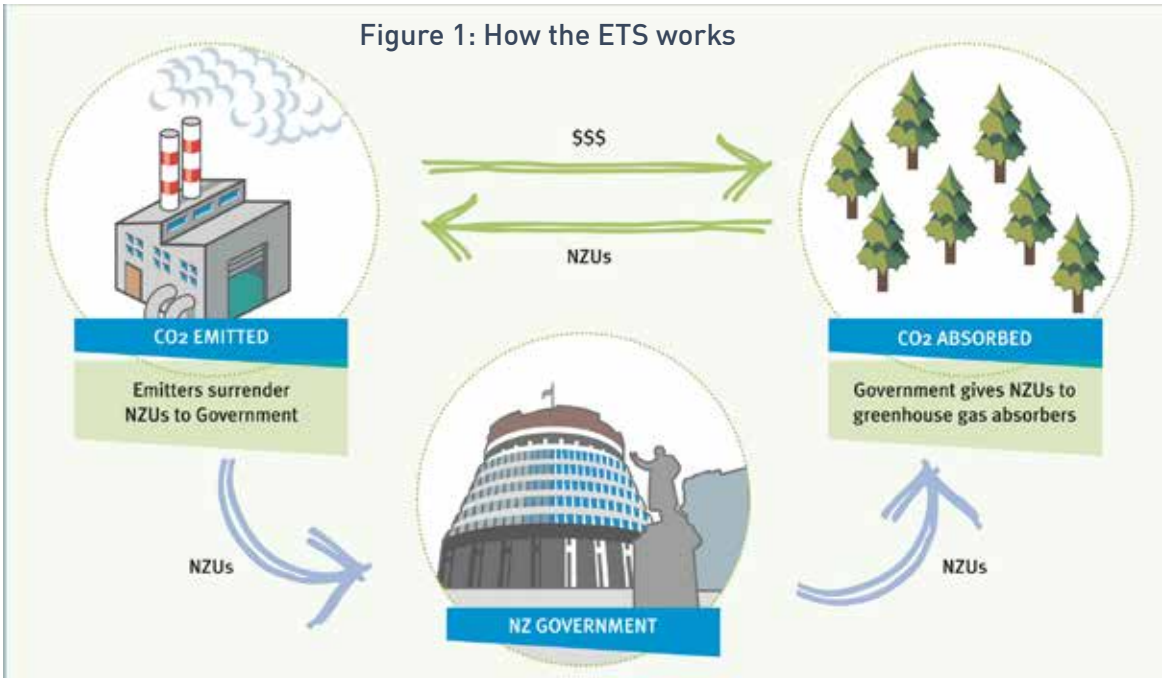
We are consulting on these changes because we want to simplify the way the ETS works for forestry participants, increase afforestation and enable more flexibility in the scheme rules to support the right trees being planted, in the right place, for the right purpose. We have identified a number of opportunities to improve the ETS settings for forestry participants so that the scheme better incentivises new forests to be planted in New Zealand. We estimate that the changes to post-1989 accounting we propose in this consultation document could lead to 170 million more trees[2] being planted over the next 10 years (at current carbon prices), on top of the 170 million we expect the ETS to encourage.

We propose to introduce changes to the ETS that will encourage increased carbon storage across a range of

1 Section 3 of the Climate Change Response Act 2002

2 These trees will contribute significant emissions abatement for achieving the 2030 target. Shortfall is estimated to be 193 million tonnes of CO_2 and forestry (if the new accounting approach is introduced) is estimated to contribute around 14-17 percent (between 27-32 million tonnes of CO_2 depending on whether an allowance for HWP mitigation is included in the new ETS accounting approach).

Figure 1: How the ETS works



different forest types, including permanent and indigenous forests. Recent reports from the Productivity Commission and GLOBE New Zealand, consistent with modelling for the Zero Carbon Bill[3], have clearly identified that the most important source of domestic emissions mitigation in New Zealand is afforestation. The transition pathways identified in these reports rely on a significant amount of new forest being planted over the next 30 years.

Encouraging New Zealanders to plant more trees will help us achieve key Government objectives, including transitioning to a net zero emissions economy, improved environmental outcomes such as water quality and erosion control, regional economic development, and the Government's target to see one billion trees planted over 10 years.

We want to hear from a range of people, including current ETS forestry participants, farmers, land owners, wood processors, investors and manufacturers, and iwi/Māori with forestry interests, along with other interested parties on these proposals.

HOW WE GOT HERE

A review of the ETS was completed in mid-2017. This review looked at how to improve the overall settings of the ETS so it could best support New Zealand to meet its future climate change targets.

This review identified some key issues with the overall ETS, including its forestry rules, and indicated a range of potential improvements. The review found that the Government did not have the tools to align the ETS with New Zealand's climate change targets and drive emissions reductions in line with these targets. A package of wider changes to improve and strengthen the overall framework of the ETS is also being consulted on.

Problems specifically associated with the forestry settings include the complexity of the scheme and the liabilities forestry face when they harvest. Following the review, Cabinet noted that officials would prepare a package of proposals for improving the forestry aspects of the ETS. One of the options to be explored was introducing a change to the accounting approach to enable forestry participants to gain greater benefits from the carbon stock held in their forests over the long term.

THE ROLE OF FORESTRY IN THE ETS

Forestry is a unique sector in the ETS as it is the only sector that can remove emissions from the atmosphere and get recognition for this through the ETS. By putting a price on greenhouse gases, the ETS encourages land owners to establish and manage forests in a way that increases carbon storage. Anyone who owns or has rights to forest land may be able to earn carbon credits (units) through the ETS.

The ETS also disincentivises deforestation. When deforestation occurs it counts as emissions of carbon. This means that participants are required to surrender units for converting forest land to other land uses.

The difference between post-1989 and pre-1990 forests

This division in the way New Zealand accounts for forest carbon was established under the Kyoto Protocol. The carbon stored in forests planted before 1990 is already accounted for in our national accounts as a baseline carbon storage level for New Zealand.

If an area of land was in forest on 31 December 1989, it is termed "pre-1990 forest land". This land is not eligible to earn units but must be registered in the ETS if it is deforested. Owners of this land must pay units for deforestation emissions. However, pre-1990 forests can be harvested and replanted without needing to surrender units.

If an area of land has become forest, either through regeneration or planting, after 31 December 1989, it is termed "post-1989 forest land" and can be registered in the ETS on a voluntary basis. Participants registering eligible post-1989 land in the scheme are entitled to receive NZUs for increases in carbon stocks and must pay units for decreases. Owners of post-1989 forests are also required to repay units for all deforestation. However, as participation is voluntary for post-89 forests, participants cannot be liable for more units than they have earned.

How participants with post-1989 forests earn units in the ETS

Owners of post-1989 forest land earn units as their forests grow, and they have to repay a large proportion of the units they have earned upon harvest. This payment of units reflects the carbon lost from the forest when the trees are cut down and removed. When the forest is replanted the cycle of earning and repaying units begins again, and foresters have to be prepared to repay units every time their forest is harvested. Currently the ETS requires these participants to account in the same way for reductions in carbon stock associated with adverse events such as storms and earthquakes (repaying units as though the forest had been harvested). A balance of units that represents the carbon lost from fallen or damaged trees is owed following an adverse event. Some participants have insurance to manage this liability.

3 Modelling undertaken by Concept, Vivid, Motu and NZIER.

Current forestry behaviour under the ETS – afforestation rates are low

Since 2000 there has been very little establishment of new areas of commercial forests, and some areas that have been in commercial forests have been changed to other land uses. Large areas of forests planted in the 1980s and 1990s are coming up to harvestable age in the early 2020s. Those forests will then become a significant source of emissions.

A carbon price of $21 has decreased rates of deforestation, but has only had a small effect on afforestation so far.

RIPARIAN PLANTING IN THE ETS

Riparian planting can provide a range of environmental benefits, including increased water quality, biodiversity, amenity, and carbon storage. Riparian margins can be registered in the ETS if they meet the current definition for an eligible forest including size requirements.

Many New Zealand farmers have chosen to plant riparian margins along the edge of at least some of the waterways on their land. The establishment of riparian zones is an important and visible way in which stock farmers can improve the sustainability of their farming operation and improve instream water quality and ecological health. However, the establishment of such buffers imposes financial costs on farmers (including fencing and planting), and can reduce the amount of remaining land they have available for grazing and other productive activities.

In these proposals we are not proposing to change the eligibility criteria of riparian margins in the ETS for the following reasons:

The financial benefit for farmers is likely to be small

The financial incentive for registering riparian planting in the ETS is likely to be very low for most participants. In practice, it is unlikely that extending the inclusion of riparian margins in the ETS would drive a significant increase in riparian planting (unless carbon prices increase significantly). Currently, for a riparian margin that was 5m in width on both sides of the stream, the emissions unit value is estimated at around 2t/ha per year per kilometre (assuming that native species are planted).

To avoid creating unintended impacts

Introducing an incentive to maximise canopy cover may result in an unintended consequence of incentivising farmers to establish riparian zones that are less effective at promoting water quality, have higher maintenance costs and risk more flood debris.

To avoid creating misalignment with international accounting rules

Riparian planting which does not meet the definition of 'forest' is not currently included in New Zealand's international carbon accounting and, therefore, doesn't count as mitigation towards our climate change targets.

LINKAGE TO THE WIDER ETS REVIEW WORK

The Ministry for the Environment (MfE) is currently consulting on improvements to the overall ETS. The proposals aim to make the scheme fit-for-purpose so that it can help New Zealand deliver on its existing and future emission reduction targets, over the 2020s and beyond.

They focus primarily on the framework of the ETS so that the scheme provides more predictability for market participants, while also providing the Government some flexibility to make well-signalled adjustments in response to changing domestic and international circumstances. Specifically, the proposals intend to improve the unit supply framework of the ETS, as well as make a range of operational improvements to the ETS.

These wider proposals will require amendments to the Climate Change Response Act (CCRA) to implement. While the legislation is under review, we have a good opportunity to make changes to the forestry aspects of the ETS at the same time.

SUMMARY OF PROPOSALS

This discussion document introduces a proposed package of changes to improve the ETS for forestry participants. The Government has prioritised this package of changes, as they are important for enabling and promoting additional forest planting in New Zealand.

It is important to clarify that these proposals for changes to the ETS accounting approach in this discussion document relate either to existing forests (trees planted after 1989 that are already in the ground whether they are registered in the ETS or not) or to new forests. They do not introduce changes for pre-1990 forests. However, some of the operational changes covered later in this document do apply to pre-1990 forests.

Some of the proposals in this discussion document contain different options for new forest planting than for existing forests. This is because our forestry proposals are primarily intended to improve the ETS so that it incentivises additional forests to be planted and this is clearly not relevant for existing forests. Introducing new rules for existing forests raises some challenges. For example, while we could offer existing forest owners access to the new accounting approach described in this discussion document, it presents some challenges to the future management of the ETS as it affects the number of units in the market by a significant amount.

Some of the changes we discuss focus on supporting new permanent forests, others support new rotation forests and some seek to improve the ETS for all forestry ETS participants. They cover four main categories of change:

- changing how forests earn and repay carbon credits in the ETS;
- introducing a mechanism for recognising emissions mitigation from harvested wood products;
- creating a new permanent forest activity in the ETS;
- introducing a package of operational changes to improve the way the ETS works for forestry participants.

We describe a range of proposed changes to the CCRA that would:

- introduce new policies and processes to improve the ETS;
- provide opportunities to improve, simplify or better explain existing processes;
- fix some technical issues.

The remaining proposals are less significant and would correct deficiencies, introduce new powers or make minor process improvements. We believe implementing these changes will make it easier to participate in the ETS by reducing complexity and removing some unnecessary administration.

The information we provide in this discussion document is supported by a technical note (entitled Technical Note: Impact Summary). The technical note contains detailed analysis supporting the options we have provided, and describes what options have been discarded and why.

What is "new" forest?

To be considered "new" forest it must be planted on bare land (land that is not forest land).

Forest land is considered:

a) any land of at least 1 hectare that has, or is likely to have, tree crown cover from forest species of more than 30 percent in each hectare; and

b) Includes an area of land that temporarily does not meet the above requirements (e.g. through harvesting) but is likely to revert to forest species.
   - This means that temporarily harvested forest does not meet the requirement to be bare land.
   - For an existing forest to be considered bare land again, it must be cleared, and remain as non-forest land for four years before it can be re-planted and considered "new".

c) This does not include:

- A shelter belt (or most riparian plantings) where the average crown width is less than 30 m and isn't contiguous with another area that meets the above requirements[4].

It must also meet the "new" requirements.

- Was not forest land on the date that will be defined in the act.
- Was forest land on the date that will be defined in the act, but was deforested on or after 1 January 2008, and the liability arising from the deforestation has been met.

It must also meet the existing requirements of all post-1989 forests.

An area of forest land is defined as post-1989 forest land if at the time of application to join the ETS

the area satisfies the above definition of forest land, and in addition:

- was not forest land on 31 December 1989; or
- was forest land on 31 December 1989, but was deforested between 1 January 1990 and 31 December 2007; or
- was pre-1990 forest land that was deforested on or after 1 January 2008, and the liability arising from the deforestation has been met; or
- is ETS-exempt pre-1990 forest land that has been deforested, and the liability that would arise had the land not been exempt has been met (refer page 53 for proposal to amend this).

Post-1989 forest land may include exotic and/or indigenous forest species. It may also include forest land that is eligible to be voluntarily transferred into the ETS from the Afforestation Grant Scheme.

4 Shelter belts do not meet the forest definition for international accounting for forest carbon, so would not be accounted for internationally. Analysis by Te Uru Rākau also indicates that the land owner would receive insufficient income from NZU sales from shelter belts to cover the cost of entering them into the ETS and claiming those units.

3. Simplified Accounting Approach for the ETS

Summary of Proposals

1. **We propose a significant change to the ETS accounting approach for calculating and rewarding forest carbon for new forest planting called "averaging" accounting.** This change in accounting approach is primarily designed to drive new afforestation. New planting means planting new forests on land which is currently being used for a different land use (i.e. it is not currently in forest). This proposal will affect:

- how many units people receive from the Government for their forest carbon;
- when they will receive these units from the Government;
- how many units they are expected to pay back to the Government following harvest and adverse events.

2. **We present some options for the future accounting approach for existing forests registered in the ETS if compulsory averaging is introduced for new forests:**

- all existing forests remain on the current approach (status quo); or
- require all existing forests to move to averaging; or
- allow existing forests a one-off decision to choose between the two accounting systems (averaging or the current approach).

Changing our accounting approach in the ETS is likely to drive much higher rates of tree planting in New Zealand. Economic modelling[5] indicates that our combined package of proposed changes to ETS accounting could increase forestry's contribution to our 2030 climate change target from 18 million tonnes to 32 million tonnes.

The opportunity for change has come from the way New Zealand accounts for forest carbon when meeting our 2030 target under the Paris Agreement. New Zealand has recently changed its approach to accounting for forestry when meeting its international climate change targets (refer to appendix one on the website for more details). This revised accounting method is known as "averaging" and was negotiated to support us to more accurately measure the climate contribution from New Zealand's forest estate over the long term.

As part of its first nationally determined contribution (NDC) under the Paris Agreement, New Zealand described its intended accounting approach to forestry and land use for the 2021-2030 target. This approach modifies the Kyoto Protocol rules by incorporating a forest carbon "averaging"approach to take better account of our fast-growing production forests. Twenty seven European Union member states have adopted a similar approach. The benefits of this approach are that it:

- creates effective accounting incentives for the establishment of more new forests and improvements to existing forest management;
- allows for the sustainable harvest of our production forests into the future, even with higher carbon prices.

This change provides an opportunity for New Zealand to consider introducing the averaging accounting approach into the ETS for forestry.

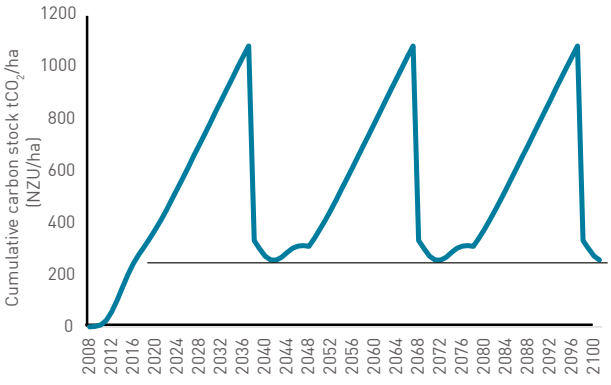
5 For more detail refer to the Regulatory Impact Assessment for the forestry accounting proposals.

HOW THE ETS ACCOUNTING APPROACH WORKS NOW

Currently people can register post-1989 forests in the ETS and receive emissions units as their forests grow. These units are called NZUs and each one represents one tonne of carbon dioxide equivalent. They can be held or sold on the market for around $21 per unit at current market prices. Other ETS participants can purchase them to meet their ETS obligations.

Those with existing post-1989 forests registered in the scheme earn units for the growth of their forest. This means calculating and reporting on the change in carbon stock through an emissions return (similar to a tax return). An emissions return must be submitted at the end of each emissions return period, every five years, but can also be voluntarily submitted every year.

Figure 2: Carbon stock change accounting example



This forest will earn 1080 NZUs per hectare, and will be required to pay back 820 NZUs at harvest. This means that only 260 NZUs can be sold without a harvest liability.

As the forest grows the change in carbon stock is positive and the forest will earn units equal to the change in carbon stored. Harvesting, or forest cover lost through an adverse event, results in a negative change in carbon stock as logs are removed from the land and woody debris decays over time. So then units need to be surrendered to the Government equalling the reduction in carbon stock.

If the forest is replanted then the positive carbon change from the growth of the new forest will eventually outweigh the negative change from the decay of the old forest. As the carbon stock of the forest does not return to zero the forest owner accrues a portion of units, known as "low risk units". These units are not required to be repaid so participants can sell them on the carbon market without facing a future liability as long as the land remains in forest.

This is referred to as the "carbon stock change" accounting system. For example, a participant who planted a radiata pine forest in 2008 could receive units from forest growth in the ETS. If the forest is harvested on a 30 year rotation, the participant will continue earning units for the forest growth until 2038. After this they must pay back units representing all of the stock that is removed at harvest. Some of the carbon stock is retained as below ground biomass and slash[6] that isn't removed from the site at harvest. This means that there is a portion of units for which there is no liability at harvest, only on deforestation. This is shown in Figure 3.

WHAT CHALLENGES DOES THE CURRENT ACCOUNTING APPROACH PRESENT?

Having to repay or surrender units at harvest means that some foresters take a financial risk if they choose to sell units earned while the forest grows, that will then have to be repaid when the forest is harvested.

There are difficulties in calculating and accounting for changes in carbon stocks due to harvesting, particularly if a forest contains different ages and species of trees that are harvested and replanted at different times. As a result it is hard for some foresters to estimate how many units they will have to pay back on harvest, which acts as a disincentive for them to sell their units. Many foresters have held on to a large proportion of their NZUs to cover this harvest cost.

HOW THE PROPOSED NEW AVERAGING ACCOUNTING APPROACH WORKS

Under the proposed simple accounting approach (called averaging) this would change for new forests. Forestry participants would earn payments of emission units that represent the carbon increases in their forest, up until their forest reaches a level of carbon storage that represents the average carbon stock it will hold over the long term. They would no longer face any liabilities on harvest or following an adverse event. This sum of units is based on the average amount of carbon the forest holds when multiple growth and harvest cycles are taken into account. As long as the forest is not deforested no units would be owed to the Crown upon harvest. Forest owners would only be able to earn further NZUs if they replant a higher carbon stock tree type, for example redwoods, or potentially if they change forest management. (Refer to the *Detailed Design Questions* section on page 16 for more information).

The units would be transferred to the participant as their new forest grows. Once the forest reaches a carbon storage volume that is the equivalent to its long term average, unit payments would cease. For example, a radiata pine forest grown in New Zealand and harvested at age 28 will usually reach its average carbon storage at age 18-20. So the forester with radiata pine rotation forests will earn NZUs up to 18-20 years of age in its first growing cycle.

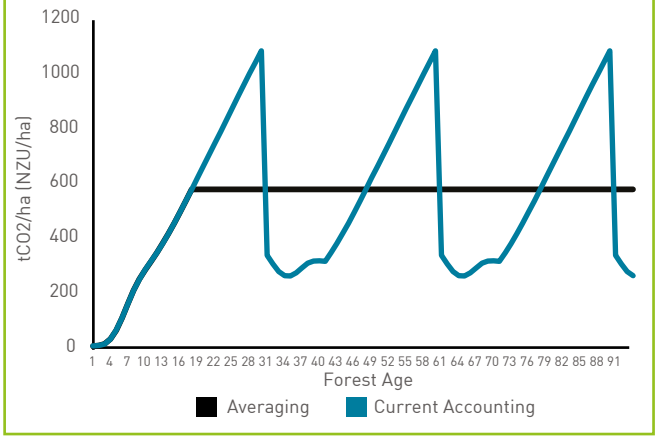
The carbon storage average for forests registered in the scheme would vary depending on factors that affect carbon yield including the region and forest type. This approach assists the ETS in supporting the right tree to be planted in the right place for the right purpose. For example, a radiata pine forest planted in Taranaki would be eligible for a different average than a redwood forest planted nearby. The amount of carbon units these two forests could receive would reflect the long term carbon stock of these different kinds of forest and would therefore not be the same.

WHAT ARE THE BENEFITS OF CHANGING TO AN AVERAGING ACCOUNTING APPROACH?

Averaging accounting is likely to increase incentives to participate in the ETS and establish new forests because:

- foresters are likely to be willing to sell more of the NZUs they are allocated for carbon stored in their forests, thus increasing the financial return from establishing new forests;
- it reduces ETS forestry complexity (no harvesting calculations are required) and compliance (reduced

Figure 3: "Averaging" accounting



6 Any tree waste left behind after forestry activities.

ongoing reporting and monitoring requirements).

As well as the benefits of a less complex system, introducing averaging would align our domestic settings with the NDC, helping ensure the ETS is an effective climate change mitigation tool.

An aligned system helps ensure NZU surrenders and allocations and the NZU/carbon price reflects New Zealand's unique challenge to meet climate change targets.

3.1 OPTION FOR INTRODUCING AVERAGING ACCOUNTING FOR NEWLY PLANTED FORESTS

Option 1 (Preferred):

Require all people who register new forests in the ETS (first established after a certain date) to use averaging accounting.

We propose to introduce a mandatory change to ETS accounting for new forest planting (the "averaging" accounting approach). This change is intended to simplify the scheme and increase the afforestation incentive for ETS participants. It means that everyone who registers new forests in the ETS will be required to use averaging accounting, although joining the ETS will remain voluntary.

Under averaging accounting, the Crown would allocate NZUs to ETS participants for new forest growth up until their forest reaches its long term average, or equivalent amount of carbon stock, on the forest's first rotation. ETS participants would not be required to repay NZUs for harvesting as long as they do not deforest. They will still have to account for deforestation emissions, and may be required to account for significant changes to forest management.

Alternative options

We discarded the option for those with new forests to have a choice of either averaging accounting or carbon stock change accounting as this option would not resolve the issues with carbon stock change accounting. Optional access to averaging accounting introduced unwanted complexity to the scheme and would maintain misalignment between the current system and New Zealand's rules to account for our first NDC.

Consultation Questions:

1. Do you agree with the Government's preferred option to require all people who register new forests in the ETS to use averaging accounting? If you disagree could you please provide your reasons why? What do you think will be the main impact of this option for you or other land owners?

3.2 OPTIONS FOR ACCOUNTING FOR EXISTING FORESTS

We could offer existing forest owners access to the new accounting approach. It presents some challenges to the future management of the ETS as it affects the number of units in the market by a significant amount. This decision represents a trade-off between short term stability in the ETS, and making the system simpler and operate more effectively over the long term. We are also aware that some people with existing forests may prefer to retain the existing approach.

Following consideration of these factors, we are not presenting a preferred option in this discussion document.

We are also aware that any option where existing ETS forestry participants move to averaging would require an appropriate transition solution. Options for a viable transition, if required, have been included on page 15 of this document.

Option 1 (continue with existing carbon stock change accounting):

Require all ETS forestry participants with existing forests on post-1989 forest land to use "carbon stock change" accounting.

This option would retain the current "carbon stock change" accounting approach for existing forests. This maintains the rules participants signed up to when they entered the ETS. It prevents short term disruption to the current accounting system requiring a change to business plans, and a formal transition with the associated potential costs and disruption, wouldn't be needed.

However these benefits may be outweighed by the following challenges:

- ETS forestry participants who may see a move to averaging as a way to help reduce their compliance effort and costs would be prevented from changing to the new accounting approach.
- Creating two "classes" of post-1989 forest, new forests on averaging accounting and existing forests on the existing carbon stock change accounting approach, therefore adding to the complexity of the ETS for both participants, Te Uru Rākau and prospective land buyers.
- Retaining the current carbon stock change accounting approach would also maintain misalignment between international and domestic ETS accounting in perpetuity, limiting the ability of the ETS to drive forestry mitigation in line with climate change targets in the medium to long term, and creating a potential fiscal risk for the Crown due to the difference between its international climate change targets and its domestic settings.

Option 2:

Require all ETS forestry participants with existing forests on post-1989 forest land to use averaging (if they register their forests in the ETS).

Existing ETS forestry participants could be required to transition to averaging accounting. This would mean that from the date averaging comes into force, all ETS forestry participants on post-1989 forest land would account for carbon stored in their forests in the same way.

The benefits of having all post-1989 ETS rotational forestry participants on the same accounting system include:

- Enabling all foresters to make more informed and confident decisions about how to maximise the carbon stored in their forests
- Increasing the number and proportion of NZUs that foresters can sell at low risk
- Removing harvest charges
- Simplifying how to comply with, and administer, the system
- Aligning ETS accounting with international accounting.

Existing forests will be at varying stages of growth. Some will still be below their long term average and some will be above. Participants who have forests below the average age would cease earning units once the forest reached its average age. Participants that are above the average carbon stock at the time of the transition would be required to repay any units received for forest growth above the average carbon stock. This would effectively align the entitlement of units to growth that occurred below the average on the forests first rotation. This aligns the potential earnings to the level of contribution the forests will have made to international targets.

A key impact of this option is the removal of surrender obligations at harvest for existing forests. This would increase the number of units in the ETS overall, which could have a potentially significant fiscal impact for the Government.

We are aware that the requirement to repay NZUs to the Crown from those who have already received NZUs above the average age of the forests could cause financial stress to some ETS participants if they are required to repay units before harvesting. This is addressed in the transitions section on page 15.

A compulsory transition to averaging removes the option of using the current carbon stock change accounting. This will have an impact on those participants that have based business plans on continued use of carbon stock change accounting, including those that have forward sold NZUs.

Examples for the required use of averaging for existing forests

Participants will need to return any units earned for growth above the long-term average. If a participant owned a 25 year old forest (at the time of transition), and the long term average of that forest was reached at age 20, they would be required to repay any units earned while the forest was growing between 20 and 25 years.

Figure 4 shows a transition for a forest planted in 1999, registered in the ETS in 2008, assuming a 30 year rotation and a 20 year average age. The different bubbles apply to different treatments of units:

A. Shows the full potential harvest liability if the forest owner continues to use the existing carbon stock change approach (approximately 820 NZUs per hectare).

B. Shows the liability required upon transition to averaging (approximately 210 NZUs per hectare).

C. Shows the units that do not have to be repaid under averaging (approximately 380 NZUs per hectare).

If a forest was harvested before the transition to averaging (but during the most recent emissions reporting period), they will be transitioned to averaging as an "above average forest". This means that the harvest liability will be reduced to only apply to the units earned for growth above the average.

For example: a forest planted in 1995, on a 28 year rotation will be harvested in 2022. If the transition occurs in 2023, the owner of this forest will be required to repay units earned from 2015 to 2021 (assuming a 20 year average). Alternatively, under the current approach, the owner would be required to pay a harvest liability.

Figure 5 shows:

A. The full harvest liability that the participant would have to repay if they remained on the current approach (approximately 580 NZUs per hectare – capped by the number of NZUs received as a participant is not required to pay back more NZUs than they have received).

B. The liability required upon transition to averaging (approximately 340 NZUs per hectare)

C. The amount of units that do not have to be repaid under averaging (approximately 240 NZUs per hectare).

Figure 4:

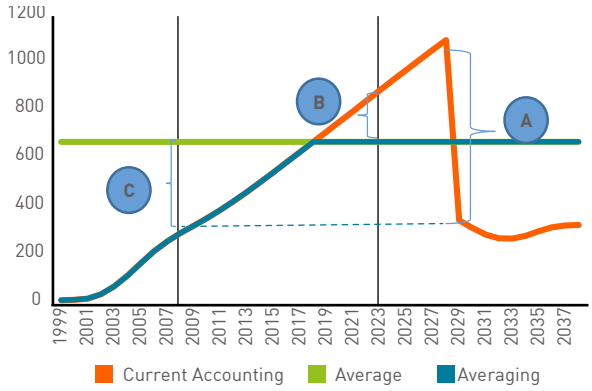
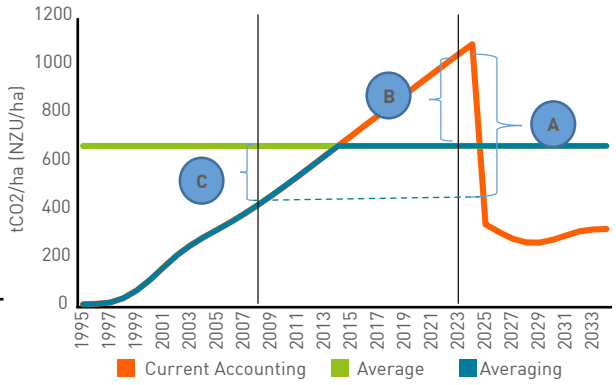


Figure 5:



Option 3:
All ETS forestry participants with existing forests on post-1989 forest land have a one-off, one-way choice to use either averaging or carbon stock change accounting.

This option would enable existing forest owners the choice to use the accounting system which best fits their circumstances.

While allowing a mix of accounting approaches would increase the number of categories of forest in the ETS, and be more administratively complex for Te Uru Rākau, this option also ensures those who have business plans and contracted commitments based on carbon stock change accounting would not be disadvantaged. As it is a once only decision it would also help prevent ETS participants from "cherry picking" between the two accounting approaches.

This retains the benefits of averaging for those foresters who choose to move to that accounting system by:

- Removing harvest charges
- Simplifying how to comply with, and administer, the system
- Increasing the number of NZUs that foresters can sell at low risk.

It would also better align the ETS accounting with international target accounting, especially if most participants decided to use averaging.

Like option 2, a key impact of this option is the removal of surrender obligations at harvest for existing forests that chose to move to averaging. The extent of this impact would depend on how many existing forests moved to averaging. This would increase the number of units in the ETS overall, which could have a potentially significant fiscal impact for the Government

All forest owners who chose to use averaging accounting would be required to surrender a number of units equivalent to the NZUs previously received for forest growth above the average carbon stock of their forest. The transition arrangements discussed for option 2 would also apply with this option.

Please note, if participants choose to keep using the carbon stock change accounting approach for existing forests, they will still be required to use averaging for any new forests (new planting on bare land, not the replanting of existing forests post-harvest) they establish and register in the ETS if that proposal is implemented.

Consultation Questions:

2. Out of the three options presented regarding averaging accounting and existing forests could you please select your preferred option? Could you please explain why it is your preferred option? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

3.3 TRANSITION CONSIDERATIONS FOR A MOVE TO AVERAGING ACCOUNTING

We are aware of the need to provide viable and helpful transition arrangements for ETS forestry participants if they move to averaging accounting. Definitive proposals for transition arrangements haven't been provided in this document. We would appreciate your views on the options below, or other options you think we should consider.

Context:

According to the proposal about how to define a new forest under averaging (page 11) participants with existing forests could be transitioned to averaging relatively quickly at a Mandatory Emissions Return Period (MERP). This will help reduce confusion and cost for both participants and potential buyers of forest land, by ensuring carbon stock calculations are accurate.

It would be simpler to move all existing ETS forestry participants to averaging at the end of the first MERP after legislation has been passed, and the systems and processes needed to support the change are in place.

For foresters who have not yet harvested, requiring existing ETS forestry participants to surrender NZUs received for forest growth above the average at the end of this MERP brings forward part of their harvest NZUs repayment obligation to the Crown. This ensures that the Crown has allocated and received comparable amounts of NZUs from all ETS forestry participants in the new averaging system. It also would align NZU flows with the accounting rules used internationally to determine the contribution New Zealand forests make to climate change targets.

However, we are aware this could cause financial stress for some ETS forestry participants who have already sold, or forward sold, these credits, and haven't received any income from harvesting. Also some small forest owners who want to transition to averaging may find they are not in a financial position to do so at the transition MERP.

Possible Approach:

The following describes a viable flexible repayment option for ETS participants who would have an obligation to repay NZUs at the transition MERP, and have not harvested. Under this option, participants above the average that are transitioning to averaging will cease earning units at the transition MERP and become "above average" forests. Only their repayment obligations would be delayed.

Option:

ETS forestry participants with existing forests on post-1989 forest land who have an obligation to repay NZUs at the transition MERP could be given the option to surrender units at the next MERP.

This option would give ETS forestry participants time to adjust their business plans to ensure they can cover the repayment cost. It would also limit the length and difficulty of the transition. Many participants would also harvest between the transition MERP and the next MERP, if their forest was already above the average at the transition MERP. We are also aware a small number of participants, whose forests are above the average at the time of transition, but have not harvested, may need to find additional funding to repay their NZUs with this option.

This option would not apply to forests that had been harvested before the end of the transition MERP. These forests will have a reduced liability on transitioning to averaging, compared with the harvesting liability they would have faced under the carbon stock change accounting approach.

Consultation Questions:

3. Do you agree with the Government's option regarding transition considerations in a move to averaging accounting? If you don't agree could you please explain why? What do you think will be the main impact of this option for you or other land owners? If there are other options you think we should consider please list them.

3.4 DETAILED DESIGN QUESTIONS FOR AVERAGING ACCOUNTING

Summary of issues covered in this section

1. **How to define a new additional forest under averaging.** If averaging is introduced there is a need to clearly define what forests will be classified as "new" under averaging and the date at which the change will apply from.
2. **How to calculate the long term average carbon storage capacity of a forest under averaging accounting.** Providing a carbon storage calculation approach and a way to convert that calculation into an age at which an ETS participant's forest will reach its long term average carbon stock.
3. **How to calculate average crediting age and carbon storage.** Deciding at which age a forest will have stored its long term average carbon stock, and how these averages will be applied nationally across different species, regions and forest types.
4. **How could a change in the average carbon storage crediting age be applied to existing participants?** If an average is changed by government after regulations are introduced, it needs to be decided how this is done and whether it can apply retrospectively to existing participants using averaging accounting.
5. **Options for how many units a participant will be able to claim for growth in carbon storage before a forest is registered into the ETS.** If a participant uses averaging accounting with a forest that has already been established, there is a need to clearly determine how many emissions units they can be allocated for past carbon storage.
6. **Outlining ongoing reporting and monitoring requirements.** Once a participant's forest passes the "average", what ongoing reporting and monitoring requirements will be required?

Context

Changing to a new accounting approach would require making decisions on some detailed design questions for how the new accounting approach would work for participants. We are looking for your input on these design questions because they will affect who benefits from the introduction of the new approach and how much benefit they receive.

These detailed design proposals are also intended to help you understand how the averaging accounting rules would work for forestry if they decided to register new forest planting in the ETS.

Proposals for consultation:

1. How to define a new forest under averaging

If some ETS participants with existing forests are able to remain on the current carbon stock change accounting approach there is a need to clearly define what forests are classified as "new" under averaging. There is also a need to signal a date as early as possible for when this change applies from to provide clarity for the forestry sector and support planting decisions.

If access to averaging accounting is introduced for all existing forests, there will be no need to define a date for "new" forests as averaging will apply to all forests.

Option:

Trees planted after 1 January 2020 are "new forests"

We propose that forests planted on currently un-forested land from 1 January 2020 would be considered "new", following changes to the legislation expected in 2019. Implementing the "new forest" rule once Parliament has passed the legislation gives certainty to the sector that the rules are final.

For example: Anyone establishing a forest during 2020 would be considered to be planting a "new" forest. They would be required to account for this forest using the averaging approach. Anyone who established a forest prior to 2020 (2019 and earlier) would be required to use the carbon stock change accounting approach. This applies to the forest regardless of registration date. Any forest planted before 2020 and not registered in the ETS would be required to use the carbon stock change accounting approach upon registration, even if it is first registered after 2020.

Consultation Questions:

4. Do you agree with the Government's preferred option that trees planted after 1 January 2020 are 'new' forests? If you disagree could please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners?

2. How to calculate the long term average carbon storage capacity of a forest under averaging accounting

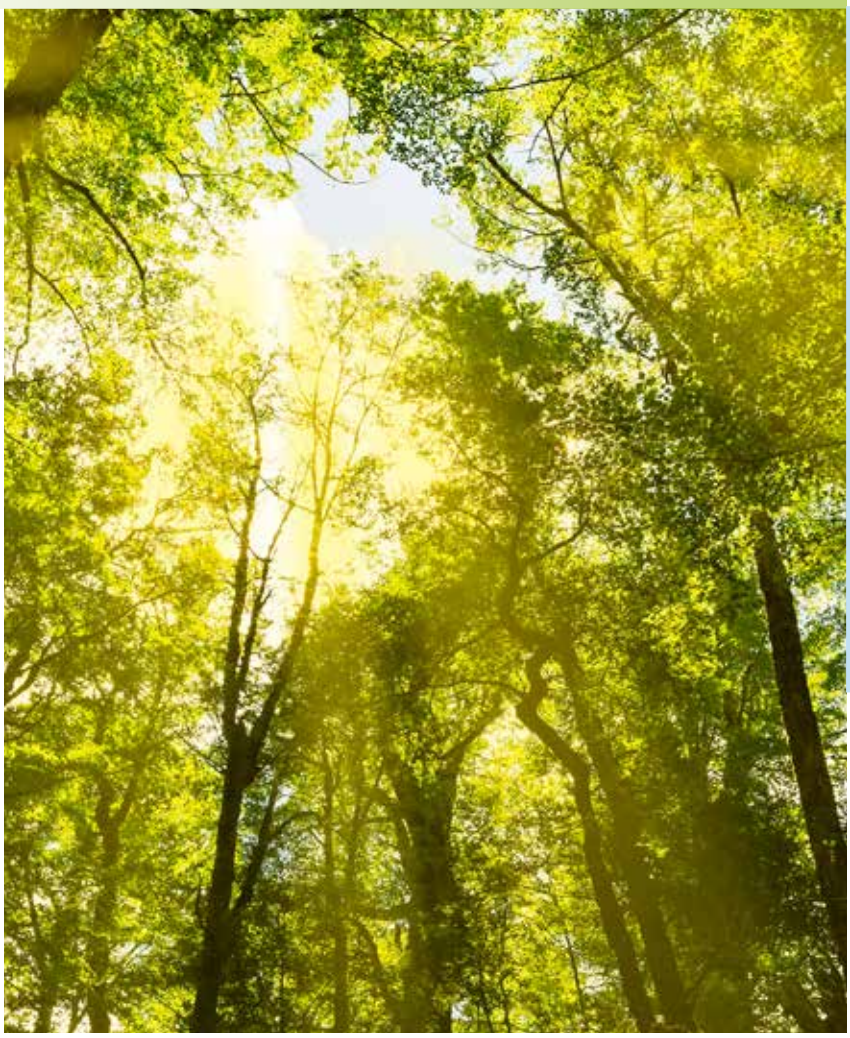
If averaging accounting is to be implemented, we need a feasible way for both ETS forestry participants and Te Uru Rākau (as ETS forestry administrators) to determine what the long term average is for forest carbon stocks under this accounting approach. This includes setting out how to determine carbon storage in forests and how to convert that into an appropriate "average long term carbon age".

Having this methodology confirmed early will allow regulations and any needed administration systems and processes to be developed for a "go live" date. It is also envisaged that any future changes needed for this methodology can be altered through these regulations.

Currently the ETS has two tools to determine both the amount of carbon stored in a forest and the forest's long term average carbon stock.

- For participants with post-1989 forest land less than 100 hectares, regional or national default tables of carbon stock by age are available for five forest types.
- For participants with post-1989 forest land of 100 hectares or more the owner must use tables of carbon stock by age derived from field measurements and future management intentions (the Field Measurement Approach (FMA))

Te Uru Rākau is aware there is a need to review the yield tables to ensure they are complete and have integrity. But this (and if needed any changes to the 100 hectares threshold) can occur after consultation on the ETS proposals as any changes could be implemented as part of Te Uru Rākau's business as usual regulation updates.



Option (Status Quo and Preferred):
Require all ETS post-1989 forestry participants with land below 100 hectares to use default look up tables and those with land over 100 hectares to use FMA approach to measure carbon storage in their forests.

The current approach could be retained for ETS forestry participants using averaging accounting. This option appropriately balances complexity for participants, administration cost, accuracy, ETS incentives, and risks to the Crown of the over-allocation of NZUs.

Consultation Questions:

5. Do you agree with the Government's preferred option to continue to require all ETS post-1989 forestry participants with land below 100 hectares to use default look up tables and those with land over 100 hectares to use the FMA approach to measure carbon storage in their forests? If you disagree could you please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners?

3. How to calculate average crediting age and carbon storage

We need to decide on how the average crediting age of the forest is defined under averaging accounting for the different forests' types and regions. For different forest species the age when the forest reaches its long-term average carbon stock doesn't vary much due to conditions at the site. However, the average crediting age is sensitive to rotation length for harvestable forest, or the time to maturity for permanent forests. The scheme settings need to be both reasonably accurate and yet simple enough to be practical for participants.

Option 1:

The age at which the long term average carbon stocks occur is set as a series of default ages for all ETS forestry participants based on forest type and region.

For most participants with small forests the default tables (with a default long term average) provide an acceptable level of accuracy. Default tables would also be significantly less complex for Te Uru Rākau to administer than allowing participants to apply for an average age specific to their forest.

However this system will not incentivise increasing carbon storage through longer rotations and is not easily adaptable to alternative species and management regimes.

Option 2:

The age at which average long term carbon stocks occur is set as a series of default age bands for all ETS forestry participants based on forest type, but ETS participants can nominate a rotation length band as well (see next page for further information).

Consultation Questions:

6. Out of the two options presented regarding how to calculate the long term average carbon storage age what is your preferred option? Could you please explain why it is your preferred option? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

Rotation age bands (option 2)

There are a number of ways that rotation age bands could be designed. The final settings for the bands would be decided as part of regulations updates prior to the implementation of averaging.

The following provides more information about how bands could be structured.

For rotation age bands to work in practice, a participant will have to nominate an age band for their forests rotation age in advance. An age band would consist of an age period (e.g. between 35 and 40 years) that they would harvest their forest between. They would be required to maintain this rotation age, or face liabilities if they moved to a shorter rotation.

Each rotation age band will have a nominated average age, which would allow a participant to earn more units for lengthening their rotation age. For example, a participant could nominate a longer rotation age than the "normal" rotation length (e.g. 35-40 instead of 25-34). This participant would be given a higher "average age", and therefore earn more units than if they had a shorter rotation. They could keep and sell these units, as long as they continued to harvest within that rotation age.

There would be ongoing reporting, to confirm that the forest is harvested in that rotation age, and monitoring to confirm the same. A participant would be required to always harvest in that age band, unless they report a change. If a participant chooses to later shift age bands they will be required to pay back the difference (or earn more units if they increase their rotation length). For example, if a participant nominates a 35-40 year age band, but harvests at age 28, they will be required to pay back any units between the average age for their nominated age band, and the average age for a forest harvested at 28. Failure to notify would also result in penalties. Likewise a participant could lengthen their rotation age in order to claim an increased average age, and earn more units.

Age bands could be structured as broad age bands, narrow age bands, and could use a wider default age band.

Broad age bands would mean less chance of accidentally shifting bands from one rotation to the next, but lessens the incentive on rotation ages. Narrow age bands would provide a greater and more accurate incentive for shifting rotation ages, but would mean more complexity to manage what age band a forest will fit into.

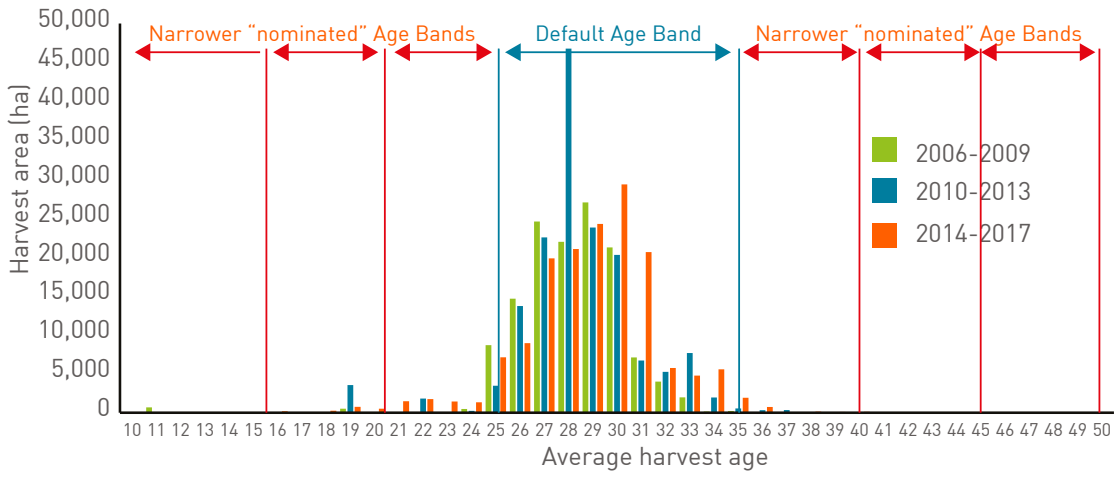
One way to manage this would be a wider "default" age band, where most "normal" behaviour is treated the same, and there is less reporting requirements, and other age bands that would need to be nominated by a participant. All participants that harvested within the default age band would receive the same average age, so long as they continued to harvest at a rotation length that fit within the default.

Over 13 years of the *National Exotic Forest Description*, the average harvest age of radiata pine as remained close to 28 years, and most harvesting occurs at similar ages. This could mean that a default age band could be established for forests harvested between 25 and 34, which would account for more than 90 percent of harvested radiata pine forests. This could be used in conjunction with narrower, nominated, age bands for the harvest ages outside of this default.

Another option would be a narrower default age band. A five year age band could account for around 75 percent of radiata pine harvest.

A similar approach could be used for other forest types, but due to differences in regime types, there is more of a spread of "normal" harvest ages, so a "default" band would be harder to define.

Figure 6: Distribution of Radiata pine mean harvest age



4. How could a change in the average crediting age be applied to existing participants?

This section presents options for participants who are above the average when a change to the average age is introduced, followed by options for participants that are below the average when a change is introduced.

The key consideration is the level of uncertainty for the participant in relation to the units they will receive for their forest. The preference is to minimise reporting and ongoing risk for the participant. If there is no need to return units in the future, based on later government changes to regulations, averaging is more attractive.

Options for participants who are above the average age, when a change to the average age in the regulations is introduced.

Option 1 (preferred):
ETS participants will not be required to repay NZUs after their forest reaches the average age (if they do not change the way they manage their forest).

Participants who have forests above the average age will not be required to repay, or be able to earn more units, if the government changes the average age in the regulations.

If a participant changes their forest management approach in a way that means a different average age in the regulations applies to their forest (after ages in the regulations have changed), the participant will earn or repay units to account for the difference between what they have earned, and the new age as set in the regulations.

This gives participants certainty that they are only required to account for changes that they make to their forest. This would mean that once their forest is at the average age they can be confident that NZUs earned can be traded, with low chance of an unplanned liability.

The Crown will have less ability to manage risks of changing participant behaviour. If an average age was reduced in regulations due to changing participant behaviour of participants past the average (e.g. a trend towards shorter rotations) it would have limited ability to recoup the cost of over-payed NZUs to participants. However, this could be managed through using age bands, and a conservative approach to crediting.

For example: if the average age specified in the regulations for a particular forest was 20, the participant will earn units for the first 20 years of the forest's life cycle. Once past this average age, if the age specified in the regulations was dropped to 19, the participant would not be required to repay any units to account for the carbon difference between age 19 and 20. Likewise, if the age specified in the regulations increased to 21, the participant would not be eligible to earn units to account for the carbon difference between age 20 and 21.

Option 2:
ETS participants will be required to repay NZUs after their forest reaches the average age (if they do not change the way they manage their forest).

Participants who have forests above the average age will be required to repay, or be able to earn more units, if the government changes the average crediting age in the regulations.

This is likely to mean that participants required to account for changes to the average crediting age set in regulations retain some units earned, in order to lower the risk of an unplanned liability. This would diminish the effect of the incentive in the ETS, and lead to higher rates of unit "banking" in the ETS.

It would give the Crown greater ability to recoup costs of overpayment, but it would undermine confidence in the scheme because participants would not be able to ensure that the units they've received will not be required to be repaid.

Consultation Questions:

7. Do you agree with the Government's preferred option regarding how a change to the average age in regulations can be applied to existing participants who are above the average age? If you disagree could you please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

Options for the average age that will apply to participants who are below the average age, when a change to the average age in the regulations is introduced.

Option 1 (preferred):

The Government is able to change the number of units ETS forestry participants using averaging receive to reflect changes in the average age set in regulations.

A participant would always receive units up to the average as the average is set in the regulations. This means that a participant below the average could have their earnings expectations changed after a forest is planted.

This gives the Crown a mechanism to increase or decrease unit expectations in the ETS to reflect changing behaviour or circumstances. This will support the ETS to be accurately reflecting carbon storage.

For example: a participant when planting will expect to earn units until their forest reaches its average age. If the average age was 20, then a participant will earn until their forest is 20 years old. If the regulations change, and the average age is increased to 21 before the forest reaches 20, then the participant will continue earning until the forest reaches 21. Likewise, if the regulations change and the average age is decreased to 19 before the forest reaches 20, then the forest will cease earning at age 19.

Option 2:

Require ETS forestry participants using averaging to continue to surrender or receive NZUs as per the average age that was set in regulations when their forest was first registered in the ETS.

This would provide the most certainty for participants. It would allow them to form clear expectations about the level of units they will receive.

However, it would also mean there is a significant lag between the Government identifying a need to change the level of the average and actual changes being fully reflected in forestry units in the ETS, as it would mean any changes made to regulations would only be effective once forests planted from then on reach the average.

Consultation Questions:

8. Do you agree with the Government's preferred option regarding how a change in the average age can be applied to existing participants who are below the average age? If you disagree could please provide your reasons why? Could you also tell us below how you expect this change will affect you/other forest owners?

5. How far back can a participant claim on entry to averaging?

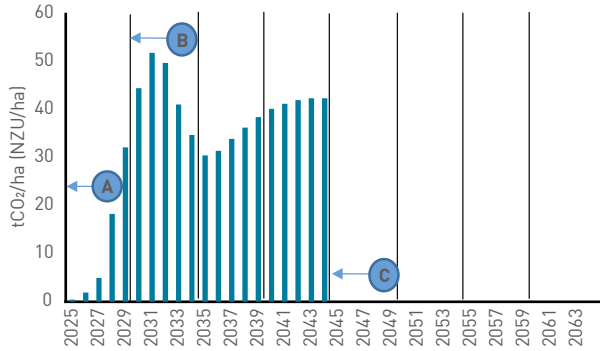
Currently participants are eligible to earn units for forest growth during each MERP. This means that a participant cannot earn any units for growth in previous MERPs.

In averaging a participant cannot earn units on the second rotation. This means for many existing participants, no more units can be earned in averaging, and there will not be crediting for growth prior to 2008, or prior to 2013 if they did not join the ETS during the first MERP. We do not propose any change to the current approach.

Option 1: Status Quo (preferred) – An ETS forestry participant can only claim NZUs from the beginning of the MERP.

The existing approach still works effectively under averaging accounting, from both an administrative and fiscal perspective. However, if existing forest owners are not permitted to continue earning NZUs on their second rotation this would mean those who entered the ETS after their forests reached the equivalent of the average age, would be worse-off under averaging as they would lose the ability to earn extra NZUs on their second rotation and they will not be able to earn any units retrospectively for growth below the average.

Figure 7: Graph showing MERPs



In the above graph, a participant that joined in year A would be able to earn units back to 2025, the beginning of that MERP. They would also be able to earn all future units for the forest. If that participant joined in year B they would be able to earn the units from 2030 onward, but not for the 2025-2029 period. If they joined in year C they would not be able to earn any units, and would be deemed to be above the average upon joining the ETS.

Consultation Questions:

9. Do you agree with the Government's preferred option regarding how far back can a participant claim NZUs/emissions units on entry to averaging accounting? If you disagree could please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

6. Ongoing reporting

This set of options builds on the proposal for ETS participants to earn NZUs for the growth of their forests up to its average age. Once the forest reaches its average age, there is no more crediting or debiting of the forest. This means participants could face lower reporting and measurement requirements. The options for ongoing reporting are shown below.

Option 1 (Status Quo): Measurement and/or reporting is required every MERP.

This would result in continued mandatory reporting and measurement for ETS forestry participants, despite no changes to NZU allocations or surrenders for forests. One of the key benefits of averaging is the ability to simplify and reduce ongoing reporting requirements.

Option 2: ETS forestry participants only have to report deforestation.

This is a simple approach, but if ETS forestry participants change any aspect of their forest, such as rotation length or forest species, it could result in a significant reduction in the average carbon stored in their forest. Conversely there would also be no ability for a participant to claim NZUs for increased carbon sequestration through changes in management such as planting a different species or increasing rotation lengths.

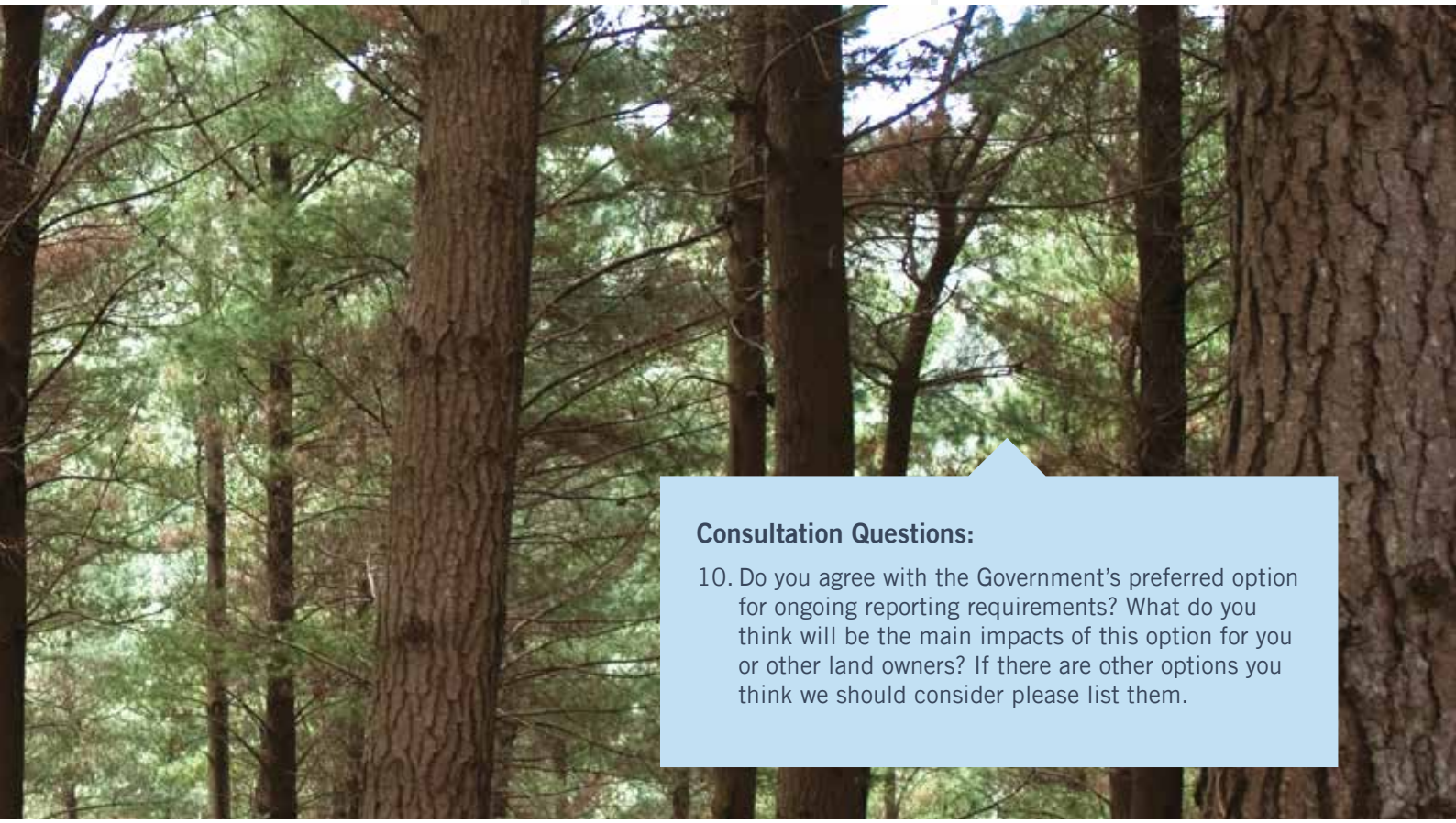
Under this system the Crown wouldn't have a way to recoup the NZUs already paid to the participant if they changed forest management.

This option could not be used in the case of a rotation age band being applied, as there could be no ongoing reporting of compliance with a rotation band.

Option 3 (Preferred): ETS forestry participants are required to report changes to the average age, deforestation and confirm continued management in each MERP.

ETS forestry participants would be required to report any change to the forest that would result in the use of a different average age for that forest. This means if a participant changes the species (forest type), or changed the rotation length such that it fell into a different age band, they would have to report the change. This option significantly lowers the Crown's risk due to changes in circumstances in forests, without placing undue reporting burden on participants.

Participants would still be required to report during each MERP, but this would be reduced to a simple confirmation of no changes to the average age, and no deforestation.



Consultation Questions:

10. Do you agree with the Government's preferred option for ongoing reporting requirements? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

4. Complementary Proposals to the Introduction of Averaging

Summary of Proposals

1. Proposal to remove liability for short term repayments of NZUs for short-term adverse events.
2. Proposal for post-1989 forest owners to be able to "offset" (replant forests on other sites to avoid deforestation liabilities).

Context

The following are additional opportunities to improve policy settings that are complementary to the introduction of averaging accounting.

1. Proposal to remove liability for repayments of NZUs for short-term adverse events.

Currently the ETS requires participants to account for a reduction in carbon stock associated with adverse events such as storms and earthquakes. In the averaging approach that will be applied as part of New Zealand's NDC in the Paris Agreement, there will not be specific accounting for emissions from temporary adverse events (those that do not result in deforestation).

Option 1 (Status Quo):

ETS forestry participants with post-1989 forests are liable for emissions from temporary adverse events.

Under the current approach ETS forestry participants can pay high insurance premiums to cover the possible damage and cost from temporary adverse events and the need to repay NZUs. This reduces the financial return from forestry investment, which can subsequently impact ETS participation and afforestation.

Option 2 (Preferred):

No liability for post-1989 ETS forestry participants, if under the "average" they pause and begin earning NZUs again once their forest has regrown to the carbon stock it held at the time of the event.

Implementing this option could prevent ETS forestry participants from experiencing significant financial stress from these events, while also incentivising them to quickly start to earn NZUs again.

Also under this option participants will have less need to pay high insurance premiums to cover NZU liabilities, which will make entry into the ETS under averaging more attractive, particularly for permanent forests (refer page 29).

But introducing this change would add more complexity to the ETS as new regulations would need to be developed to carve out new areas within/across forests. This would require mapping affected areas within forests and accounting for that area separately to the rest of the forest.

Additional considerations for temporary adverse events:
If, after an adverse event, an ETS forestry participant has claimed the benefit of these provisions, proof of re-establishment of the forest would be necessary. Lack of this proof within four years would result in deforestation/de-registration liabilities.

Further defining of the term "adverse event" in this context is needed. Detail such as thresholds in terms of scale and type of destruction need to be considered upon final design of the policy.

Consultation Questions:

11. Do you agree with the Government's preferred option for ETS participants with forests subject to a temporary adverse event? If you disagree could you please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.
12. Do you think removing temporary adverse event emissions liabilities will reduce insurance premiums and incentivise people to register more forests in the ETS?

2. Proposal for post-1989 forest owners to be able to "offset" (replant forests on other sites to avoid deforestation liabilities)

This is a proposal to introduce offset forest planting (offsetting) for forests established after 1989. The changes to improve the pre-1990 offsetting rules (to ensure they can be used more effectively) would also apply to post-1989 forest offsetting. Doing this would increase land use flexibility which could assist the Government to achieve a range of objectives (including climate change adaptation, regional economic development, environmental co-benefits, and moving to a low emissions economy). It could also increase ETS participation and consequently afforestation rates by making the scheme more flexible.

Option 1 (Status quo): No offsetting for ETS forestry participants with post-1989 forest land.

Currently participants with post-1989 forests cannot offset plant instead of paying for deforestation liabilities. Offset planting was introduced for pre-1990 forests in order to increase land use flexibility while causing no net increase in carbon emissions, but this was not extended to post-1989 forests.

Option 2 (preferred): Introduce offsetting for ETS forestry participants with post-1989 forest land who use averaging.

This option means introducing offsetting for all ETS participants that are eligible for averaging. Offsetting would not be made available for participants on the carbon stock change (current) accounting approach. Offsetting allows foresters to avoid deforestation liabilities if they establish a forest elsewhere of equal or greater size in area. This gives ETS forestry participants greater land use flexibility and makes it easy to retain forest cover when changing land use. It could also increase ETS forestry participation by de-risking forestry as an investment opportunity, particularly under averaging.

Offsetting can lower the Crown's exposure to deforestation in the ETS by allowing increased use of the Flexible Land Use (FLU) rule in national accounting. Land use flexibility will become an increasingly important consideration for the Government for the transition to a low emissions economy at low cost.

Consultation Questions:

13. Do you agree with the Government's preferred option to introduce offsetting for ETS forestry participants with post-1989 forest land who use averaging? If you disagree could you please provide your reasons why? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

5. Recognising the Emissions Mitigation from Harvested Wood Products

1.How should New Zealand recognise storage of carbon in harvested wood products?

This section considers options for how the Government might be able to encourage further climate mitigation from harvested wood products (HWP). There is value for New Zealand in incentivising further climate mitigation from HWP. New Zealand currently claims emissions mitigation equal to around $16million[7] per year for the carbon stored in HWP.

HWP are products made from timber such as furniture or the framing for buildings. These products bring benefits to New Zealand by increasing climate change mitigation through continuing carbon storage. They delay the release of emissions when forests are harvested and the wood decomposes (and releases emissions) more slowly as the carbon is locked carbon in the wood products. Some wood products store carbon for a long time and others only store carbon for a few months (e.g. furniture versus paper).

Currently the way emissions units are calculated in the ETS assumes instant oxidisation of the carbon removed from the site when trees are harvested. This is different from how forest carbon is accounted for at the international level. From 2021 New Zealand's accounting approach for forest carbon for its 2030 target under the Paris Agreement will include recognition of the impact of HWP. This will be represented as an additional number of emissions units on top of the long term average units we will claim for our forests.

We want to hear your views on all of the options for how to incentivise HWP production and use in New Zealand. We are not presenting a preferred option. It is possible to introduce both of the proposed options (2&3), which would mean that two sectors have incentives related to HWP in New Zealand.

Option 1 (Status Quo):
Do not reflect the benefits of accounting for harvested wood products to the forestry sector.

The status quo reflects historic international agreements which did not account for HWP. But New Zealand's approach to accounting for its Paris Agreement NDC includes the Crown accounting for the delayed decay of HWP. So the non-recognition of HWP in the ETS means that unit supply will not be aligned with accounting for New Zealand's targets from 2021, and the ETS will not incentivise the right amount of emissions mitigation.

7 Based on a projection of past HWP trends and a carbon price of $21.

Option 2:
ETS participants using averaging accounting receive additional NZUs.

The contribution HWP accounting makes to the international long term average carbon stock (LTA) could be added to the average age/carbon stock of all new forests using averaging accounting in the ETS. This would drive ETS unit supply in line with the new international long term average carbon stock. This would also mean that existing forests would only be eligible to receive recognition for HWP carbon storage if they are able to move to the new accounting approach.

This option would increase ETS forestry participants' average crediting age for their forests. This would mean amending the calculation of the average carbon stored in ETS forests to include extra units to recognise deferred emissions from HWP. For a participant registering 100ha of pine forest into the ETS these additional units could be equivalent to 12,000 units or $250,000 (at current carbon prices) in total, over and above what they would receive for their forest under averaging accounting.

Economic modelling indicates that this would increase ETS forestry participation, and significantly increase afforestation. This would assist New Zealand in meeting its climate change targets in a way consistent with how New Zealand proposes to meet its international obligations.

It is likely to be too complex to collect information on individual participants' HWP use under this option, and only ETS participants would be eligible to receive the HWP value. So this option is unlikely to create a strong incentive for the forestry sector to increase the proportion of longer-lived wood products produced.

Option 3:
Create an HWP "industry good" wood processing sector fund.

The Government could set aside a pool of funding that is roughly equal to an estimate of the contribution HWP accounting will make to the international LTA carbon stock. The funds could be used in an "industry good" scheme which aims to support the forestry sector to develop longer-lived wood products. This would in turn increase the contribution HWP could make to international targets.

This option would either preclude or limit the use of the funds for an afforestation incentive, which would provide a known contribution towards climate change targets. The contribution of a fund towards an increased contribution from HWP is harder to quantify.

A research and development scheme should be used to maximise the value that HWP contributes to international targets. This means that it should aim to incentivise longer-lived wood products, compared with the current mix of product produced from our production forests.

Additional HWP considerations:
New Zealand will estimate the contribution of HWP accounting based on past export and domestic data, but actual HWP activity will occur later after harvesting. To address this we may adjust the reference level accounting based on any change to the projections and account for the actual use of HWP.

While this could lead to an over allocation of HWP value to ETS forestry participants, the risk could be mitigated by transferring a conservative amount of HWP value which can be adjusted over time.

Consultation Questions:
14. Out of the three options presented regarding how to pass on the international harvested wood products accounting benefit to the NZ forestry sector what is your preferred option? Could you please explain why it is your preferred option? What do you think will be the main impacts of this option for you or other land owners? If there are other options you think we should consider please list them.

6. Creating a Permanent Forests Category in the ETS

Context

The intent of this proposal is to:

- make permanent forest a more attractive option for land owners by making it easier to access the potential revenue stream from NZUs;
- simplify the administration of permanent forests for land owners and the Government; and
- increase the amount of permanent forest registered in the ETS.

The ETS can be used to encourage the establishment of permanent forests, which are likely to mostly consist of indigenous trees or exotic species which are not harvested (or on very long rotations). These forests will assist New Zealand in achieving its climate change goals, increase incomes to land owners and increase the options for land owners to manage existing forests more effectively (for example, moving from rotation forest on erosion prone land into permanent forest).

Why do we want better incentives to plant permanent forests?

Meeting our long term international climate change commitments will require New Zealand to increase the amount of permanent forest planted and maintained in perpetuity as a means of sequestering carbon. Establishing 100,000 hectares of permanent forests (in the 2020s) will sequester between 1 and 3 million tonnes of carbon dioxide per year by 2050 and beyond[8].

Where those forests are maintained they will provide an important carbon sink in the long term.

Permanent forests provide a wide range of other environmental and cultural benefits for local communities including Mātauranga Māori. Properly sited forests contribute to erosion control, improved water quality and increased biodiversity. They can also provide economic benefits, for example through high value selectively harvested timber or the production of honey.

By allowing NZUs to be traced back to the forest they were earned from, forest owners will be able to potentially signal that their units have higher environmental values than rotational forest (for example, by providing enduring habitat for biodiversity). This could provide an additional financial benefit for units from permanent forests.

What are the existing options to earn units for permanent post-1989 forests?

At present owners of permanent post-1989 forest have two options to earn units: they can join the Permanent Forest Sink Initiative (PFSI), or they can register their forest with the ETS as post-1989 forest. Units from permanent forests registered with the PFSI are distinguished from NZUs earned through the ETS with a "PFSI" tag in the unit register. Some PFSI participants have reported successfully selling their units at a premium price compared with the NZU market price.

The PFSI was established under the Forests Act 1949 in 2007, prior to the establishment of the ETS in 2008. PFSI participants must establish a legal covenant[9] over their forest, which has specific management requirements, and the details of how the carbon will be reported and rewarded. The covenant is in perpetuity, however, there is an option to exit after 50 years. The covenant is the mechanism used by the PFSI to ensure the permanence of carbon sequestration by the forest.

The covenant contains the registration details of the forest and the obligations on both parties, as well as much of the operational detail around how these forests receive carbon credits. As each covenant is a separate legal agreement this represents a considerable administrative effort for both the land owner and the Crown. The requirement for a covenant means the PFSI registration process is more onerous than the ETS. In some cases land owners also have separate covenants with other agencies, such as the Queen Elizabeth II National Trust, which have different purposes and obligations, which adds complexity for all parties.

Participation rates for permanent forest in the PFSI are low compared to that of native forest in the ETS. Just over 15,000 hectares is registered with the PFSI, 80 percent of which is native. In comparison,

8 The lower estimate is based on native forest, while the upper estimate is for pine forest (such as retired production forest on erosion prone land).

9 A covenant is a legally binding agreement that is registered on the title of the land.

more than twice as much native forest is registered in the ETS. Despite increasing carbon prices, participation rates in the PFSI have remained static for some years.

MPI conducted two previous consultations on the PFSI, in 2013 and 2015. The proposals in these consultations focused on:

- how the PFSI could be better administered (including moving it into the CCRA from the Forests Act);
- how it could attract more participants; and
- how more marginal land could be put under long term forest cover.

Feedback from these consultations provided a strong indication of stakeholder preferences and priorities. There was strong support, especially from current PFSI participants, for a carbon scheme relating to permanent forests being included in the ETS. However, feedback was not as supportive of the proposal to no longer use covenants as they are seen as the signal of permanence. Some participants felt that the covenant, as a contract between the Crown and the land owner, was an important aspect of ensuring the PSFI is "permanent".

The Government is looking for ways to increase the number of hectares of permanent forests planted and convert rotational forest to permanent forest. This means attracting new participants and encouraging existing participants to plant more forests. We are proposing to make it easier for owners of permanent post-1989 forest to access a carbon scheme, and have the additional value of a permanent forest recognised on the number of units participants receive. The challenge is to ensure that the mechanism is simple to use for participants, while ensuring the permanence of the forest is credible and the units allocated to participants accurately represents the amount of carbon stored in permanent forests.

Preferred policy approach

A specific permanent post-1989 forest activity (category) in the ETS would continue to enable units from permanent forests to be identified as in the current PFSI. This gives owners of these units the option to market them as "high quality" units while making registration and administration easier and cheaper for both participants and the Crown.

Our preferred approach is to dis-establish the existing PFSI and create a special category in the CCRA for permanent post-1989 forests to earn units in the ETS.

Options for a permanent post-1989 activity in the ETS

Providing a pathway for owners of permanent forest to earn units is important to improve the incentives to establish permanent forests. We have identified four options and are seeking your input on the approaches, and where you have one, your preferred approach.

Option 1:
Keep the PFSI as the primary mechanism for permanent forest to earn units (status quo).

Under the status quo option owners of permanent forests would continue to be able to choose either the PFSI or the ETS to earn units. This option would maintain the PFSI within the Forests Act as the primary Government scheme for incentivising long term carbon sequestration.

The status quo option does not address the administrative burden of the PFSI, or provide permanent forests registered in the ETS with the ability to differentiate their units from rotational forest units.

Option 2:
Retain and improve the PFSI.

Retaining and improving the PFSI within the Forests Act would mean owners of permanent post-1989 forest still have the ability to participate in a scheme that recognises the permanence of their forest.

However, through two reviews of the scheme we have not been able to identify meaningful improvements within the Forests Act, that would reduce the administrative burden which respondents have told us is a barrier to entering the PFSI. This is because the Forests Act does not contain the legal framework that the CCRA provides for the ETS, so a covenant is necessary for the PFSI to operate within the Forests Act.

One option to improve the covenants could be to include operative parts of the CCRA into the Forests Act. This option is unlikely to offer meaningful benefits as carbon forestry would still be governed under two pieces of legislation and require the development of new solutions to make the Forests Act and the CCRA work together (e.g. a post-1989 forest being re-classified as permanent).

Keeping the PFSI covenant mechanism (Options 1 and 2) would make it more difficult to offer other improvements to PFSI participants around how forest carbon is accounted for (which would be offered to ETS participants), as these options would need to be reflected in each individual covenant.

Option 3:
Discontinue the PFSI (leaving post-1989 forest as the only option to earn units).

Removing the PFSI as an option for receiving NZUs would limit current and potential owners of permanent forests to using the post-1989 forest option within the ETS to reward long term carbon storage. This would not enable owners of permanent post-1989 forest to distinguish their units from other NZUs.

This option is unlikely to provide sufficient incentive to increase long term carbon storage over and above what is already being delivered. In our view, independent recognition of the additional benefits of permanent forestry, as well as the longer term carbon sequestered in their forests, is an important incentive for land owners to establish permanent rather than rotational forestry. We believe this is most effectively done by having a mechanism to differentiate between permanent post-1989 forest and other post-1989 forest.

Option 4 (preferred):
Establish a new permanent post-1989 forest activity in the ETS and discontinue the PFSI.

This option would create a new permanent post-1989 forest activity in the ETS as a separate activity to rotational forest, with conditions that incentivise afforestation and deter deforestation. At the same time the PFSI would be disestablished.

A permanent post-1989 forest category in the ETS would:

- simplify the long-term crediting of permanent exotic forest in the same way as other permanent forests. This will clarify the option for land owners to gain a long term cash flow from rotation forest being retired to permanent forest;
- create a single framework for managing and administering all forest carbon schemes (the ETS); and
- enable owners of permanent forest to trace units from their forest by tagging each NZU in the unit registry as coming from a permanent post-1989 forest (thus retaining the mechanism to market their units as having higher value as currently indicated through PFSI units);
- allow both exotic and native forests to be entered as Permanent Post-1989 forests.

This may raise concerns about the ETS being used to incentivise large scale permanent exotic forests. However, as exotic forests can be used as establishment and nursery crops for native trees, and have greater erosion control benefits immediately following establishment.

Subject to the design details on the next page we propose to allow any forest established on post-1989 eligible land to be registered as a permanent post-1989 forest.

Consultation Questions:

15. Do you agree with the Government's preferred approach to introduce a new activity into the ETS for permanent post-1989 forests? If you disagree could you please provide your reasons why? Could you also tell us how you expect this change will affect you or other land owners?

DETAILED DESIGN QUESTIONS FOR INTRODUCING A PERMANENT FOREST CATEGORY IN THE ETS

Summary of questions

1. How would units be earned by forest owners for permanent forests?
2. How will the "permanent post-1989 forest land" and "post-1989 forest land" activities interact in the ETS?
3. What restrictions will apply for permanent forests registered in the ETS?
4. Should we introduce a 50 year permanence clause for forests registering in the permanent forest category?
5. Should we introduce a covenant for forests registering in the permanent forest category?
6. How will we manage the transition for current PFSI participants to a permanent post-1989 forest activity in the ETS?
7. What is the process for dealing with permanent forests registered in the permanent forest category in the ETS after the 50 year permanence clause expires?
8. What process could apply for participants to exit the ETS permanent forest category activity prior to the end of the 50 year on-harvest clause?
9. How should we manage transfers from the ETS category for post-1989 rotation forests over to the ETS permanent forest category (when the forest is already above average crediting age)?
10. Options for transitioning rotation post-1989 forests in the ETS over to the permanent forest category once they are past their first rotation.
11. What harvesting restrictions should apply when transferring from Post-1989 forest to Permanent Post-1989 forest?

1. How would units be earned by forest owners for permanent forests?

Under this proposal, the land owner would receive units for carbon stock change in their forests, as they do now. They would continue to earn units as their forests continue to store carbon (depending on the species of trees planted they will continue to store more carbon for over 100 years).

Having a separate permanent forest activity will simplify the ETS for land owners with permanent forest compared to the PFSI. The process to register into the ETS will be the same as for a post-1989 forest and the registered area will be clearly recorded as a different activity making emissions returns simpler.

Option 1:
Using averaging (as is proposed in this discussion document for rotational forestry in the ETS).

We do not believe that averaging would provide the ongoing financial incentive to establish and maintain more permanent forests that is required to increase long term carbon storage. Averaging would result in the same number of units for the participant as simply registering as a post-1989 participant in the ETS.

Option 2:
Using the current carbon stock change accounting process (preferred).

Using averaging would be administratively simpler for Government, however our preferred approach is to use the current carbon stock change accounting process which credits forests as they grow (and requires repayments of units if the forest if harvested). This is because crediting permanent forest units up to the average does not fully reward the carbon sink over the 50 year period of the activity. Permanent forests will continue to accumulate carbon for more than 100 years as they continue to mature (before eventually reaching a steady state of carbon storage).

Consultation Questions:

16. Do you agree with the Government's preferred approach to use the existing stock change accounting process for permanent forests? If you disagree could you please provide your reasons why? Could you also tell us how you expect this change will affect you or other land owners?

2. How will the "permanent post-1989 forest land" and "post-1989 forest land" activities interact in the ETS?

Under this proposal, an owner of eligible post-1989 forest will have two options for registering forests in the ETS: as post-1989 forest land, or as permanent post-1989 forest land.

Registering as post-1989 forest land gives the forest owner the ability to harvest or deregister at any time and earn units in line with the accounting rules that apply. Registering as permanent post-1989 forest land means the forest owner would not be able to clear fell harvest or deregister for 50 years , unless they meet the conditions for an early exit.

Both activities would share[10] a lot of common operational process around the ETS, including:

- the process of registration into the ETS;
- the reporting and unit claim process for carbon change in the forests (including the use of the Field Measurement Approach);
- the monitoring of the forests;
- the exclusion of tree weed species from registration in the ETS;
- any treatment for natural or adverse events.

Consultation Questions:

17. Do you agree with the Government's preferred approach that the majority of the operational processes and regulations should be shared between permanent post-1989 and post-1989 forests, with the key difference being the non-clear-fell harvest period? If you disagree could you please provide the reasons why? Could you also tell us how you expect this change will affect you or other land owners?

10 If a permanent post-1989 forest is permanently prevented from being re-established as the result of a natural event (ref CCRA section 189 (8A)).

3. What restrictions will apply for permanent forests registered in the ETS?

Under the preferred option forest owners who register their permanent post-1989 forest will be unable to clear-fell these forests for 50 years after the date of registration (the 50 year period). While the forest is in the 50 year period the forest owner would be able to undertake activities which are consistent with the forest maintaining the 30 percent canopy cover as defined in the ETS "forest definition", e.g. they can selectively remove trees.

This approach is practical for the land owner and the Crown because:

- the land owner can manage their forests without being concerned that transitioning between species (e.g. from exotics to natives) will inadvertently trigger a breach of the harvesting condition; and
- for the Crown, the monitoring of the forest will be simpler as our key concern would be total forest cover and long term carbon stock changes rather than if the forest owner has removed 9 or 11 percent, for example, of the basal area of the living trees.

In practice, we believe the increased flexibility (compared to the PFSI) will not be detrimental to the manner in which permanent forests are managed because:

- land owners generally want reasonably full canopy cover to promote other outcomes (e.g. erosion control, biodiversity benefits, suppression of weeds in the understory); and
- the species likely to be used in a permanent forest that may be harvested in the future, such as tōtara, are unlikely to be economic to harvest prior to the 50 year period expiring.

Consultation Questions:

18. Do you agree with the restrictions proposed for permanent forests? If you disagree could you please provide the reasons why? Could you also tell us how you expect this change will affect you or other land owners?

4. Should we introduce a 50 year permanence clause for forests registering in the permanent forest category?

If we progress with the preferred option of creating a specific permanent post-1989 forest category in the ETS, discontinuing the PFSI, and using carbon stock change accounting, there are some detailed design considerations that need to be taken into account.

How these design considerations are used will depend on the length of time forests in the permanent post-1989 category are not allowed to harvest. Our preferred approach is to align the permanent post-1989 forest category with the existing minimum timeframe of 50 years in the PFSI.

Te Ture Whenua Maori Act (1993) (The Maori Land Act) requires additional considerations should a long term lease (over 52 years) be granted over Māori land. We are proposing a 50 year period for permanent forests. Permanent forest terms of longer than 52 years term would act as a significant barrier to Māori participation in permanent forest, and also increase the costs for them to access carbon revenue as they would need to comply with these additional considerations of the Te Ture Whenua Maori Act (1993).

We have therefore used a 50 year non-harvest period throughout this document to signify permanence, but we are seeking your views on whether this timeframe is appropriate.

Option 1:
Align the 50 year permanence timeframe of the permanent post-1989 forest to the 50 year timeframe required under the PFSI (preferred).

Under the PFSI, participants are able to remove any part of the forest sink area from the covenant after 50 years. If any area is withdrawn, the land owner must repay (surrender) units for that particular area. If the participant wants to continue the permanent forest activity they don't need to do anything. We propose to use the same 50 year limit, with the option at 50 years to continue with the permanent forest activity or move out of it and repay some or all of the credits received for that area of forest. A 50 year limit is seen as the right balance between a participant's commitment to permanence, while not locking land into a carbon forestry option forever, and allowing participants to reassess how they will take part in carbon forestry.

Consultation Questions:

19. Do you agree that 50 years is an appropriate non-harvest period for ETS registered permanent forests? If you disagree could you please provide the reasons why? Could you also tell us how you expect this change will affect you or other land owners?

5. Should we introduce a covenant for forests registering in the permanent forest category?

The CCRA rules around registration and operational detail would apply to all participants including those registered in the permanent forest category. This makes the relationship between the Crown and the land owner much simpler than the PFSI. The PFSI puts much of the operational detail into a covenant. Under the CCRA, any covenant option for permanent forests in the ETS would be largely symbolic as the contractual details and conditions would be in the CCRA. A covenant would mean the Crown has an interest over the land, so would need to agree new interests being created (for example a mortgage).

Option 1 (preferred):
Do not offer a covenant

The ETS, through the CCRA, provides the legal framework required to enable the crediting of a permanent forest and to ensure its permanence with strong enforcement provisions. This will simplify the administration of a permanent post-1989 activity and will not lock land into the ETS forever. Land owners whose indigenous forests are of sufficient quality to be eligible would be free to sign up to a covenant offered by organisations such as the Queen Elizabeth II National Trust, regional or district councils, Nature Heritage Fund, or Nga Whenua Rahui (for Māori land), provided they meet the conditions of these organisations.

Consultation Questions:

20. Do you agree with the Government's preferred option of not offering a covenant for permanent forests registered in the ETS? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.
21. What assistance could the Government offer to make it easier for indigenous forest to be registered in a covenant from other organisations (e.g sharing mapping information)?

Option 2:
Offer a voluntary minimal covenant

This option would be to offer a minimal covenant that the participant could take up. This covenant would reflect the land owners' commitment to establishing a permanent forest (in line with the CCRA definition of this), and also the CCRA as the primary regulatory tool for these forests. Any covenant under this approach would be optional.

6. How will we manage the transition for current PFSI participants to a permanent post-1989 forest activity in the ETS?

Current PFSI participants, and the land subject to the PFSI, could automatically be registered under the CCRA as Permanent Post-1989 forestry. However, the desire to transfer across to Permanent Post-1989 forestry will differ among land owners. Automatically transferring participants may result in current participants withdrawing.

Conversely, maintaining the PFSI in its current form for only a few participants who wish to remain would undermine the advantages of having one approach to permanent forests, and increase costs to land owners and the Crown.

Our preferred approach is to transfer existing PFSI participants to the new permanent post-1989 forest activity in the ETS, or allow them to exit the scheme entirely.

Option (preferred):
Transfer is mandatory with one-off option to leave the scheme.

We propose that the transfer be mandatory with a one-off option to leave the scheme by repaying any units received[11]. The transfer of current participants will be done through a transfer document to gather any relevant information needed for the ETS, without any administrative cost to participants, and the forest land will not be subject to any reassessment of land eligibility. We would propose to backdate the non-harvest period for these transferred forests to the time when they joined the PFSI.

Consultation Questions:

22. Do you agree with the Government's preferred option that transfer for current PFSI participants to a permanent post-1989 forest activity in the ETS should be mandatory with a one-off option to exit? If you disagree could you please provide the reasons why? Could you also tell us how you expect this change will affect you or other land owners?

11 In line with that land owner's existing covenant.

7. What is the process for dealing with permanent forests registered in the permanent forest category in the ETS after the 50 year permanence clause expires?

Option:

During the non-harvest period, the forest must remain as forest land in the ETS for the full time (50 years under the Crown's preferred option), and cannot be clear-fell harvested within this timeframe. However, once the 50 year non-harvest period expires forest owners will have three choices:

a) Remain in the permanent post-1989 forest category: by signing up for another non-harvest period (e.g. 25 or 50 years), and continuing with the stock change accounting approach they have used to date.

b) Switch to the post-1989 forest category: allowing them to harvest, but changing to an averaging accounting approach if this proposal is adopted. They would need to repay units for the difference between the current carbon stock for the forest and the average carbon stock for that forest type as a post-1989 forest.

c) Exit (deregister from) the ETS (and either keep the forest or deforest) and repay all units received.

Consultation Questions:

23. Do you agree with the Government's three choices for dealing with permanent forests registered in the ETS when the 50-year permanence clause ends? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

24. Do you agree whether there should be an option to sign-up for another non-harvest period? If you do agree could you please state how long this should be and why.

25. Do you agree that a retrospective averaging approach is the best way to allow forests to be harvested after 50 years? If you disagree could you please provide the reasons why?

8. What process could apply for participants to exit the ETS permanent forest category activity prior to the end of the 50 year non-harvest clause?

If we establish a Permanent Post-1989 forestry activity, clear conditions to exit prior to the 50 year non-harvest period expiring must be outlined in the CCRA. We propose that any exit option will require complete deregistration from the ETS, and the full surrender of the NZUs received for that forest land. We believe allowing for exit is likely to lead to an increase in uptake, but allowing an exit which is too easy would undermine the integrity of the permanent post-1989 activity.

Currently, if a PFSI land owner withdraws after 50 years, they need to repay the units for the area of forest being removed. If they want to terminate early (and they only can do this in limited situations) they must repay the units they have received[12]. They require the Crown's agreement to do this. Unless they meet certain conditions for exemption, they must surrender units for the loss of carbon.

We have identified a range of options for participants wanting to exit the permanent forest category.

Option 1: Repayment of units along with a unit multiplier (or a specific fee per unit).

Allowing a participant to exit the activity would require repayment of units earned as well as a penalty fee of additional units. They would be calculated at a compounding rate applied to each year's increase in carbon stock from the beginning of the covenant (e.g. after seven years at a compounding rate of 10 percent the unit multiplier would be two, so participants would need to surrender twice the carbon earned in the seventh year). This would act as a significant disincentive to exit, particularly late in the non-harvest period. However, this "penalty" option could be an unfair option for participants who need to exit the ETS for bona fide reasons and may act as a strong disincentive to establishing permanent forests.

Option 2: Cancellation only under certain conditions.

Cancellation can only take place under circumstances, defined in legislation, which could not have reasonably been foreseen at the time of registration, and where the participant's ability to access the value of carbon sequestration in their permanent post-1989 forests are significantly affected.

This option is consistent with the intention of limiting participants exiting unless it would be unfair to require the participant to remain registered.

12 (as per covenant).

Option 3:
Two-step test.

An alternative to option 2 is the requirement for the Minister for Climate Change to apply a two-step test, as defined in legislation. The first step seeks to provide some flexibility and the second stage of this test seeks to limit the application of the discretion in favour of the applicant.

For example, if it would be unreasonable in the circumstances to require the participant to maintain registration in the scheme then considerations should include:

- Whether a decision to remove the land from the permanent forest category in these circumstances would be likely to result in a loss of public confidence in the integrity of the scheme?
- What is the cost to remove the land from the ETS, and where does this fall?
- What are the benefits and costs of this land not being in permanent forest, and who receives the benefits and who pays the costs?

9. How to manage transfers from the ETS category for post-1989 rotation forests over to the ETS permanent forest category (when the forest is already above average crediting age).

The transfer of forests from Post-1989 forestry to Permanent Post-1989 forestry is simple, if the forest is below the average age, as the number of units earned will continue (but no longer stop at the average). However, if a forest is transferred after the average age the participant potentially loses the ability to claim units between the average age and the forest's current age when it makes the shift to a permanent forest.

Allowing participants to earn units when forests are transferred above the average age could potentially result in considerable increases in movement from Post-1989 to Permanent Post-1989 forestry to gain substantial one-off units. This effect could be magnified if projected increases in carbon prices occur. A substantial number of participants moving could also result in greater fiscal costs to the Crown, and reduce timber supply.

Option (preferred):
Participants who transfer are only able to gain units from the start of the Mandatory Emissions Return Period (MERP).

It is recommended that participants who transfer to Permanent Post-1989 forest are only able to gain units back from the start of the MERP at the time they transfer. This is effectively the case with new ETS registrations for post-1989 forests, and the current approach to crediting.

The NZUs received while the forest was a post-1989 forest would be retained, and would only need to be repaid if the forest is removed from the ETS or the carbon stock drops significantly and the forest owner is liable for that change[13].

Consultation Questions:

26. Out of the three options presented for participants to exit the ETS permanent forest category prior to the end of the 50-year non-harvest clause which do you prefer? Could you please explain below why it is your preferred option and how this will affect you or other land owners? If there are other options you think we should consider please list them.

Consultation Questions:

27. Do you agree with the Government's preferred option for participants who transfer to permanent forests to only earn units from the start of the MERP during which the move to permanent forest is made? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

13 Sections 190 and 191 for the CCRA limit the number of units that need to be repaid for a carbon accounting area (or part thereof) to the number received for that CCA.

10. Options for transitioning rotation post-1989 forests in the ETS over to the permanent forest category once they are past the first rotation.

The way in which an existing forest on the second rotation is registered into Permanent Post-1989 will have implications for forests both inside and outside the ETS. On page 22 there is a discussion of how second rotation forests will be treated under averaging, and it is proposed that the option for second rotation permanent post-1989 forest be closely linked to the decision taken under averaging.

Allowing second rotation forests that are registered as permanent forests to earn units will provide an incentive to retain these areas as forest. Crediting the carbon stock for these forests from the date they are registered as permanent forests will be particularly important for those areas where production forestry is no longer viable (e.g. on very highly erodible land). Registering the forest as a permanent forest will provide cash flow to the land owner instead of a harvesting income. However, we need to consider how this transition will work.

It is proposed that forests outside the ETS would earn units for the carbon stock change back to the start of the MERP when they register for the permanent post-1989 activity.

Forests already registered in the ETS, and subject to the carbon stock change accounting approach, would earn units for the carbon stock change back to the start of the MERP when they register into the permanent post-1989 activity. These forests would have earned units as a post-1989 forest up to the carbon stock when they decide to change to permanent post-1989 forest.

For forests already registered in the ETS that are subject to averaging there are two possible cases:

- Where a forest is in its second rotation and carbon stock is above the average. These forests would be treated in line with the first rotation forests in topic
- Where the carbon stock is below the average there are two options.

Option 1 (preferred): Repay the units between the current carbon stock and the average.

The more costly option for the participant would require that they surrender units equal to the difference between the current carbon stock and the average[14] when it transitions from the Post-1989 forestry activity to the Permanent Post-1989 forestry activity. This would apply if the current carbon stock is below the average.

Option 2: Don't earn units until the carbon stock reaches the average.

A more administratively complex option would be for the land to not earn units until the carbon stock reaches the average that applies for that area of forest. Once that point is reached, the forest earns units.

14 Section 190 of the CCRA would apply to this repayment, meaning the forest owner would pay no more units than the current unit balance for that Carbon Accounting Area or sub-area of forest

Consultation Questions:

28. Do you agree with the Government's preferred option regarding transitioning rotation post-1989 forests in the ETS over to the permanent forest category once they are past the first rotation? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

11. How long should harvesting restrictions should apply when transferring from Post-1989 forest to Permanent Post-1989 forest?

Participants moving from Post-1989 forestry to Permanent Post-1989 forestry would generally benefit most if the harvesting restrictions (50 years) start from the initial date they registered their forest with the ETS.

However, allowing participants to have harvesting restrictions commence from the initial date of registration in post-1989 forest could potentially undermine the integrity of permanence of the permanent post-1989 forest activity and they would not have the same 50-year non-harvest period as other participants. Applying harvesting restrictions from the date of transfer would signify the participant's commitment to permanence.

Option (preferred): Harvesting restrictions are applied from the date of registration as a permanent post-1989 forest.

We are proposing that harvesting restrictions should be applied from the date of transfer into Permanent Post-1989 forestry, as this indicates when participants fully committed their forests to permanence.

Consultation Questions:

29. Do you agree with the Government's preferred option that harvesting restrictions are applied from the date of transfer to permanent post-1989 forest? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

7. Operational Improvements to the ETS

This section deals with proposals for operational improvements aimed at reducing the complexity of the forestry sector parts of the ETS. They are also expected to make voluntary and mandatory compliance easier. The proposals relate to all forests regardless of whether they use the current (carbon stock change) approach, the proposed averaging approach, or take the proposed permanent forest option. Many of the proposals have been developed from the feedback based on 2015/16 review of the ETS, and others from Te Uru Rākau's administration of the scheme and interaction with participants.

Twenty six operational improvements have been identified that would help solve problem areas for forestry in the ETS and provide the administrators with new tools to resolve emerging and unexpected issues as they arise.

These operational changes are divided into three groups:

1. **Significant changes** (five proposals) that will positively impact investment decisions in forestry, improve the ETS for a large numbers of forest owners, or require regulations to be developed at a later date after the Act is amended.
2. **Operational changes** (four proposals) where final policy decisions will be tied closely to decisions on the way an averaging accounting approach may be introduced.
3. **Minor and technical changes** (17 proposals) to improve areas where the legislation creates uncertainty for participants, is not working in line with the policy intent, or is contradictory. These proposals should result in participants making fewer inadvertent errors and improve their compliance with ETS obligations. This will also have associated administrative benefits for Te Uru Rākau.

SIGNIFICANT OPERATIONAL CHANGES

1. More certainty on land classification

- Clarify the existing rulings regime in the Act so that definitive classifications of land status can be made.
- Amend the Act to allow land status to be defined by reference to maps held by Te Uru Rākau.

Context:

Currently those who want to buy or convert land, forested or not, can't check whether it is eligible to be ETS registered until it is established in forest and an ETS registration application is made.

In the five years between 2013 and 2017 MPI rejected an average of 20 percent of the area in applications as ineligible for post-1989 forestry. This is time consuming for land owners and officials, and is also a barrier to investment in carbon forestry, as it increases uncertainty on land eligibility.

Owners of forest land considering deforestation or sale would also benefit from clarity on whether their land would be classified as pre-1990 forest land.

The Act currently allows the EPA to make rulings on determining the classification of forest land (or eligible forest land) under the ETS. We propose to provide greater certainty on land classification by developing definitive maps (with Geographic Information Systems (GIS) spatial layers). We anticipate that these layers would describe:

- pre-1990 forest land;
- post-1989 forest land;
- land eligible to be registered as post-1989 forest land (subject to being established in forest species sufficiently to meet the statutory definition of "forest land").

These maps would be closely linked to existing data sets:

- already publicly available information (e.g. the fact land is ETS registered is currently listed on land titles but not in a useful way to facilitate investment decisions);
- the maps used in New Zealand's international reporting of greenhouse gas emissions and removals, ensuring alignment with international emissions accounting.

Next steps:

Should this proposal be agreed, regulations would be developed, and the public consulted, to support definitive land classification by the Crown through published maps. Developing these maps will require investment from the Crown, and will take time to deliver, but would be a considerable improvement for ETS participants.

Benefits:

The public will know what land is currently defined as pre-1990 or post-1989 forest land, and which land would be eligible to be registered as post-1989 forest land if established in forest. This would enable awareness of any ETS impacts on land ownership, and remove a barrier to investment in new post-1989 forests.

Consultation Questions:

30. Do you agree that publicly available maps are the best way to provide more certainty on forest eligibility in the ETS? If you agree could you please list how much information the map should contain (e.g. just land eligibility, unit balances etc). If you disagree could you please provide the reasons why?
31. Would you be comfortable with your information on the maps being publicly available?
32. How would you see the information in these maps interacting with other publicly available maps?

2. Options for improving the deforestation offsetting process for pre-1990 forests.

We consider the current offsetting implementation process could be improved and made more flexible by:

- extending the timeframe for all users of offsetting to up to four years after clearance[15] or the application is approved. This provides a standard timeline for all forest owners, independent of what is happening with the forest land.
- creating the ability to redefine the areas the application applies to, while it is live. The forest owner will be able to adjust the pre-1990 area to be deforested and the proposed offsetting area within a single application (to allow for changes in deforestation intent and forest establishment success).
- allowing the ability to carry-over "unused" offset forest between sequential applications (e.g. if a participant were to plant 20 hectares more than they needed, it could be counted against the next application).
- making clear that only the deforestation not covered by the new forest requires that units be surrendered (moving away from the current "all or nothing" approach).
- technical fixes to clarify land status and other drafting.

Consultation Questions:

33. Do you agree with the options for improving the deforestation offsetting process for pre-1990 forests? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

34. Have you considered using the current offsetting rules for pre-1990 forest? If so did you face barriers to using offsetting and could you list them?

Context:

Pre-1990 forest offsetting was available in the ETS from 2013 to reduce the cost of converting pre-1990 forest land to other uses, by allowing a forest of equivalent area and carbon stock to be planted elsewhere.

Providing pre-1990 forest offsetting to the owners of plantation forests is useful to land owners as it enables them to move forests from where they were suited in the past to locations where they are more suited now. For example, a farmer may have brought part of a neighbouring property and the forest planted by the previous owners would better fit into farm management plans if it was moved to a new part of the farm. Offsetting would reduce the cost of making this change, and aid the farmer in complying with wider environmental commitments.

Since 2016 a number of applications have been approved, but concerns have been raised that the current rules are inflexible which significantly increases the risk to land owners using this rule. This inflexibility results from the following:

- There is no ability to amend the areas to be deforested or planted after an application is approved (e.g. this would be necessary if parts of the land planned for conversion to pasture are found to be unsuitable after the pre-1990 forest is harvested).
- The exact and entire offsetting area must be successfully planted in sufficient forest species to qualify as forest land. The risk is that tree seedlings may fail in parts of the area and, even if they are replanted, the whole area may not establish. The need to establish the entire forest means land owners cannot undertake a sensible risk mitigation option of "plant a bit extra" as this would be considered part of the area that needs to be established.
- Within the statutory two year timeframe if any of the deforested land is converted, conversely if the land is not converted, there are four years to do this.
- If any part of the offsetting application fails the entire application is revoked with participants exposed to significant financial risks as they must surrender NZUs for the full carbon liability for all deforestation (currently around $13,000 per hectare at $20 per/NZU, and any penalties applied). Failing to establish 0.2 of a hectare of new forest would mean the pre-1990 forest owner would be liable for all deforestation in a 100 hectare application ($1.3 million).

Benefits:

Making these changes will provide land owners with more flexibility in applying the offsetting regime to their particular circumstances. It also strikes a balance between flexibility for the land owner to manage their land for most appropriate land uses with the Crown's ability to ensure the integrity of NZUs and the ETS.

15 Note that clearance is different from conversion. This four years would apply provided the land remains forest land or is temporarily unstocked.

3. Improving the tree weed deforestation exemption process for pre-1990 forests.

We propose to put the majority of operational detail (e.g. timelines for the removal of the tree weeds) into the regulations. This will make it easier for the Crown to update the rules to ensure they remain fit for purpose. We also propose to allow areas of pre-1990 forest that have received a Forest Allocation Plan allocation of NZUs to be able to apply for an exemption.

Context:

The spread of wilding coniferous trees, or tree weeds, is a significant environmental and conservation issue in New Zealand. Wilding conifers cover more than 1.8 million hectares of land (6.7 percent of New Zealand's land area) and are spreading at an estimated rate of five per cent per year.

Wilding conifers are trees that:

- produce cones instead of flowers;
- are not indigenous to New Zealand;
- begin growing through natural spread – seeds are self-sown by the wind; and
- are growing outside managed conifer plantations (pine and fir forests).

In the wrong place they are a major threat to our ecosystems, land and farms. They compete with native plants and animals for sunlight and water, and can significantly alter natural landscapes.

In the CCRA, tree weeds are trees that are defined or designated as either a pest, in a pest management strategy under the Biosecurity Act 1993, or a tree weed listed in the Climate Change (Forestry Sector) Regulations 2008.

The ETS provides for the deforestation of pre-1990 forest land to be exempted from deforestation emissions where the forest species is a tree weed. This reduces a land owner's cost of controlling tree weeds.

However, current operational settings are a barrier to effective tree weed management as the exemption process is highly prescribed and has limited flexibility.

Also, exemptions can't be applied for pre-1990 tree weed forest land that received an allocation of units under the Forestry Land Allocation Plan. This prevents the effective control of these forests across large areas (e.g. there may be an area ineligible for the exemption in the middle of a wider exempt area).

Operational changes have been identified that will reduce unnecessary processes, and make it easier for land owners to obtain an exemption and comply with its conditions.

Areas of tree weeds that are post-1989 forest cannot be registered into the ETS. This means they are not eligible to earn carbon credits, and have no deforestation liability if removed.

Benefit:

To simplify the tree weed exemption process so that the eradication of tree weeds is not constrained.

Without these changes existing pre-1990 tree weed exemption provisions will continue to limit, or impose unnecessary costs on, efforts to manage tree weed spread. This will lessen the long-term effectiveness of management and eradication programmes.

Consultation Questions:

35. Do you agree with the proposal to improve the tree weed deforestation exemption process? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.
36. Have you attempted to control tree weeds on your land and, if so, did you face any barriers? Could you please include any suggestions for how the process could be made easier?

4. Exemptions for less than 50 hectare blocks of pre-1990 forest land.

It is proposed that where land was multiply-owned on 1 September 2007, the current professional trustee or trustees (who may have been appointed at any time), may apply for an exemption for pre-1990 forest land contained within that land title, provided that the area of pre-1990 forest land contained in the title was less than 50 hectares on 1 September 2007. It is proposed to use the title, rather than the trustee for the less than 50 hectares test as trustees often sit on multiple trusts. We are, however, uncertain on how to provide a definition of multiply-owned land that can be applied to all land owners, and seek your view on what this threshold should be.

We also propose to extend the ability to apply for an exemption to any agent appointed by the Māori Land Court (under Te Ture Whenua Māori Act 1993).

All other conditions will remain the same (e.g. land that has received forest allocation plan units will be excluded).

Context:

Since 2012, people who owned less than 50 hectare areas of pre-1990 forest land have been able to apply for the land to be declared exempt from deforestation liabilities. The purpose of this exemption was to exempt the many owners of small blocks of pre-1990 forest from having to comply with the ETS, and to reduce the Government's administrative burden.

The likely emissions from the deforestation of small holdings was expected to be very small in relation to the expected total deforestation emissions. To date exemptions have been granted to around 16,500 hectares of forest.

In each application the forest area also had to be owned on 1 September 2007 by a person or persons who, along with any associated person, signed a statutory declaration that they owned in total less than 50 hectares of pre-1990 forest land. The applications had to be signed by all legal owners of the land on 1 September 2007. Part of the reasons these conditions were put in place was to manage the risk that land owners would change their ownership structures to access the exemption.

Meeting these conditions has been a challenge when blocks of land have many legal owners, particularly Māori freehold land under Te Ture Whenua Māori Act 1993 where there may be more than 200 owners. This is mainly because the ownership record may not be up to date, and it may be difficult to locate and contact all the registered title owners. This led to some blocks being unable to get an exemption.

It is recognised that for Māori freehold land, there are two cases where the land was multiply-owned on 1 September 2007 but where an exemption may be more easily applied for as the situation has changed:

- The land owners have appointed trustees after 1 September 2007, having complied with the requirements of the Te Ture Whenua Act 1993.
- Where the land remains outside a trust, but an agent has been appointed by the Māori Land Court (under Te Ture Whenua Māori Act 1993).

Benefit:

To allow owners of "less than 50 hectare" blocks of pre-1990 forest land who were unable to practically obtain an exemption in 2012, to now be eligible for an exemption.

Consultation Questions:

37. Do you agree that a generic threshold for using exemptions for less than 50 hectare blocks of pre-1990 forest land should be 10 owners on 1 September 2007? If you disagree could you please include what number of owners you would set it at and why?
38. Do you agree that any subsequently appointed trustee or agent should be able to apply for the above exemption (provided it has met the statutory requirements under Te Ture Whenua Maori Act 1993)? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

5. A simpler process for Section 60 exemptions.

We propose that the legislation makes it explicit that section 60 exemptions can be granted for activities which occurred prior to the Order in Council. For forests, these exemptions cover the deforestation of pre-1990 forest land.

Section 60 exemptions are often granted after deforestation has already occurred. While it is acceptable to apply the section 60 exemptions to deforestation events that have already occurred in certain circumstances, this part of the CCRA is quite ambiguous. This can create challenges when drafting the Order in Council to give effect to the Minister's decision.

Context:

Section 60 is a provision in the CCRA which allows for an exemption to be granted from ETS obligations, under certain circumstances. This process requires the Minister for Climate Change to be satisfied that certain conditions are met, and allows a participant to be exempted from some or all of an activity and not have to surrender the emissions liabilities. These conditions include the Minister being satisfied or having regard to:

- the exemption being granted does not materially undermine the environmental integrity of the ETS;
- the costs not exceeding the benefits of granting the exemption; and
- the alternatives to the exemption.

Benefit:

To provide quicker resolution and greater certainty to pre-1990 forest land owners about what their obligations may be.

Consultation Questions:

39. Do you agree with the proposal for a simpler process for Section 60 exemptions? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

OPERATIONAL CHANGES INFLUENCED BY AVERAGING

1. Redefining Mandatory Emission Return Period

We propose that a shorter Mandatory Emissions Return Period (MERP) of three years is set to bring the ETS into alignment with our international reporting. This shorter "mini-MERP" would be designed to reduce the cost on the forestry participant (e.g. owners with more than 100 hectares of forest would not be required to undertake the Field Measurement Approach for this return). The timing of the mini-MERP (2018-2020 or 2023-2025), would be driven by the timing of the introduction of averaging (if introduced). A Mini-MERP ending in 2020 would make averaging simpler to introduce from 2021.

Context:

The Act defines the MERP as the first Kyoto Protocol Commitment Period (2008-2012), the five-year period beginning 1 January 2013 and each subsequent five-year period after that.

ETS post-1989 participants have the following responsibilities linked to MERPs:

- they must submit a Mandatory Emissions Return (MER) once every period; and
- Field Measurement Approach[16] (FMA) participants must collect forest data once every period so that a participant specific carbon lookup table can be generated for use in the mandatory return.

The current MERP concluded in 2017, with the third MERP scheduled to run between 2018 and 2022. However the current MERP isn't aligned to New Zealand international emission reduction targets (both 2020 and 2030 targets).

Some options for the introduction of averaging require the participants and the Government to know the carbon stock in post-1989 forests. As this information is gathered and reported to Te Uru Rākau at the end of the MERP, introducing averaging once this has happened will probably be simpler.

Benefits:

These changes will align MERPs to New Zealand's international emission reduction targets, and to the proposed introduction of new forestry carbon accounting rules.

Consultation Questions:

40. Do you agree that a mini-MERP is the best way to align participants' ETS obligations with New Zealand's international emissions targets? If you disagree could you please include what alternatives to a mini-MERP you would propose?

16 Post-1989 forestry participants who have registered 100 hectares or more are subject to the Field Measurement Approach.

2. Deforestation offsetting for post-1989 forests

Context:

To provide greater land use flexibility, and help make ETS participation more attractive, deforestation offsetting could also be made available for post-1989 forests.

Currently owners of post-1989 forest land can voluntarily remove their land from the ETS, or if they deforest they must deregister and remove the land from the ETS. In both cases they have to then surrender the NZU balance of the affected land.

Under the current carbon stock change accounting regime, deforestation offsetting is unlikely to be attractive because forest owners will generally deforest after harvesting when the unit balance is zero or low.

But under the proposed "averaging accounting" regime, where a unit balance equal to the level of long-term average carbon stock would have to be surrendered if the land is deforested after harvest, offsetting would be more attractive as planting an equivalent forest is likely to be a cheaper option.

More flexible land use could increase competition for, and the price of, suitable forestry land. But the demand for offsetting land is expected to be only a small proportion of the total land available for afforestation.

Benefit:

To make ETS participation more attractive and to provide greater land use flexibility.

Consultation Questions:

41. Are you comfortable with the operational detail for post-1989 offsetting being largely the same as pre-1990 offsetting?
42. Which yield table do you think should be used to define the carbon equivalence of the new forest?
43. Should the land the new (offset) forest is planted on be differently recorded from pre-1990 forest offset land? If so could you tell us why? Could you also include if you have any other input regarding this proposal.

3. Extending section 60 exemptions to post-1989 forest land

The proposal is to allow the application of section 60 to post-1989 forest land that is subject to averaging accounting, and permanent post-1989 forest land.

Context:

Section 60 is a provision in the CCRA that allows for exemptions to be granted from mandatory ETS obligations. To grant an exemption, the Minister for Climate Change must be satisfied certain conditions are met, and consider a number of factors in their decision.

Under certain conditions Section 60 of the Act allows the Minister to recommend that the Governor General grant exemptions from ETS liabilities. It's used when costs to participants are disproportionately against the intent of the ETS. So far there have been three forestry applications.

Each case application is considered on its own merits and the Minister must be satisfied that the order will not materially undermine the environmental integrity of the ETS and that the costs don't exceed the benefits.

Section 60 currently applies to Schedule 3 activities, but doesn't cover Schedule 4 activities i.e. post-1989 forests. These forests can also be affected by unanticipated issues, so there is an opportunity to extend section 60 to include them.

Benefit:

To allow post-1989 forestry participants to be eligible for exemptions under section 60 for unanticipated events.

Consultation Questions:

44. Do you agree with extending Section 60 exemptions to post-1989 forest land? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

4. Cost recovery

The proposal is that powers are included in the CCRA to allow the cost recovery framework to be extended to all relevant parts of the ETS.

The details of the cost recovery settings, including testing with the sector, would be developed once the detailed decisions on accounting are made.

Context:

Currently, the administering agencies recover some of their costs from ETS participants, however the cost recovery regime is inconsistent and incomplete. An example of this is the recovery of Te Uru Rākau's costs of assessing land for pre-1990 forest offsetting applications and post-1989 forest registration. Both of these provide a benefit to the forest owner[17], and require land to be assessed to the similar standard, and to similar criteria. Pre-1990 forest offsetting is free, while post-1989 forest is partially cost recovered.

Benefit:

To appropriately allocate the costs of operating between the Government and the forestry sector.

17 Land users using the pre-1990 forest offset option face a lower cost of deforestation as they convert land uses, while post-1989 forest owners earn income from the carbon stored in their forests.

Consultation Questions:

45. Do you agree with the proposed change to extend the cost recovery framework? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

1.Simplifying transfers of post-1989 forest

It is proposed to treat executors of wills as if they were the registered participants of the land subject to the wills.

Context:

When post-1989, ETS registered forest land is transferred, such as being sold, ETS participation transfers to the new land owner or forestry right/lease holder. There are various forms of transfer, collectively termed "transmissions of interest" under the CCRA.

Whenever there is any change in legal ownership (except when less than 40 percent of the members of an unincorporated body change), the parties involved must notify the EPA and submit an emissions return within 20 working days[18] of the date of transfer.

Compliance with these requirements is currently low which results in Te Uru Rākau trying to find a way to complete the transfer and comply with the CCRA. This is expected to be improved using measures such as targeted guidance to professionals involved in land transactions and trust management.

A way to simplify the transfer process would be to treat executors of wills as if they were the registered participants of ETS registered land subject to the wills. This would remove the unnecessary step of Te Uru Rākau registering executors as participants. The transfer of participation would be recorded when the land is transferred to the will beneficiary.

Benefit:

To simplify the process for transferring post-1989 forest land, and reduce compliance costs for participants and administrative costs for Te Uru Rākau.

18 **http://www.legislation.govt.nz/act/public/2002/0040/latest/DLM1662782.html**

Consultation Questions:

46. Do you agree with the proposal to treat executors of wills as if they were the registered participants? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

2. Interested parties notification when land is added or removed

It is proposed that a more efficient process for updating contact details would be for participants, rather than the EPA, to notify interested parties when participants add or remove land.

Context:

If a land owner is a post-1989 forestry participant, the holder of a forestry right, or lease over the land is considered to be an interested party under the CCRA. Similarly, if a forestry right or lease holder is the participant, then the land owner is an interested party.

When a participant adds or removes land then the EPA must notify the interested party.[19] However, interested parties are not required to notify the EPA if they change their contact details which means Te Uru Rākau must find the new contact details of interested parties when needed, which can be difficult and time consuming.

Benefit:

The proposed change is more efficient and is in the commercial interests of both parties.

19 **http://www.legislation.govt.nz/act/public/2002/0040/latest/DLM1662781.html** (6 and 7).

Consultation Questions:

47. Do you agree with the proposed change for the notification of interested parties? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

3. Reconfiguration of carbon accounting areas

Provide a new process in the Act that allows reconfiguration of carbon accounting areas (CAAs) without cost to a participant.

Context:

Post-1989 ETS participants are allowed to reconfigure (subdivide or merge) their CAAs. Currently if CAAs are removed and the same land re-registered within 20 working days, the participant must surrender the units that have been issued to the land. They can then only regain units issued in the current five year emissions return period. If the land was registered in a prior five-year period, the participant does not regain the same amount of units that were surrendered.

If averaging accounting is implemented, participants may wish to reduce their number of CAAs, because the "liability cap[20]" applies at a CAA level i.e. emissions from harvesting in a CAA are capped by the number of units issued to that CAA. With averaging, reporting of harvesting emissions is not required, so fewer CAAs are needed.

Benefit:

This change will align the Act with policy intent and remove unintended losses for participants.

20 Sections 190 and 191 for the CCRA limit the number of units that need to be repaid for a carbon accounting area (or part thereof) to the number received for that CCA.

Consultation Questions:

48. Do you agree with the proposal to allow reconfiguration of carbon accounting areas (CAAs) without participant cost? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

4.Timing of deforestation

We propose extending section 181 of the CCRA to any pre-1990 forest land owner who clears the land, but doesn't make the decision to deforest until later.

Context:

Section 181 also provides for cases where pre-1990 forest land is cleared by one owner, then transferred to a new owner who wishes to convert it to another land use.

In these cases the new land owner is treated as deforesting on the date of the first action on the land that is inconsistent with it remaining forest land, following the land transfer date.

Section 181[21] in the CCRA treats pre-1990 forest land as deforested on "the date it is cleared as part of the deforestation process." So, once the land is cleared, the owner must notify Te Uru Rākau within 20 working days and submit an emissions return in the first quarter of the next calendar year.

However, the current wording in Section181 doesn't fit well with situations where a pre-1990 forest land owner clears the forest land, leaves it as "temporarily un-stocked forest land" for several years[22], then decides to convert it to another land use. The deforestation decision is not made at the time that the land is cleared.

Benefit:

Current drafting results in a lack of clarity and potential costs to participants, and places an unnecessary enforcement burden on Te Uru Rākau. The amendment will allow pre-1990 forest land owners the option to change their land use within four years without being considered non-compliant.

21 **http://www.legislation.govt.nz/act/public/2002/0040/latest/DLM1662767.html**
22 Forest land that is harvested or otherwise cleared is treated as deforested if not re-established in forest within a 4, 10 or 20 year timeframe.

Consultation Questions:

49. Do you agree with the proposed change regarding timing of deforestation? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

5. Emissions returns for post-1989 forest land with mixed ages

Amend the CCRA to ensure that the emissions or removals from all trees in a CAA are included in an emissions return.

Context:

If a CAA consists of trees of more than one age with some trees planted in the current emissions return period, the emission return requirements determine the emissions return period as commencing at the age of the youngest trees in the CAA[23]. As a result the carbon contribution of older trees in the CAA is unintentionally excluded.

Benefit:

To help ensure all emissions and removals are accounted for when a carbon accounting area is registered.

Consultation Questions:

50. Do you agree with the proposal to ensure all emissions or removals from all trees in a CAA are included in an emissions return? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

6. Emissions returns for natural disturbance events

Exempt participants faced with a natural disturbance that permanently prevents re-establishment of forest from needing to fill out an emissions return when they remove the land under section 191 [24].

Context:

Post-1989 forestry participants with forest land affected by a natural disturbance event that permanently stops the forest being re-established (such as river or sea erosion) must submit an emissions return, even though they aren't obligated to surrender any units. This is considered unnecessary compliance.

Note, this proposal is different to the adverse events proposal in this discussion document on page 24. That proposal relates to the short term loss of carbon where a forest is re-established. Whereas, this proposal relates to those areas where a forest is unable to be re-established.

Benefit:

Removing this unnecessary compliance cost will reduce costs for participants and Te Uru Rākau, without undermining the integrity of the ETS.

Consultation Questions:

51. Do you agree with the proposal to change emissions returns for natural disturbance events that permanently prevents forest re-establishment? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

7 Removing unnecessary emissions return requirements

Amend section 179A to explicitly note the exemption from the notification and emission return requirements of section 56 and 65 of the CCRA.

Context:

It is unclear in the CCRA whether forest land with an approved offsetting application is also exempt from obligations to notify and submit an emissions return for a deforestation activity. Technically the participant may be required to pay for the deforestation twice, through meeting the criteria for two separate activities that require a mandatory emissions return.

Benefit:

Lower compliance costs and more clarity around the requirements for participants.

Consultation Questions:

52. Do you agree with the proposed change to remove unnecessary emissions return requirements? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

23 Other conditions apply if the CAA was constituted following removal of land from a CAA or a transmission of interest; or if an s189 (4A) return was submitted.

24 **http://www.legislation.govt.nz/act/public/2002/0040/latest/DLM1662790.html**

8. Excluding post-1989 forest land with tree weeds

Either

Amend the relevant section to exclude from the ETS all tree weed land registered after 2012;

Or

Amend the relevant section to exclude from the ETS all future registrations of tree weed land, or areas which become tree weeds, regardless of who applies to register.

Context:

Section 187(5) was added to the CCRA in 2012 with the intention of excluding tree weed land from being registered in the ETS. But to avoid making an amendment that had retrospective application, participants who had registered land containing tree weeds before this amendment were excluded. The problem is that those existing participants are able to add more land containing tree weeds. Currently, approximately five ETS participants are in this situation, but most have deregistered their tree weeds.

Benefit:

Improve the integrity of the ETS to meet its policy and environmental intent.

Consultation Questions:

53. Which of the two proposed options to exclude post-1989 forest land with tree weeds do you prefer? Could you please provide your reasons why?
54. Do you currently have any tree weeds registered?

9. Allowing the EPA to review its decisions

Amend the CCRA to allow the EPA to reconsider, revoke or replace a decision that is deemed incorrect, provided that the affected person is be consulted before amending a decision. The affected person, if dissatisfied with an amended decision, has existing rights of review under sections 144-146.

Context:

The EPA cannot initiate a review of their own decision, if it appears a mistake has been made, which may lead to it being unnecessarily disregarded. There is a precedent in the CCRA where the Minister has the power to review allocation plan decisions[25].

Benefit:

To reduce the complexity and cost of correcting decisions by the EPA.

Consultation Questions:

55. Do you agree with the proposal to allow the EPA to review its decisions? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

10. Deregistering forestry participants who cease to be legal entities or are persistently non-compliant

Allow the EPA explicit ability to deregister ETS participants and close their holding accounts if they cease to be legal entities or are persistently in breach of their obligations.

Context:

If post-1989 participants cease to be legal entities (such as where a company or partnership is wound up), the EPA is unable to deregister them, or close their holding accounts.

Some forestry ETS participants have been in breach of their obligations even after they have been penalised. For example approximately 200 post-1989 participants still have not submitted a mandatory return, or approximately 55 pre-1990 forest owners have not notified us they have ceased deforesting. We propose to enable the EPA to deregistered persistent non-compliers from the ETS activity.

Benefit:

Ensuring this function is included in the current legislation, and reducing participant non-compliance.

Consultation Questions:

56. Do you agree with the proposed change for deregistration of forestry participants? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

25 http://www.legislation.govt.nz/act/public/2002/0040/latest/DLM1662640.html

11. New rounding rules

Specify rounding rules in sections 190 and 191 that are consistent with the rounding rules in the forestry sector regulations.

Context:

Rounding rules for unit calculations are unclear when removing land from a CAA or repaying units from an offsetting land application. Participants are unsure whether to round up or round down when surrendering or repaying units in these situations.

Benefit:

Reduces confusion faced by participants about rounding rules.

Consultation Questions:

57. Do you agree with the proposed change to rounding rules? If you disagree could you please provide the reasons why? If there are other options you think we should consider please list them.

12. More flexibility in submitting mandatory emission returns

The proposal is to allow persons who have submitted a transmission of interest notification (i.e. either the transferee or transferor) to submit a mandatory emission return.

Context:

Currently only the registered post-1989 forestry participant can submit the mandatory emissions return due at the end of each five-year period. Situations can arise where an ETS transmission of interest process hasn't been fully completed by the last date for submitting the return. However, the transferor (who would be responsible for submitting the return) will no longer hold an interest in this land, and may be unwilling to undertake a return with no benefit to themselves.

Benefit:

Transferors may no longer exist or be willing to undertake an emissions return for land that they are transferring. Allowing the transferee to undertake this responsibility will mean the interested entity can submit the return.

Consultation Questions:

58. Do you agree with the proposal to allow more flexibility in submitting emissions returns? If you disagree could you please provide the reasons why? If there are other options you think we should consider please also list them.

13. Standardise timeframes for unit surrenders and payments

It is proposed to standardise the timeframe for surrendering/repaying units to 60 working days from the date on which a notice is sent to a participant.

Context:

Timeframes for surrendering or repaying units to the Crown range from 20 to 60 working days, depending on the scenario and type of emissions return that resulted in the surrender/repayment. Also timeframes for different transactions may be calculated from the date of submission, approval, or the date on which a notice is sent to a participant. This is unnecessarily complex for participants.

Benefit:

To reduce complexity in the ETS, and make compliance simpler for participants, the EPA and Te Uru Rākau.

Consultation Questions:

59. Do you agree with the proposal to standardise timeframes for unit surrenders and payments? If you disagree could you please provide the reasons why? If there are other options you think we should consider please also list them.

14. Require all returns to be "net" returns

It is proposed that participants' unit entitlements are made net of any unit surrender obligations that that participant may have.

Context:

Currently participants can claim units, even if they owe and have not surrendered units for emissions from other parts of their forest. Making returns "net" would resolve this issue, and would reduce the number of transactions that the EPA or Te Uru Rākau must manage.

Benefit:

To simplify unit transactions for participants, the EPA and Te Uru Rākau.

Consultation Questions:

60. Do you agree with the proposal to require all returns to be net returns? If you disagree could you please provide the reasons why? If there are other options you think we should consider please also list them.

15. Transfer of participation when forestry rights are granted

Make the transfer of participation optional when a land owner participant grants a forestry right or lease.

Context:

Post-1989 participants may want to grant a forestry right (e.g. as a mechanism to sell a cutting right to another party when the trees are close to harvest), but remain as the ETS participant. Currently when a forestry right or lease is granted, the ETS participation automatically transfers to the holder of the forestry right or lease. This automatic transfer may not suit either the current ETS participant or the forestry right/lease holder.

Benefit:

Corrects an unanticipated outcome, and provides more flexibility for participants.

Consultation Questions:

61. Do you agree with the proposed change regarding the transfer of participation when forestry rights are granted? If you disagree could you please provide the reasons why? If there are other options you think we should consider please also list them.

16. Planted and naturally regenerated native forest on cleared forest land

Amend the criteria so that they cover cases where cleared land is re-established in forest by a combination of planting trees and the natural regeneration of trees.

Context:

When forest land is cleared, it is treated as deforested unless it is re-established in forest within the timeframes specified in Section 179 of the CCRA. However, these criteria don't cover cases where the land is reforested by a combination of tree planting and natural regeneration. For example when tree weeds are cleared some land owners undertake restoration planting of native trees within a regenerating landscape. If this follows best ecological practice, it is likely to use a facilitated regeneration model which relies on the combination of planting and regenerating species.

Benefit:

Corrects an unanticipated outcome, and provides more flexibility for participants.

Consultation Questions:

62. Do you agree with the proposed change to cover cases where cleared land is re-established in forest by both planting and natural regeneration? If you disagree could you please provide the reasons why? If there are other options you think we should consider please also list them.

17. Exempt land eligible as post-1989 forest land

It is proposed to amend the CCRA so deforested exempt land that becomes forest land nine years or more after being deforested is considered to be post-1989 forest land.

Context:

In the ETS, pre-1990 forest land is declared exempt land if a "less than 50-hectare" or tree weed exemption is granted. In these cases, the Crown absorbs the cost of deforestation emissions because the benefits are considered to be greater than the costs.

Under the international accounting rules, New Zealand must account for carbon stock changes on deforested land that is reforested again i.e. it is treated the same as post-1989 forest land.

But in the ETS, if exempt land is to be eligible to be registered as post-1989 forest land, the land owner must surrender NZUs for that land as if it was not exempt. This requirement was included to prevent pre-1990 forest land owners from using the exemption process to convert pre-1990 to post-1989 forest land. At around $16,000 per hectare, this acts as a significant barrier to future afforestation (particularly after a change in land ownership) and best practice farm management.

Benefit:

This would better align the ETS treatment with international accounting, and increase the afforestation incentive for land owners, including farmers.

Consultation Questions:

63. Do you agree with the proposal that deforested exempt land is considered post-1989 forest land if it becomes forest land again nine years or more after being deforested? If you disagree could you please provide the reasons why?
64. As above, do you agree with the stand-down period of nine years or more? If not, what period do you think should be used?

9. What Happens Next?

HAVE YOUR SAY

Te Uru Rākau welcomes written submissions on the proposals contained in this document. All submissions must be received by Te Uru Rākau no later than 5.00pm on Friday, 21 September 2018.

There are three ways you can make a submission:

- Submissions should be sent directly to **etsconsultation@mfe.govt.nz**
- You can also submit online through our website: **www.mfe.govt.nz/consultation/ets**
- You can mail hard copies of your submission to:
  ETS Consultation
  Ministry for the Environment
  PO Box 10362
  Wellington 6143
  New Zealand

Please ensure if you mail your submission that it arrives by close of business at 5.00pm on Friday, 21 September 2018.

We will consider all relevant material in submissions, so you are welcome to provide information supporting your comments. Please make sure you include the following in your submission:

- the title of the consultation document;
- your name and title;
- your organisation's name (if you are submitting on behalf of an organisation, and whether your submission represents the whole organisation or a section of it);
- your contact details (such as phone number, address and email).

SUBMISSIONS ARE PUBLIC INFORMATION

Please note that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982. The Official Information Act specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the Official Information Act. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as if the information is commercially sensitive or if they wish personal information to be withheld. Te Uru Rākau will take such indications into account when determining whether or not to release information.

WHERE TO FIND FURTHER INFORMATION

Please go to **www.mfe.govt.nz/consultation/ets** to find further information, register for information sessions and make a submission.

10. Glossary of Terms

Above the average	Forests that have grown beyond their average crediting age on their first rotation. During further growth and subsequent rotations, the forest will be considered 'above the average'.
Accounting	In the ETS this refers to the counting of carbon stored in registered forests from their forest growth, and the amount emitted upon harvest or deforestation. This is equated into emissions units that are allocated to participants for forest growth, and required to be paid when emitting.
Accounting approach	In the ETS this refers to the method used to count and report our greenhouse gas emissions both domestically and internationally. The method used determines what activities and factors are considered in determining the domestic counting and the international reporting of New Zealand's emissions increases/reductions.
Adverse events	A natural event that either temporarily or permanently disrupts the growth of a forest by removing all or part of the trees in an area. Examples include wind throw, earthquakes, floods and landslides.
Afforestation	The establishment of forest on land that did not previously have tree cover, and will therefore be considered 'new forest' (see definition for new forest).
Age band	A range of harvest rotation ages for a forest types, where all the forests within that range will be allocated the same long term average carbon stock age. For example radiata pine forests that are harvested between ages 25 and 34 will be allocated the same 'average age'.
Allocation	The Crown gives emissions units to ETS participants who are eligible to receive units for their activities. For example an eligible forest owner who is registered in the ETS will receive be allocated emissions units from the Government in accordance with their forest growth.
Average age	The age at which a forest is deemed to have reached its long term average carbon stock for five or more rotations.
Average crediting age	The age to which a registered forest in the ETS will be able to earn emissions units up to for forest growth on its first rotation under the averaging accounting method.
Averaging	The averaging accounting method allocates emissions units to participants that reflect the amount of carbon stored in their forest over the long term (five rotations or more) and no longer requires repayment of emissions units on harvest. Once the forest reaches a carbon storage volume that is the equivalent to its long term average, unit payments would cease.
Below the average	Forests that have not yet grown to their average crediting age on their first rotation. While the forest growth is under this age, it is considered 'below the average'. It will continue to earn emissions units for growth until it reaches its average age.
Carbon Accounting Area (CAA)	CAA means an area of post-1989 forest land that— (a) is defined by a person who is registered or has applied to register as a participant under section 57 in relation to an activity listed in Part 1 of Schedule 4; and (b) meets any relevant criteria specified in regulations made under this Act; or (c) is constituted as a carbon accounting area by operation of section 188(7)(b) or 192(3)(b)
Carbon price	The cost of one emissions unit. One emissions unit represents one tonne of carbon dioxide equivalent.
Carbon sink	Natural and artificial processes which take carbon dioxide from the atmosphere and store it are known as 'carbon sinks'. Forests are a good example of a carbon sink, as they take in and store carbon dioxide through the process of photosynthesis.
Carbon Stock	The amount of carbon that is contained within a forest.

Carbon stock change	Addition or removal of carbon stock contained in a forest.
Climate Change Response Act (CCRA) 2002	A legal framework to enable New Zealand to meet its international obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.
Deforestation	(a) Means to convert forest land to land that is not forest land; and (b) Includes clearing forest land, where section 179 applies.
Deforestation liability	A participant must pay back any New Zealand Units owed when deforesting in the ETS.
Emissions Mitigation	The reduction or removal of emissions. In forestry, this specifically regards carbon sequestration, as forests act as a carbon sink.
Field Measurement Approach	A method used to calculate how much carbon is in post-1989 forest land (the 'carbon stock') from information you collect about your forest. Participants must use the FMA if a participant: • has 100 hectares or more of post-1989 forest land registered in the ETS at any time during a mandatory emissions return period, or • holds a covenant in the Permanent Forest Sink Initiative (PFSI) subject to the FMA, and have a forest sink area of 100 hectares or more at any time during a mandatory emissions return period.
Forest land	(a) means an area of land of at least one hectare that has, or is likely to have, tree crown cover from forest species of more than 30 percent in each hectare; and (b) includes an area of land that temporarily does not meet the requirements specified in paragraph (a) because of human intervention or natural causes but that is likely to revert to land that meets the requirements specified in paragraph (a); but (c) does not include— (i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less than 30 metres; or (ii) an area of land where the forest species have, or are likely to have, a tree crown cover of an average width of less than 30 metres, unless the area is contiguous with land that meets the requirements specified in paragraph (a) or (b)
Harvest liabilities	Post-1989 forests must pay back New Zealand Units when they harvest.
Harvested Wood Products (HWP)	Products made from timber, which act as a store of carbon.
Harvesting restrictions	A participant is restricted from harvesting their forest within specified legal parameters.
Interested party	If a land owner is a post-1989 forestry participant, the holder of a forestry right, or a lease holder over the land is considered to be an interested party under the CCRA. Similarly, if a forestry right or lease holder is the participant, then the land owner is an interested party.
Liability	In this context, liability means the requirement to surrender or repay New Zealand Units under the ETS.
Long term average	The age at which a forest will have stored its long term average carbon stock.
Low risk units	The balance of the units received and the units that need to be surrendered when the forest is harvested. E.g. an area of forest which has received 700 NZU, but will have a harvest liability of 600NZU could be said to have 100NZU of low risk units. Low risk units are occasionally referred to as 'safe carbon.'
Mandatory Emissions Return	All ETS participants are required to calculate carbon stock change for the Mandatory Emissions Return Period (MERP), notwithstanding participants who have previously submitted Voluntary Emissions Returns. Completed return forms must be submitted to MPI within six months of the end of a mandatory return period.

Mandatory Emissions Return Period (MERP)	Any of the following periods: (a) the first commitment period: (b) any subsequent commitment period or, if there is no subsequent commitment period,— (i) the five-year period commencing on 1 January 2013: (ii) each subsequent five-year period after the period specified in subparagraph (i)
Mini-MERP	A shorter Mandatory Emissions Return Period (see 91 and 92). A Mini-MERP is one of the operational changes proposed.
Nationally Determined Contribution (NDC)	How a country states its target under the Paris Agreement on Climate Change. The individually determined contributions that each specific country should make in order to reduce national greenhouse gas emissions and adapt to the impacts of climate change
New forest	This refers to forests planted on currently un-forested land from 1 January 2020
New Zealand Unit (NZUs)	A unit issued by the Registrar and designated as a New Zealand unit
Pre-1990 forest Offsetting (activity)	Under section 186B of the CCRA, unstocked land that the EPA has approved as offsetting forest land can be established in forest instead of paying NZUs for the deforestation liability of an equivalent area of pre 1990 land that an applicant intends to deforest.
Participant	In this context, it refers to a person, persons or entity that: • participates in a forestry activity; or • carries out an activity covered by the ETS/PFSI. A Participant must report on emissions (or on carbon captured) and may need to surrender units to cover their emissions or may receive an entitlement of units for carbon capture.
Permanent forest	A forest which will not be clear-fell harvested.
Permanent Forest Sink Initiative (PFSI)	A forest in the PFSI enters into a covenant with the Crown, which is registered against their land title(s). The covenant is in perpetuity, with the right to terminate after a minimum term of 50 years. Land owners are responsible for establishing and maintaining the forest. Limited harvesting is allowed on a continuous cover forestry basis. Currently administered under the Forest Act 1949.
Permanent post-1989	A proposed new activity in the Climate Change Response Act 2002 (CCRA). The key features of this proposal are: • the forest must remain as forest land for 50 years, and cannot be clear fell harvested, or otherwise completely cleared, within this time frame (effectively a 50 year limit on clear fell harvest); • Continuous canopy, or selective, harvest will be allowed in the permanent post-1989 activity provide the forest is not clear felled.
Post-1989	Post-1989 forest land is land which meets the forest land criteria, and: • was not forest land on 31 December 1989; or • was forest land on 31 December 1989 but was deforested between 1 January 1990 and 31 December 2007; or • was pre-1990 forest land that was deforested on or after 1 January 2008, and any ETS liability has been paid.
Pre-1990	Pre-1990 forest land: • was forest land on 31 December 1989; remained as forest land on 31 December 2007; and • contained predominantly exotic forest species on 31 December 2007. • Land that was indigenous forest land on 31 December 1989, and remained so on 31 December 2007, is not pre-1990 forest land and is not subject to ETS obligations.
Repay	In this context it refers to the payment of NZUs back to the Crown when the carbon stock of your forest has decreased.
Register	In this context; enter an area of eligible forest land into the ETS.

Rotation	The cycle of growth and felling or cutting of trees.
Rotation age	The growth period elapsed between the establishment of the forest and the felling or cutting of the same forest
Rotation age band	A specified age period (e.g. between 30 and 35 years) within which participants would need to harvest their forest
Slash	Any tree waste left behind after plantation forestry activities.
Status quo	The current approach or method used.
Surrender	The transfer of one or more units to the Crown surrender account in the Register to meet an emissions obligation.
Temporarily un-stocked forest land	In this context, this refers to forest land that has been cleared (e.g. harvest) but is expected to revert (e.g. be replanted or regenerate) to forest within the timelines of the CCRA.
The Act	Refers to the Climate Change Response Act 2002.
Transmission of interest	A participant either transfers land to a new participant, enters into a contract where the contract holder is the new participant, or a contract is terminated and the land owner or new contract holder is the participant.
Tree weed	A tree that is defined or designated as— (a) a pest in a pest management strategy under the Biosecurity Act 1993; or (b) a tree weed in regulations made under this Act.
Units	This means a Kyoto unit, a New Zealand Unit (NZU) or an approved overseas unit. Currently the ETS only transacts NZUs.
Yield tables/default tables	Pre-calculated values of carbon stock in forests, categorised by forest type, age and, for *Pinus radiata*, region. The values express the amount of the carbon dioxide removed from the atmosphere and stored in the forest, as well as the carbon that would be released back into the atmosphere due to harvesting. The values are expressed in tonnes of carbon dioxide per hectare.

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