

Impacts of the New Zealand Emissions Trading Scheme on Crown Forest Licensed Land

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FOREWORD

Maori have a significant stake in the forestry sector. With the return of the Crown forest licensed land to iwi in the Central North Island in July 2009, some 440,000 hectares of exotic forestland will be owned by Maori. Maori ownership is likely to increase to over 700,000 hectares (40% of the 1.8 million hectare exotic forest estate) over the next few years once the remaining Crown forest licensed lands are settled and returned to iwi.

In 1990, the Crown Forestry Rental Trust (the Trust) was established to receive the rental proceeds from Crown Forestry Licences and make the interest earned from the rental proceeds available to assist Maori in the preparation, presentation and negotiation of claims before the Waitangi Tribunal that involve, or could involve, Crown forest licensed land.

Crown forest licensed land is a valuable asset which claimant groups may wish to include in their settlement packages. Before deciding whether to include Crown forest licensed land in their settlement packages, however, claimant groups need to agree with the Crown on the value of the land. Generally this involves the claimant groups undertaking a thorough due diligence process early in the negotiations. To assist with this process, and subject to certain criteria being met, the Trust funds valuations of Crown forest licensed land.

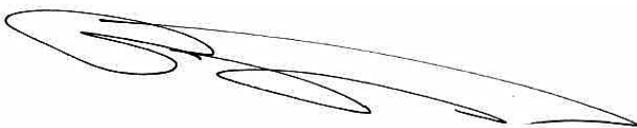
In addition to valuations, claimant groups also usually seek funding from the Trust for feasibility studies on the commercial potential and opportunities of alternative land uses for Crown forest licensed land. This additional information assists claimant groups to ascertain the future potential of the land and informs their decisions on the role of the Crown forest licensed land in their settlement packages.

One factor affecting the future potential and value of Crown forest licensed land is the New Zealand Emissions Trading Scheme (NZ ETS). It is important that claimant groups properly understand and assess the impact of the NZ ETS on Crown forest licensed land as they negotiate their settlement packages.

The attached report prepared by Buddle Findlay discusses how the NZ ETS works and how it applies to Crown forest licensed land. A companion report prepared by Burleigh Evatt Consulting Ltd, *Economics of Alternative Land Use on Crown Forest Licensed Land*, is available on the Trust website. It provides a comparative analysis of the economics of a number of pastoral enterprises with that of forestry and commercial options for the future management of Crown forest licensed land taking into account the impacts of the NZ ETS.

The Trust believes that these reports will provide claimant groups with a comprehensive introduction to the impacts of the NZ ETS on Crown forest licensed land, including the potential for claimant groups to have NZ ETS obligations as future owners of the land, and on the economics of alternative enterprises and land uses. While claimant groups always need to consider the specific circumstances relating to their own claims, these reports will assist claimant groups to seek the necessary information during the negotiation stage, and ultimately make informed decisions on the merits of selecting Crown forest licensed land as part of their commercial redress package.

This report was originally published in May 2009. Substantial amendments to the NZ ETS have since been made, following a review of the scheme by the National-led government. This version of the report reflects those changes.



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Disclaimer:

This report has been prepared for information purposes only and does not constitute legal advice. Any person who wishes to understand how any matter covered in this report applies to a particular set of circumstances should seek specific legal or other advice in relation to those circumstances. While every endeavour has been made to ensure that the content of this report is accurate, no liability can be accepted for any incorrect statement or omission or for changes to policies or processes outlined in this report.

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Executive summary

The Emission Trading Scheme

The New Zealand Emissions Trading Scheme (NZ ETS) is established by the Climate Change Response Act 2002. Emissions trading is a market-based regulatory instrument designed to reduce pollution. Participants in the scheme must hold a number of “emissions units” equal to the volume of emissions they produce. Participants needing to increase their emissions must buy additional units from those emitting less. The sellers, in selling their surplus units, are rewarded for having reduced emissions. This creates an incentive to reduce emissions and therefore impacts positively on the environment.

Emissions units are the “currency” traded within the ETS. The New Zealand Emissions Unit Register is an electronic register established to record the holding and transfer of emissions units. Emissions units can be held and traded within New Zealand or overseas.

Forestry in the Emission Trading Scheme

The forestry sector was included in the NZ ETS from 1 January 2008. There are two types of forest land for NZ ETS purposes:

- (a) **Pre-1990 Forest Land:** forest land consisting of predominantly exotic forest, which was established before 1 January 1990, and which remained forest land on 31 December 2007; and
- (b) **Post-1989 Forest Land:** forest land consisting of exotic or indigenous forest, which was established after 31 December 1989 on land that was either not covered by forest on that date, or covered by forest on that date but deforested before 1 January 2008.

These two types of forest are treated very differently in the NZ ETS. In summary, their treatment is as follows:

- (a) Landowners of Pre-1990 Forest Land are able to harvest and replant their forests without joining the NZ ETS or incurring any liabilities. But if landowners decide to “deforest” (i.e. change land use from forestry to an alternative, non-forest land use) they automatically become participants in the NZ ETS and must report on the level of deforestation and meet the associated liability. In either case, landowners are not able to earn any credit for the carbon stored in the trees.
- (b) The owners of Post-1989 Forest Land, or the owners of the trees on the land, are not required to become participants in the NZ ETS but may choose to do so. They are able to earn credit for any increases in stored carbon, but must also meet the liabilities associated with any decreases in carbon stored in the trees.

Crown Forest Licensed Land is predominantly (if not exclusively) Pre-1990 Forest Land. NZ ETS liabilities will therefore only arise if the land is deforested. In the case of Crown Forest Licensed Land that the Crown has returned to Maori ownership, the Maori owners will be liable for any deforestation that occurs. This is because the licensee under a Crown Forestry Licence has no ability to deforest the land (that is, to convert the land to another land use). Under the terms of the licence, the licensee is restricted to undertaking forestry activities only, which includes harvesting, but does not have the ability to change land-use from forestry to an alternative, non-forest use, unless agreed with the Maori owners. The licensee must return control of the land to the Maori owners in a state suitable for the re-establishment of forest. So, although a licensee may harvest the timber on the land, they will not have deforested for the purposes of the NZ ETS.

Once control of the land has been returned to its Maori owners, it is the Maori owners who decide how to use the land. If the Maori owners decide to use the land for a use other than forestry (i.e. to deforest the land), they will be liable under the NZ ETS for the subsequent deforestation.

A pool of approximately 55 million New Zealand Units (NZUs) will be allocated to Pre-1990 Forest Land owners as partial compensation for the reduction in land value resulting from the imposition of liability for deforestation. From this pool 18 NZUs per hectare will be allocated for Crown Forest Licensed Land returned to Maori ownership as part of a Treaty of Waitangi settlement on or after 1 January 2008. Crown Forest Licensed land returned to Maori before 1 January 2008, which was still Pre-1990 Forest Land on that date, will attract either 39 or 60 NZUs per hectare depending on when settlement took place.

1. Purpose and structure of report

This report describes how the New Zealand Emissions Trading Scheme (“**NZ ETS**”) applies to Crown Forest Licensed Land.

Parts 2 and 3 provide context for the report by first presenting an overview of the NZ ETS, and then outlining the terms and conditions of Crown Forestry Licences that are relevant to determining the NZ ETS rights and obligations of the owners and licensees of Crown Forest Licensed Land. Parts 4 and 5 then detail the relevant components of the NZ ETS that apply to Crown Forest Licensed Land and the associated rights and obligations that arise.

Parts 6 and 7 contains further detail about the emissions trading market and how it is designed to work. In particular, part 6 lists the emissions units (i.e. the “currency”) that can be traded within the NZ ETS and provides a summary of the processes for buying and selling emissions units and relevant market factors, such as the likely prices and quantity available for sale. Part 7 describes the income tax and GST treatment of these units.

Finally, Part 8 discusses regulatory uncertainty with respect to the NZ ETS, and the possibility of changes to the legislation establishing the scheme arising from the current state of international climate change negotiations and New Zealand’s domestic political landscape.

2. The New Zealand emissions trading scheme

The NZ ETS is established by the Climate Change Response Act 2002 (“**CCRA**”). Its purpose is to help New Zealand meet its international climate change obligations by reducing New Zealand’s greenhouse gas emissions below business-as-usual levels.¹

This part of the report provides an overview of how the NZ ETS works and its core design features.

2.1 Why emissions trading?

Emissions trading is a market-based regulatory instrument designed to reduce pollution. Participants in the scheme must hold a number of “emissions units” equal to the volume of emissions they produce. Participants needing to increase their emissions must buy additional units from those emitting less. The sellers, in selling their surplus units, are rewarded for having reduced emissions. This creates an incentive to reduce emissions and therefore impacts positively on the environment.

The introduction of the NZ ETS reflects New Zealand’s status as a Party to the Kyoto Protocol, which establishes a global emissions trading scheme. The Protocol sets greenhouse gas emission quotas for each Party, on average requiring Parties to reduce emissions 5.2% below 1990 levels in the period from 2008-2012. If New Zealand’s emissions exceed its quota,² the New Zealand Government must procure additional emissions units to match the increase.

The NZ ETS in effect devolves the Government’s Kyoto Protocol liability to emitters by requiring them to acquire emissions units to cover their emissions. Emitters then surrender those units to the Government, which the Government can use to meet its Kyoto liability. It is hoped that the price signal this creates for emitters (and throughout the wider economy) will lead to emission reductions that may not otherwise occur.

2.2 Core design features of the NZ ETS

2.2.1 Scheme coverage

The NZ ETS covers all sectors of the New Zealand economy, and emissions of all six greenhouse gases covered by the Kyoto Protocol.³ The following table shows how sectors are staged into the scheme over the period from 2008 to 2015:

¹ CCRA, section 3(1)(b) (the purpose of the Act is to “provide for the implementation, operation, and administration of a greenhouse gas emissions trading scheme in New Zealand that supports and encourages global efforts to reduce greenhouse gas emissions by assisting New Zealand to meet its international obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and by reducing New Zealand’s net emissions below business-as-usual levels”).

² New Zealand’s quota, or “Assigned Amount”, is approximately 309 million tonnes of emissions. This is equal to New Zealand’s emissions in 1990 multiplied by 5, since the first commitment period consists of 5 years (2008-2012).

³ The six gases covered by the Kyoto Protocol are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆).

Table 1: Sector coverage in the NZ ETS

Year	Sector	Individual Participants in the NZ ETS
2008	Forestry Deforestation emissions from forests planted before 1990	Landowners or third parties where the decision to deforest is vested in the third party
	Forestry Emissions and removals from forests planted from 1990 onwards	Option for landowners, forestry right and lease holders Parties to a Crown conservation contract
2010 (mandatory reporting from 1 Jan; unit surrender obligations from 1 July)	Liquid fossil fuels (mainly used in the transport sector)	Owners of fuel when the fuel is removed from the refinery for use within New Zealand - Option for large users of jet fuel (e.g. airlines)
	Stationary energy Coal Natural gas Geothermal fluid Used oil, waste oil, used tyres, waste Crude oil products	Miners and importers of coal and natural gas - Option for large users of coal and natural gas (e.g. electricity generators) Users of geothermal fluid to generate electricity or industrial heat Combustors of used oil, waste oil, used tyres, or waste to generate electricity or industrial heat Petroleum refiners
	Industrial processes Iron and steel Aluminium Clinker or burnt lime (used in cement production) Glass Gold Cable	Producers and manufacturers of industrial products
2013 (early reporting from 2011)	Waste	Operators of disposal facilities
	Synthetic gases (HFCs, PFCs and SF ₆)	Importers of synthetic gases, including importers of certain goods containing synthetic gases Manufacturers of synthetic gases
2015 (early reporting from 2011)	Agriculture (emissions from on-farm fertiliser use and livestock)	Importers and manufacturers of synthetic fertilisers containing nitrogen Dairy, meat and wool processors Exporters of live cattle, sheep and pigs Egg producers (Option to make farmers/landowners the participant from 2013 onwards).

A “participant” is an individual, company or other entity with obligations under the NZ ETS. Most participants have obligations to surrender emissions units to the Government, but some may earn units for carbon removed from the atmosphere by their activity or for carbon not emitted. These activities are known as “removal activities” and include sequestering carbon in forests planted from 1990 onwards.

2.2.2 Participant obligations and entitlements

Parts 4 and 5 of the report outline the specific obligations and entitlements that Maori owners of Crown Forest Licensed Land will have in particular situations. In general, however, participants’ core obligations and entitlements are to:

- (a) have an emissions unit holding account;
- (b) monitor and calculate emissions and removals from their activities in accordance with methodologies prescribed in regulations;
- (c) report annually by 31 March of each year the emissions and removals that resulted from their activities in the previous year (except for participants carrying out removal activities, who have specific reporting rules);
- (d) surrender one emissions unit for each tonne of emissions by transferring the units to the Government (or earn one emissions unit for each tonne of removals), except during the pre-2013 transitional period as outlined below; and
- (e) retain records showing their emissions and removals for 7 years in the case of non-forestry participants, and 20 years in the case of forestry participants.

2.2.3 Pre-2013 transitional period

Some transitional measures have been put in place to ensure a gradual transition to a price of carbon throughout the New Zealand economy. These transitional measures apply to participant obligations and entitlements in the period before 2013.

First, a 50% obligation applies to participants in the transport, stationary energy and industrial processes sectors. This means that participants in these sectors need only surrender one emissions unit for every two tonnes of emissions that result from their activities in the period from 1 July 2010 to 31 December 2012. The 50% obligation halves the NZ ETS cost these participants would otherwise face in the period before 2013, and therefore the price increases consumers would face for transport fuels and electricity.

The 50% obligation does not apply to participants in the forestry sector, who are still required to surrender one NZU for every tonne of emissions in the period before 2013. Similarly post-1989 Forest Land participants (discussed in part 4, below) are still entitled to receive one NZU for each tonne of carbon sequestered in forests in that period.

A further transitional measure is a NZ\$25 cap on the price of carbon before 2013. When surrendering units for emissions occurring before 2013, participants may choose to either surrender the units or to pay NZ\$25 per unit instead (or a combination of surrender and payment). The price cap applies to all participants, including those in the forestry sector, before 2013.

2.2.4 Compliance and enforcement

The CCRA gives the administrator of the NZ ETS powers to check participants' compliance with the scheme and take any necessary enforcement action where non-compliance is detected. The administrator of the NZ ETS is currently the chief executive of the Ministry of Economic Development, although the chief executive of Ministry of Agriculture and Forestry ("**MAF**") will administer the forestry and agriculture sectors under delegation. The Ministry for the Environment will administer the provisions relating to free allocation of emissions units and retain responsibility for overall NZ ETS policy development.

The scheme adopts a "self-assessment" approach under which participants are required to assess their own liabilities and entitlements and report those to the chief executive in an "emissions return". The chief executive of the responsible department then has a range of audit-type powers to verify that information contained in emissions returns is correct. In particular, the responsible chief executive can require information from participants relating to their activities, and appoint enforcement officers to enter land or premises to obtain information.

If the chief executive considers that a participant has submitted an incorrect emissions return, the chief executive may amend the participant's return. Where a participant has failed to provide an emissions return at all, the chief executive may assess the matters to be contained in a return on the participant's behalf. An amendment or assessment may be accompanied by a penalty notice where a participant has underestimated their liability to surrender units, overestimated their entitlement to units, or failed to surrender units by the due date.

A participant's failure to comply may also involve the commission of an offence, in which case the chief executive may bring offence proceedings, which may result in a Court imposing both a conviction and a further penalty.

Any person wishing to challenge a decision of the chief executive has rights of review and appeal.

2.2.5 Emissions units and linking the NZ ETS to the international market

Participants must surrender to the government a number of emissions units equal to their number of tonnes of emissions. Some participants receive emissions units for removal activities, and some will be freely allocated units. Those participants who do not receive emissions units, or who have greater emissions than the number of emissions units they receive, will need to buy emissions units from those with a surplus to surrender to the government. In that sense, emissions units can be seen as the "currency" that is traded within the ETS.

This part provides a general overview of the emissions units that can be traded, and the processes and conditions for doing so. Part 6 contains a more detailed description of the different types of emissions units and the mechanisms available for buying and selling them.

The New Zealand Emissions Unit Register ("**NZEUR**") is an electronic register established to record the holding and transfer of emissions units. Emissions units can be held and traded within New Zealand or overseas.

The NZEUR was originally established in 2002 to record details of emissions units created under the Kyoto Protocol.⁴ The NZ ETS legislation extended the scope of Part 2 to:

- (a) Create a New Zealand Unit (“**NZU**”) as the domestic unit of trade in the NZ ETS;
- (b) Define how NZUs are held, transferred, and surrendered for compliance purposes under the NZ ETS;
- (c) Enable linking of the NZ ETS to the international market for Kyoto units (participants may import and surrender Kyoto units for NZ ETS compliance purposes, and export NZUs through conversion into defined Kyoto units for overseas transfer); and
- (d) Enable linking of the NZ ETS to other countries’ domestic emissions trading schemes by regulation.⁵

The default position is that any Kyoto unit may be imported from offshore into the NZEUR and used by participants to meet their NZ ETS obligations. The CCRA provides two exceptions to this default position:

- (a) Assigned Amount Units (“**AAUs**”) may not be used by participants to meet their NZ ETS obligations unless the AAUs meet conditions and requirements prescribed in regulations,⁶ and
- (b) AAUs issued during the Kyoto Protocol first commitment period (2008-2012) may not be used by participants to meet their NZ ETS obligations in respect of emissions that occur after the first commitment period.

In addition, the Climate Change (Unit Register) Regulations 2008 apply the following restrictions:

- (a) no person may hold in the NZEUR an Emission Reduction Unit (“**ERU**”) or Certified Emission Reduction Unit (“**CER**”) arising from a project involving nuclear energy, or a long-term CER (“**ICER**”); and
- (b) participants may not surrender temporary CERs (“**tCERs**”) to meet their NZ ETS obligations.

Any person (i.e. not just NZ ETS participants) may open a holding account in the NZEUR. Once the person has a holding account, they are able to receive emissions units from other account holders in New Zealand or overseas. They may also apply to the Registrar to transfer the units to other account holders in New Zealand or overseas. This is subject to the restrictions outlined above, and some limits are placed on the general ability to export NZUs during the transitional period before 2013. In this period, only NZUs issued for forestry may be converted into AAUs and exported overseas, i.e. NZUs issued under the Pre-1990 Forest Land Allocation Plan or in respect of Post-1989 Forest Land. All other NZUs, such as those freely allocated to fishing quota owners, may not be exported.

⁴ There are 6 different types of Kyoto Protocol units: Assigned Amount Units (AAUs), Emission Reduction Units (ERUs), Certified Emission Reduction Units (CERs), Long-term CERs (ICERs), Temporary CERs (tCERs), and Removal Units (RMUs).

⁵ It does this by enabling regulations to specify certain “overseas units” as being approved for importation into and use in the NZ ETS (see part 6 for more information on approved overseas units).

⁶ CCRA, section 18CB. At the time of writing, no conditions or requirements have been prescribed in regulations.

2.2.6 Free allocation of NZUs

One of the more complicated and controversial aspects of the NZ ETS concerns the free allocation of NZUs to certain firms and individuals. Free allocation is intended to help lessen the impact of the NZ ETS on those who are eligible to receive assistance.

Eligibility for free allocation is not tied to NZ ETS participation. Some participants will get a free allocation of NZUs, and others will not. At the same time, some firms and individuals who are not NZ ETS participants will receive a free allocation of NZUs. Again, parts 4 and 5 of the report summarise the specific provisions most likely to apply to the Maori owners of Crown Forest Licensed Land. In general terms, however, allocation to individual sectors is as follows:

- (a) Forestry: approximately 55 million NZUs available to landowners of Pre-1990 Forest Land;
- (b) Emissions-intensive, trade-exposed industry: NZUs will be freely allocated to emissions-intensive, trade-exposed firms that meet certain eligibility requirements. There are two categories of emissions-intensity: high and moderate. Highly emissions-intensive firms receive a greater level of free allocation than moderately emissions-intensive firms. There is no cap on the total number of NZUs that may be allocated, but the allocation will be phased out from 2013;
- (c) Fisheries: 700,000 NZUs will be available to fishing quota owners before 2012;
- (d) Agriculture: NZ ETS participants in the agriculture sector are entitled to a free allocation of NZUs from 2015. Allocation is made on an intensity or output basis (as with emissions-intensive, trade exposed industry), and will be phased out from 2016. There is no cap on the number of NZUs that may be allocated.

Free allocation to emissions-intensive, trade-exposed firms will be halved in the pre-2013 transitional period, in recognition of the halved costs they will face during that time.

The CCRA requires the government to consult with affected parties about the precise rules concerning the eligibility for a free allocation, and specific individual or firm entitlements.

2.2.7 Treaty of Waitangi

The CCRA includes a Treaty of Waitangi clause. The clause requires decision-makers under the CCRA (i.e. the relevant Minister or the chief executive) to discharge the Crown's responsibility to give effect to the principles of the Treaty of Waitangi by consulting representatives of iwi and Maori who they consider have an interest in various specified matters.

The matters that representatives of iwi and Maori must be consulted about include:

- (a) the fishing and Pre-1990 Forest Land allocation plans;
- (b) the details of allocation and points-of-obligation for agriculture; and
- (c) the setting of emission reduction targets.

This clause also requires the review panel conducting the mandatory 2011 review of the NZ ETS (see section 2.4 below) to include at least one member with appropriate knowledge, skill and experience relating to Treaty principles and tikanga Maori. Furthermore, the terms of reference for the panel must incorporate reference to

Treaty principles. The panel itself, once established, must consult representatives of iwi and Maori with an interest in the review.

2.3 Secondary legislation

While the CCRA is very comprehensive in coverage, some significant aspects of NZ ETS implementation are contained in secondary legislation (e.g. regulations). The key areas of regulation are:

- (a) regulations containing methodologies governing the monitoring, calculation and reporting of emissions and removals;
- (b) allocation plans for the fisheries and forestry sectors;
- (c) regulations in relation to eligible industrial and agricultural activities;
- (d) Orders-in-Council moving the agriculture point-of-obligation from the processor level to the farm-level (see part 5, below); and
- (e) various orders exempting certain entities or classes of entity from incurring NZ ETS obligations.

At the time of writing, regulations have been made that:

- (a) set out requirements in relation to the NZEUR;
- (b) contain the requirements for participants in the forestry, liquid fossil fuels, stationary energy, and industrial processes sectors regarding the data and information they must collect, and for calculating emissions or removals from relevant activities; and
- (c) exempt certain entities from the NZ ETS.

2.4 2011 review and regulatory change

The NZ ETS is a new and relatively complex regulatory instrument and will be subject to change over time. The CCRA requires that there be a sequence of reviews of the operation and effectiveness of the NZ ETS, the first of which must be completed by the end of 2011. These reviews are likely to result in suggested improvements to the scheme's operation.

The precise nature of any suggested improvements will depend in part on the outcome of the international climate change negotiations. Part 8 of the report provides for detail on the current state of these negotiations and possible impacts on NZ ETS design.

3. Crown Forest Licensed Land and Crown Forestry Licences

This part concerns the nature of certain licensee⁷ interests created by Crown Forestry Licences. It has been prepared with reference to a template Crown Forestry Licence (“**Template CFL**”). This Template CFL was prepared in 1991 as a template for all Crown Forestry Licences to be subsequently granted by the Crown. It contains terms and conditions that we understand to be representative of the terms and conditions in all Crown Forestry Licences. Even so, any Party seeking to understand the impact of the NZ ETS on Crown Forest Licensed Land should consult the terms and conditions of the relevant licence.⁸

The specific focus of this section is on the scope of licensees’ rights to use Crown Forest Licensed Land and their obligations when returning control of the land to Maori. In other words, this report is concerned with Crown Forest Licensed Land that the Crown has returned to Maori ownership as part of a claim under the Treaty of Waitangi Act 1975, but which remains the subject of a Crown Forestry Licence. The key conclusion is that licensees may only undertake forestry activities on Crown Forest Licensed Land, and when returning control of the land to its Maori owners, must ensure that the land is suitable for the re-establishment of forest. The only exception is where the Maori owners have agreed that the land may be returned in any other state.

The relevant provisions of the Template CFL are sections 16 and 17.

Section 16 applies where the Waitangi Tribunal has made final recommendations that all the land subject to a particular Crown Forestry Licence be returned to Maori. When such final recommendations are given, the Crown is required by section 36 of the Crown Forest Assets Act 1989 to return the land to Maori ownership in accordance with the recommendations. The Crown is also required to give the licensee a termination notice stating that the relevant Crown Forestry Licence will terminate after 35 years. The new Maori owners replace the Crown as the licensor⁹ from the date the land is returned to Maori ownership, but the return of the land to Maori ownership does not otherwise affect the licence or the rights of the licensee.¹⁰

Clause 16.5 of the Template CFL stipulates that during the 35-year termination period, the rights of the licensee in respect of the land are restricted to:

using the land to exercise only such rights that are necessary to enable the licensee in accordance with accepted forestry practice to protect, manage, harvest and process the trees standing or lying on the land at the commencement of the 35-year termination period.

In other words, the rights of the licensee are restricted to forestry activities. The licensee has no right to use the land for any purpose other than forestry.

Under clause 16.7, the licensee must return control of any land to its Maori owners if, either at the commencement of the 35-year termination period or before it ends, the licensee no longer requires the land to protect, manage, harvest or process the trees that were on the land at the commencement of the period. The licensee is required to return the land in a state suitable for the re-establishment of forests, unless otherwise agreed by its Maori owners.

⁷ The Crown has granted a number of licences in relation to Crown Forest Licensed Land, which provide the “licensee” (i.e. the person in whose favour the licence is granted) with certain rights and obligations in relation to the land.

⁸ A list of all Crown Forestry Licences, and the licences themselves, are available from Land Information New Zealand (see <http://www.linz.govt.nz/crown-property/crown-forest-land/index.aspx>).

⁹ “Licensor” is the technical term for the Party granting the licence to the licensee.

¹⁰ Crown Forest Assets Act 1989, section 36(2).

Similarly, under clause 16.8, any land returned to the control of its Maori owners at the end of the 35-year termination period must be returned in a state suitable for the re-establishment of forests, unless otherwise agreed by its Maori owners.

Clause 17 of the Template CFL applies where the Waitangi Tribunal has made final recommendations that part of the land covered by a Crown Forestry Licence be returned to Maori. In this situation, the Crown is required to grant a new Crown Forestry Licence to the licensee in respect of the area to be returned to Maori. The new licence will have a 35-year term and contain provisions similar to those in section 16 of the Template CFL. The new licence will, therefore, restrict the rights of the licensee to forestry activities and provide for the return of control of the land to its new Maori owners in every case suitable for the re-establishment of forests, unless otherwise agreed by the Maori owners.

As stated above, the important point for the purposes of this report is that where Crown Forest Land has been returned to Maori ownership by the Crown but is still the subject of a Crown Forestry Licence, any licensee may only carry out *forestry activities* on the land and must, when returning control of the land to its Maori owners, ensure that the land is suitable for the *re-establishment of forests*. A licensee may only return the land in any other state with the agreement of the land's Maori owners.

This is important because in the context of the NZ ETS any such agreement by the Maori owners is likely to result in the Maori owners incurring an NZ ETS liability. The next part of the report explains why.

4. Forestry in the NZ ETS

The forestry sector was included in the NZ ETS from 1 January 2008. The key to understanding the treatment of forestry in the NZ ETS is to understand that there are two types of forest land for NZ ETS purposes:

- (c) **Pre-1990 Forest Land:** forest land consisting of predominantly exotic forest, which was established before 1 January 1990, and which remained forest land on 31 December 2007; and
- (d) **Post-1989 Forest Land:** forest land consisting of exotic or indigenous forest, which was established after 31 December 1989 on land that was either not covered by forest on that date, or covered by forest on that date but deforested before 1 January 2008.¹¹

These two types of forest are treated very differently in the NZ ETS. The following sections of the report cover the treatment of Pre-1990 Forest Land and Post-1989 Forest Land in detail. In summary, their treatment is as follows:

- (c) Landowners of Pre-1990 Forest Land are able to harvest and replant their forests without joining the NZ ETS or incurring any liabilities. But if landowners decide to “deforest” (i.e. change land use from forestry to an alternative, non-forest land use) they automatically become participants in the NZ ETS and must report on the level of deforestation and meet the associated liability. In either case, landowners are not able to earn any credit for the carbon stored in the trees.
- (d) The owners of Post-1989 Forest Land, or the owners of the trees on the land, are not required to become participants in the NZ ETS but may choose to do so. Upon becoming participants, land or forest owners must monitor and report on the total level of carbon stored in the trees. They are able to earn credit for any increases in stored carbon, but must also meet the liabilities associated with any decreases in carbon stored in the trees.

Table 2 contains a quick guide to key components of, and differences between, Pre-1990 Forest Land and Post-1989 Forest Land.

¹¹ Post-1989 Forest Land also includes Pre-1990 Forest Land that is deforested (i.e. converted to non-forest land) after 1 January 2008, and returned to forest, but only where the associated deforestation liability has been met.

Table 2: Quick guide to Pre-1990 and Post-1989 Forest Land

Type of Forest Land	Definition	Participant in the NZ ETS	Liabilities	Entitlements	Exotic and/or Indigenous	First reporting period	Coverage and exemptions
Pre-1990 Forest Land	Land consisting of forest established before 1990 that remained forest land on 31 Dec 2007	Landowner or third party where the decision to deforest is vested in the third party	Emissions from deforestation (i.e. land-use change)	Free allocation of NZUs to compensate for affected land value No NZUs awarded for increases in carbon stock	Exotic only (but not including trees grown to produce fruit or nuts).	1 Jan 2008 - 31 Dec 2009	Mandatory coverage Exemptions: - less than 2 hectares of deforestation in a 5-year period - owning less than 50 hectares on 1 Sept 2007 - removal of tree weeds
Post-1989 Forest Land	Land consisting of forest established after 1989, that was not covered in forest in 1989, or was covered in forest in 1989 but deforested before 2008 and subsequently returned to forest Pre-1990 Forest Land that has been deforested and any liabilities met	Landowners, forestry right and lease holders, and parties to a Crown conservation contract	Net decreases in carbon stock	NZUs awarded for increases in carbon stock	Exotic and indigenous (but not including trees grown to produce fruit or nuts).	1 Jan 2008 – 31 Dec 2008	Voluntary coverage

4.1 Pre-1990 Forest Land

4.1.1 Liabilities and entitlements

As outlined above, Pre-1990 Forest Land is defined as land consisting of predominantly exotic forest that was established prior to 1990, which remained forest land on 31 December 2007. Unless the land is exempted from the scheme (see below), the deforestation of Pre-1990 Forest Land is automatically included in the NZ ETS.

NZ ETS liabilities in respect of Pre-1990 Forest Land only arise if the land is “deforested”. “Deforestation” means converting the land from forestry to an alternative, non-forestry land use.¹² Accordingly, forest management activities such as pruning, thinning and harvesting of Pre-1990 Forest Land do not give rise to any NZ ETS liabilities so long as the land continues to meet the definition of “forest land”.

The definition of “forest land” is important. “Forest land” is land upon which the trees are capable of reaching 5 metres in height and has, or is likely to have tree crown cover of more than 30% in each hectare of the land.¹³ It also includes land that temporarily does not meet this test due to human activities such as timber harvesting, but that is likely to revert to land upon which the trees are capable of reaching 5 metres in height and with tree crown cover of 30% on each hectare.

Crown Forest Licensed Land is predominantly (if not exclusively) Pre-1990 Forest Land. NZ ETS liabilities will therefore only arise if the land is deforested. Normal forest management activities undertaken on the land will not give rise to any NZ ETS liabilities so long as the land remains in forest, or if after harvest, the land is replanted or is likely to regenerate naturally into forest.

Owners of Pre-1990 Forest Land are not entitled to receive credit for any increase in the carbon stored in the trees, but are entitled to a free allocation of NZUs as compensation for affected land values. The parameters of this entitlement are dealt with further below.

4.1.2 Who bears the deforestation liability?

In most cases, the owner of Pre-1990 Forest Land will be required to meet any deforestation liability that arises. The only case where the landowner will not be liable is where the decision to deforest is legally vested in another person so that the landowner has no control over whether the deforestation occurs or not.

In the case of Crown Forest Licensed Land that the Crown has returned to Maori ownership, the Maori owners will be liable for any deforestation that occurs. This is because the licensee under a Crown Forestry Licence has no ability to deforest the land (that is, to convert the land to another land use). Under the terms of the licence, the licensee is restricted to undertaking forestry activities only, which includes harvesting, but not the ability to change land-use from forestry to an alternative, non-forest use, unless agreed with the Maori owners. The licensee must return control of the land to the Maori owners in a state suitable for the re-establishment of forest. So, although a licensee may harvest the timber on the land, they will not have deforested for the purposes of the NZ ETS.

Once control of the land has been returned to its Maori owners, it is the Maori owners who decide how to use the land. If the Maori owners decide to use the land for a use other than forestry (i.e. to deforest the land), they will be liable under the NZ ETS for the subsequent deforestation.

¹² The full legal definitions of terms such as “deforestation”, “forest land” and “clearing” (see below) are in section 4(1) of the CCRA.

¹³ “Forest land” does not include land planted in trees that are grown to produce fruit or nuts.

The only situation where a licensee may deforest an area of Crown Forest Licensed Land that the Crown has returned to Maori ownership is with the agreement of the Maori owners. As the Maori owners are still making the decision to deforest in this case, the Maori owners will be liable under the NZ ETS, even though it may be the licensee that actually carries out the physical process of deforestation.¹⁴

4.1.3 *When does the deforestation liability arise?*

Deforestation is a process that occurs over time; an area of forest may be deforested over a period of weeks, months or even years. In order to establish when the deforestation liability arises, the CCRA¹⁵ contains provisions stipulating when deforestation is deemed to have occurred.

The starting point is that a landowner is liable for the deforestation of Pre-1990 Forest Land on the date the land is “cleared” as part of the deforestation process. “Clearing” includes any felling, harvesting, burning, removing by mechanical means, spraying, or any other form of human activity intended to kill a tree.

Accordingly, a landowner who clears trees on Pre-1990 Forest Land as part of a deforestation process will be liable for the deforestation on the date the first action is taken to kill the trees (whether by felling, spraying or other means).

Whether tree clearance amounts to deforestation in any particular situation will depend on the intent of the landowner and the nature of the clearance work. It may be obvious that tree clearance is part of a deforestation process if, for instance, the landowner has declared his or her intention to convert the land from forestry to a non-forestry use. Similarly, accepted forestry practice may indicate that certain tree clearance actions are inconsistent with the land remaining in forestry,¹⁶ in which case the clearance may indicate that deforestation is underway.

These rules apply to all Crown Forest Licensed Land that the Crown has returned to Maori ownership. In addition to these general rules, however, the CCRA contains specific rules that apply to Crown forest land that is:¹⁷

- (a) cleared (but not deforested) by the licensee prior to returning control of the land to its Maori owners; and
- (b) subsequently deforested by the Maori owners.

In this situation, the Maori owners become liable for the deforestation on the date the first action is taken that is “inconsistent with” the land remaining forest land. The CCRA does not contain a list of actions that are treated as “inconsistent with” cleared land remaining forest land. Again, this will need to be determined in

¹⁴ This conclusion is based on the terms of a template CFL provided by the Crown Forestry Rental Trust. The terms of each specific Crown Forest Licence should be examined in any particular case to establish who will be the liable party in the case where deforestation occurs.

¹⁵ The CCRA is the Act of Parliament that establishes the NZ ETS. Subpart 1 of Part 5 of the CCRA contains the forestry-specific provisions, with sections 180-186 applying to Pre-1990 Forest Land.

¹⁶ For instance, deforestation may be evidenced by actions such as the removal of stumps or the fencing-off and grazing of the cleared land.

¹⁷ CCRA, section 181(2). This section applies to landowners who deforest Pre-1990 Forest Land that was cleared but not deforested prior to control of the land reverting to the landowner following the “expiry or termination” of a Crown Forestry Licence. Under the terms of the Template CFL, control of Crown Forest Licensed Land is either returned to the Maori owners at the expiry of the licence, or when no longer required by the licensee. In the latter situation, the licence ceases to apply to the returned land and the licensee and Maori owners are obliged to execute a partial surrender of the licence to evidence the fact that the licence has ceased to apply to the returned land. In a legal sense, the licence no longer applying to the land and having been surrendered is equivalent to expiry or termination, and so section 181(2) applies in respect of the Crown Forest Licensed Land returned to the control of Maori owners either during the 35-year termination period or at the expiry of the licence.

each particular situation by reference to the intent of the Maori owners in carrying out the clearance actions and the nature of the actions themselves.

Deforestation is assessed on a hectare-by-hectare basis. The liability in respect of a particular hectare of land will arise on either:

- (a) the date the trees on that hectare are cleared as part of the deforestation process; or
- (b) in the case of Crown Forest Licensed Land that is cleared (but not deforested) before being returned to its Maori owner control, on the date the Maori owners take the first action that is inconsistent with that hectare remaining forest land.

4.1.4 Liability for deforestation caused by natural events

Landowners are liable for deforestation caused by both human interventions and natural events such as fires, floods and wind throws.¹⁸ The rules for determining when the liability arises are the same as for deforestation carried out by human intervention. Landowners are liable on the date the land is cleared as part of the deforestation process.

In practice, a natural event itself will not render the land deforested because it will not occur as part of a process initiated by the landowner. Also, the land may be capable of regenerating into forest naturally. The landowner will only become liable for deforestation when he or she does something to demonstrate that the land is to be deforested. Again, this could be an announcement that the land is not to be replanted and instead converted to a non-forestry use, or physical actions that are inconsistent with the land remaining forest land such as the removal of tree stumps.

Liability will be calculated by hectare with the liability being the total number of hectares cleared by the natural event and subsequently deforested by the landowners.

4.1.5 Deemed deforestation

Even using the rules explained above, it may still not always be clear that deforestation of Pre-1990 Forest Land has occurred, or if it has occurred, when the liability should arise. For instance, a landowner may take no action following a natural event that cleared an area of forest. Similarly, Maori owners who receive control of cleared Crown Forest Licensed Land back from a licensee may take no action after resuming control of the land. At what point would either area be treated as deforested rather than simply cleared? Once treated as deforestation, when would the liability arise?

In order to provide some clarity, section 179 of the CCRA contains a number of additional rules to those outlined above to determine when cleared forest land is to be treated as deforested and when the liability for that deforestation arises. The basic concept behind these rules is that landowners cannot simply leave land cleared forever. At certain points after the trees are cleared, deforestation will be treated as occurring unless the landowner has replanted or the forest has regenerated naturally.

Specifically, Pre-1990 Forest Land will be treated as deforested if the land is cleared and 4 years after clearing it has not:

¹⁸ CCRA, section 4(1) : the definition of "clearing" also includes any felling, burning, killing, uprooting, or destruction of a tree by a natural cause or event.

- (a) been replanted with at least 500 stems of trees per hectare capable of reaching 5 metres in height at maturity; or
- (b) naturally established a covering of at least 500 stems of trees per hectare capable of reaching 5 metres in height at maturity.

Even if an area of Pre-1990 Forest Land meets either of these tests, it will still be treated as deforested if:

- (a) 10 years after clearing there are predominantly exotic forest species growing, but it does not have tree crown cover of at least 30% from trees that have reached 5 metres in height; or
- (b) 20 years after clearing there are predominantly indigenous forest species growing but the land does not have tree crown cover of at least 30% from trees that have reached 5 metres in height.

In other words, cleared land will be treated as deforested under the NZ ETS unless it meets the “500 stem per hectare” test 4 years after it is cleared. Even if it meets these “500 stem per hectare” test at the 4 year point, if sometime in the next 6 years the trees are mainly exotic species but have not reached the necessary level of tree crown cover, then at the 10 year point the land will be treated as deforested. Similarly, if the land meets the “500 stem per hectare” test at year 4 after clearing, but 16 years later the trees are predominantly indigenous but without the necessary level of tree crown cover, the land will be treated as deforested at the 20 year point.

If land is treated as deforested under any of these rules, the owner becomes liable for the deforestation at the time the land is treated as deforested, i.e. 4, 10 or 20 years after clearing. The liability will be calculated on the basis of the age of the trees at the time the land was cleared.

The examples in Table 3 illustrate how the various rules about deforestation are designed to interact.

Table 3: Illustration of deforestation rules in practice

Example: a licensee returns the control of an area of Crown Forest Licensed Land to its Maori owners, which prior to harvest by the licensee consisted of mature *Radiata pine*. The land is suitable for the regeneration of forest. Deforestation (i.e. land use change) has not occurred on the date the land is returned to the control of its Maori owners and so no deforestation liability has arisen.

Scenario A: 2 years after resuming control of the land, its Maori owners remove the tree stumps as part of a deforestation process to convert the land to pasture. Accepted forestry practice indicates that the removal of stumps is inconsistent with land remaining forest land. Deforestation will be treated as occurring when the stumps are removed (i.e. on the date the first action is taken that is inconsistent with the land remaining forest land) and the Maori owners will be liable for deforestation from that date.

Scenario B: 2 years after resuming control of the land, its Maori owners replant each hectare with 500 *Radiata pine* seedlings. As the land has been replanted with a species that will meet the definition of “forest land” when mature, no deforestation has occurred and no liability arises.

Scenario C: 4 years after resuming control of the land, its Maori owners have not replanted any trees, and the land has not naturally regenerated at least 500 trees capable of reaching 5 metres in height when mature. Deforestation will be treated as occurring at that 4 year point and the Maori owners will be liable for deforestation on the basis of the age of the trees when cleared 4 years earlier.

Scenario D: 4 years after resuming control of the land its Maori owners have not replanted trees but the land has naturally regenerated trees capable of meeting 5 metres in height at maturity. Deforestation has not occurred. 10 years after clearing the land, predominantly exotic species are growing on the land, but the land does not have tree crown cover of at least 30% and the trees have not reached five metres in height. Deforestation is deemed to have occurred at that 10 year point and the Maori owners are liable for the deforestation calculated on the basis of the age of the trees when cleared 10 years earlier.

Note: at any time after the land is cleared, the regulator (currently the chief executive of MAF) is able to assess the land for NZ ETS compliance. If the land is assessed as having been deforested – whether at the time of clearing or any subsequent time – then the landowner will be liable for deforestation on the basis of the age of the trees at the time the land was cleared.

4.1.6 Exemptions from the NZ ETS

A landowner who deforests any Pre-1990 Forest Land will, in general, be automatically liable under the NZ ETS. Three specific exemptions from this automatic coverage exist:

- (a) the total area deforested is less than 2 hectares in a 5-year period (in which case the landowner is not included in the NZ ETS);¹⁹
- (b) the total area owned by the landowner as at 1 September 2007 (with any associated persons) is less than 50 hectares (in which case the landowner is entitled to an exemption from the scheme if he or she wishes to deforest any or all of the 50 hectares); and
- (c) the relevant deforestation involves trees designated as weeds (in which case the landowner can apply for an exemption from the scheme).

The Maori owners of Crown Forest Licensed Land may take advantage of exemptions (a) and (c). Exemption (b) is only applicable to Crown Forest Licensed Land returned to Maori ownership prior to 1 September 2007, and only if the total area of Pre-1990 Forest Land owned by the Maori owners was less than 50 hectares on that date.

¹⁹ CCRA, Part 1 of Schedule 3 (this is not strictly an exemption; rather, landowners deforesting less than 2 hectares of Pre-1990 Forest Land in a 5 year period are simply not covered by the NZ ETS. This differs from the other 2 exemptions, where landowners are covered unless specifically exempted).

Apart from these three exemptions that relate specifically to Pre-1990 Forest Land, section 60 of the CCRA provides a ministerial discretion to exempt any person from the NZ ETS, including a landowner carrying out deforestation of Pre-1990 Forest Land. Certain criteria must be met before such an exemption can be granted. In the case of Pre-1990 Forest Land, these criteria are only likely to be met in the situation where a small amount of deforestation occurs. Large-scale deforestation is unlikely to satisfy the criteria for an exemption.

4.1.7 Landowner compliance requirements for Pre-1990 Forest Land

Sections 56-67 of the CCRA contain Pre-1990 Forest Land owners' primary NZ ETS obligations. The Maori owners of any Crown Forest Licensed Land who deforest more than 2 hectares of land within a 5-year period will be required to take the following steps:

- (a) *Notify MAF that they have become a participant in the NZ ETS:* this notification must be given within 20 working days of commencing the deforestation. The notification forms will require information such as the landowner's name, holding account number, and details of the Pre-1990 Forest Land.
- (b) *Obtain a holding account:* the Maori owners must have a holding account from which to surrender emissions units to the Crown to meet their deforestation liability. A holding account is obtained from the NZEUR, which is an electronic register established to record the holdings and transfers of emissions units.
- (c) *Calculate the greenhouse gas emissions (i.e. carbon dioxide) associated with the deforestation using the methods contained in the relevant regulations:* the Climate Change (Forestry Sector) Regulations 2008 ("Regulations") contain look-up tables for determining the level of carbon dioxide emissions from the deforestation of the Pre-1990 Forest Land. These tables are broken down according to forest type, age class and the relevant region.
- (d) *File an "emissions return" by 31 March in the year following deforestation:* the Maori owners must file an emissions return by 31 March in the year following deforestation. The emissions return must contain an assessment of the Maori owners' liability to surrender emissions units equal to the carbon emissions arising from the deforestation (as calculated in accordance with the Regulations). This means that reporting generally occurs on an annual basis (i.e. by 31 March in relation to the deforestation emissions that occurred in the previous calendar year). The only exception to this is in relation to deforestation that takes place in 2008 and 2009. The required emissions return must be filed between 1 January 2010 and 31 March 2010 and include all the deforestation that occurred in the previous two calendar years.²⁰
- (e) *Surrender emissions units to meet emissions liabilities by 31 May in the year following deforestation:* Maori owners who have submitted an emissions return are required to surrender to the Government emissions units by 31 May of the year that the emissions return was filed in order to meet any emissions liability reported in that return. Again, there is an exception to this rule in relation to deforestation carried out in 2008 or 2009. Maori owners carrying out deforestation in this period have until 31 May 2011 to surrender emission units to cover the resulting emissions.

²⁰ CCRA, section 196.

- (f) *Ceasing to be a participant:* Once Maori owners have completed deforesting they must notify MAF as soon as practicable that they have ceased to be a participant in the NZ ETS.

4.1.8 Entitlement of landowners to a free allocation of New Zealand Units

As noted above, the CCRA provides for a free allocation of NZUs to Pre-1990 Forest Land owners as partial compensation for the reduction in land value resulting from the imposition of liability for deforestation. Recipients of the freely allocated NZUs may use them to help meet their NZ ETS liability for deforesting, or sell the NZUs on the market and keep the proceeds.

Section 72 of the CCRA contains the rules concerning landowner eligibility for a free allocation, and the level of landowner entitlement. Section 72 also provides that some details about eligibility and entitlement are to be set in the Pre-1990 Forest Land Allocation Plan.

MAF released a draft Pre-1990 Forest Land Allocation Plan for consultation in October 2009. The combined effect of the rules in section 72 of the CCRA and the draft Pre-1990 Forest Land Allocation Plan is that those eligible for the free allocation are:

- (a) owners of Pre-1990 Forest Land (other than exempt land)²¹ on the date the Pre-1990 Forest Land Allocation Plan is issued (the issue date), if the land was not deforested on the issue date; or
- (b) if the Pre-1990 Forest Land was deforested between 1 January 2008 and the issue date, the owners of the land on the date the land was deforested; or
- (c) the person appointed by the responsible Minister to hold certain units on trust for the future owners of Crown Forest Licensed Land.

Free allocation of NZUs to owners of Pre-1990 Forest Land will be made on the following bases:

- (a) for Pre-1990 Forest Land that is also Crown Forest Licensed Land returned to iwi as part of a Treaty of Waitangi settlement on or after 1 January 2008:
 - (i) 18 NZUs per hectare in total;
 - (ii) 7 NZUs per hectare will be allocated before 31 December 2012, and the remaining 11 NZUs per hectare after 31 December 2012;
 - (iii) NZUs allocated in respect of Crown Forest Licensed Land not yet returned to iwi on the issue date will be held in trust for the future owners of the land by a person appointed by the responsible Minister (section 73);
- (b) for Pre-1990 Forest Land acquired by the eligible owner on or after 1 November 2002 (or before 1 November 2002 if the eligible owner is a company whose ownership has changed by more than 51% between 31 October 2002 and the issue date):
 - (i) 39 NZUs per hectare in total;
 - (ii) 15 NZUs per hectare will be allocated before 31 December 2012, and the remaining 24 NZUs per hectare after 31 December 2012;

²¹ Owners of Pre-1990 Forest Land exempted from the NZ ETS under sections 183 or 184 of the CCRA (which provide for the "less than 50 hectare" and tree-weed exemptions) are not entitled to a free allocation.

- (c) for all other Pre-1990 Forest Land (i.e. Pre-1990 Forest Land acquired by the eligible owner before 1 November 2002):
 - (i) 60 NZUs per hectare in total;
 - (ii) 23 NZUs per hectare will be allocated before 31 December 2012, and the remaining 37 NZUs per hectare after 31 December 2012.

MAF estimates that approximately 55 million NZUs in total will be freely allocated to the eligible owners of Pre-1990 Forest Land.

The draft Pre-1990 Forest Land Allocation Plan also sets out information that eligible owners must provide when applying for a free allocation (such as the legal description of their Pre-1990 Forest Land), and certain record-keeping requirements.

Following consultation on the draft Pre-1990 Forest Land Allocation Plan, it can be finalised and issued.

Where Crown Forest Licensed Land has not been returned to Maori ownership before the Pre-1990 Forest Land Allocation Plan is issued, the 18 NZUs per hectare to be allocated in respect of that land will be allocated to a person appointed by the Government to hold the units in trust for the future Maori owners of the land. Accordingly, Maori who take ownership of Crown Forest Licensed Land after the Pre-1990 Forest Land Allocation Plan is issued will be entitled to 18 NZUs per hectare of land returned.

Any NZUs transferred to a Pre-1990 Forest landowner after 31 December 2012 can be cancelled by the Minister of Finance under section 30F of the CCRA if there are no longer any controls on deforestation under the NZ ETS. This is only likely to happen if New Zealand's international climate change obligations no longer include deforestation of Pre-1990 Forest Land after 2012, and would be preceded by amendment to the CCRA to remove or alter the deforestation liability on Pre-1990 Forest Land.

The examples in Table 4 illustrate how these proposed allocation rules would work in practice.

Table 4: Illustration of proposed allocation rules in practice

The only proposed allocation rule that is relevant for claimant groups who have not yet settled their Treaty of Waitangi claims is the rule stating that owners of Crown Forest Licensed Land returned as part of a Treaty of Waitangi settlement after 1 January 2008 will receive 18 NZUs per hectare in total, with 7 NZUs per hectare allocated before 2012 and 11 NZUs per hectare after 2012. These claimant groups would by definition take ownership of their Crown Forest Licensed Land as part of a Treaty settlement after 1 January 2008, and so will be entitled to 18 NZUs per hectare of the land. An example of how the rule would work in practice for such groups is as follows:

A block of Crown Forest Licensed Land returned to iwi as part of a Treaty of Waitangi settlement after 1 January 2008 is 2,000 hectares. The total number of NZUs freely allocated to the Maori owners will be 36,000 (18 NZUs x 2,000 hectares). 14,000 NZUs (7 NZUs x 2,000 hectares) will be allocated before 31 December 2012, and the remaining 22,000 NZUs (11 NZUs x 2,000 hectares) will be allocated after 31 December 2012.

If the land was returned before the Pre-1990 Forest Land Allocation Plan was issued, the Maori owners may apply for the NZUs directly when MAF calls for applications for a free allocation following issuance of the plan.

If the land was returned after the Pre-1990 Forest Land Allocation Plan was issued, then a body established or nominated by the Government would be holding the NZUs on trust for the Maori owners, who can claim the NZUs from the body upon taking ownership of the land.

The other allocation rules will not apply to claimant groups who receive Crown Forest Licensed Land as part of a Treaty settlement after 1 January 2008.

The other rules might apply to Crown Forest Licensed Land returned to Maori owners as part of a Treaty settlement before 1 January 2008, which was still Pre-1990 Forest Land on that date. Such land will attract either 60 or 39 NZUs per hectare under the rules above, depending on when settlement took place. For example:

The Maori owners of a 5,000 hectare block of Crown Forest Licensed Land settled their Treaty claim before 1 November 2002 and the land passed into their ownership prior to that date. The Maori owners are entitled to a total of 300,000 NZUs (60 NZUs x 5,000 hectares), receiving 115,000 NZUs (23 NZUs x 5,000 hectares) before 31 December 2012, and the remaining 185,000 NZUs (37 NZUs x 5,000 hectares) after 31 December 2012.

The Maori owners of a 6,000 hectare block of Crown Forest Licensed Land settled their Treaty claim in the period from 1 November 2002 to 1 January 2008 and the land passed into their ownership in that period. The Maori owners are entitled to a total of 234,000 NZUs (39 NZUs x 6,000 hectares), receiving 90,000 NZUs (15 NZUs x 6,000 hectares) before 31 December 2012, and the remaining 144,000 NZUs (24 NZUs x 6,000 hectares) after 31 December 2012.

4.2 Post-1989 Forest Land

Although Crown Forest Licensed Land is predominantly (if not entirely) Pre-1990 Forest Land, the treatment of Post-1989 Forest Land within the NZ ETS is still relevant for the Maori owners of Crown Forest Licensed Land. This is because Pre-1990 Forest Land may become, in certain circumstances, Post-1989 Forest Land.

In other words, Crown Forest Licensed land that is currently Pre-1990 Forest Land may, in the future, become Post-1989 Forest Land.

Pre-1990 Forest Land becomes Post-1989 Forest Land if it is deforested (i.e. converted to non-forest land), and at some later point returned into forestry.²² Once the land becomes Post-1989 Forest Land, it is eligible to be entered into the NZ ETS. The following sections describe who may enter Post-1989 Forest Land into the NZ ETS and the implications of doing so.

4.2.1 Who is entitled to enter Post-1989 Forest Land into the NZ ETS?

Landowners of Post-1989 Forest Land are entitled, but not obliged, to enter the land into the NZ ETS. Upon doing so, the landowner becomes the NZ ETS participant and assumes the rights and obligations detailed further below. Note that unlike the regime for Pre-1990 Forest Land that covers only exotic forest, the regime for Post-1989 Forest Land includes both exotic and indigenous forest.

If a third party holds a forestry right or registered lease over the Post-1989 Forest Land, then the landowner must get the consent of these parties before entering the land into the NZ ETS. Similarly, a forestry right or registered lease holder over Post-1989 Forest Land may enter the land into the NZ ETS and become the NZ ETS participant, but only with the landowner's consent.

Landowners, forestry right holders and registered leaseholders are entitled to remove their land from the NZ ETS, and may transfer their NZ ETS rights and obligations to other parties. Fairly complex rules govern these situations. It is not necessary to go into these rules in detail in this report, but detailed guidance is available from MAF.

Accordingly, the Maori owners of Crown Forest Licensed Land who have deforested that land, but later returned it to forest land, could enter the land into the NZ ETS to access the entitlements associated with doing so. At the same time, however, the Maori owners would also assume the associated liabilities.

²² CCRA, section 4(1) (see paragraph (c) in the definition of "Post-1989 Forest Land"). Note also that the liability associated with the deforestation of the Pre-1990 Forest Land must be met in order for the land to become Post-1989 Forest Land.

4.2.2 *Liabilities and entitlements in respect of Post-1989 Forest Land*

Entering the land into the NZ ETS entitles the participant (i.e. the landowner, forestry right or registered lease holder) to receive NZUs for any increases in the amount of carbon stored in the forest (including roots and soil). On the other hand, the participant is also liable to repay emissions units for any decrease in the amount of carbon stored in the forest.

This means that a participant who enters Post-1989 Forest Land into the NZ ETS with young trees growing may receive NZUs for increases in forest carbon stocks as the trees grow. As the trees near maturity, the rate of carbon sequestration will slow and he or she will receive fewer numbers of NZUs. If forest management practices such as pruning and thinning result in a net decrease of carbon stored in the forest, the landowner will have to repay emissions units. Similarly, the landowner is likely to have to repay emissions units when he or she harvests the timber, since harvest will result in a large decrease of carbon stored in the forest.²³

The landowner is liable to repay emissions units irrespective of whether the carbon loss occurs due to human intervention (e.g. harvest) or as a result of a natural event (e.g. fire or wind throw). Under current NZ ETS rules, however, the landowner is not liable to repay more emissions units than he or she has received, even if the decrease in carbon stocks exceeds any increases over the relevant period.

Landowners, forestry right and registered leaseholders have until the end of 2012 to decide whether to enter any Post-1989 Forest Land into the NZ ETS for the period from 1 January 2008 to 31 December 2012. If they do, they are eligible to receive NZUs to reflect all the carbon stored in the forest since 1 January 2008. After 2012, they can still enter the land into the NZ ETS, but will only receive NZUs for the carbon stored from 1 January 2013 onwards.

4.2.3 *Compliance requirements for Post-1989 Forest Land participants*

The basic compliance requirements of Post-1989 Forest Land participants are similar to those of Pre-1990 Forest Land participants (see section 4.1.7 above). Once land is entered into the NZ ETS, Post-1989 Forest Land participants must monitor and report net changes in carbon stocks, report their entitlements or liabilities in an emissions return, and either receive NZUs for increases in carbon stocks, or surrender emissions units for any net decrease.

Again, however, there are fairly complex rules governing the specific requirements of emissions returns relating to Post-1989 Forest Land.²⁴ These rules relate primarily to when emissions returns must be submitted by Post-1989 Forest Land participants, and the information they must contain.

As with Pre-1990 Forest Land, the Regulations specify how emissions and removals are to be calculated using 'look-up tables' broken down by forest type, age class and the relevant region. MAF may develop a more accurate field measurement approach, which, if developed, may become the required measurement approach for some Post-1989 Forest Land participants.

Guidance is available from MAF regarding the rules governing the reporting requirements of Post-1989 Forest Land participants.

²³ As with deforestation of Pre-1990 Forest Land, the NZ ETS assumes that the majority of the carbon dioxide stored in trees on Post-1989 Forest Land is released upon harvest.

²⁴ See CCRA, sections 189-193.

5. Agriculture

The previous section describes what NZ ETS liabilities the Maori owners of Crown Forest Licensed Land will face if they deforest the land once it is returned to their control by the licensee. This section describes what additional NZ ETS liabilities Maori owners will face if they undertake livestock farming on the land (i.e. once converted from forest land into pasture).

Under current law, the agricultural sector is due to enter the NZ ETS with partial obligations from 1 January 2011 and full obligations from 1 January 2015. Greenhouse gas emissions resulting from fertiliser use (nitrous oxide) and livestock farming (methane and nitrous oxide) are covered from those dates. Other parts of the agriculture sector, such as horticulture and viticulture (i.e. orchards, vineyards etc), are not covered.

This means that Maori owners of Crown Forest Licensed Land who deforest and convert the land into pasture for livestock farming will, in addition to the deforestation liability, face NZ ETS obligations with respect to their farming activities from 2011 onwards.

5.1 The liabilities of agricultural participants in the NZ ETS

As stated above, agriculture is included in the NZ ETS with *partial* obligations from 1 January 2011. These *partial* obligations arise as follows:

- (a) agricultural participants in the NZ ETS *may* choose to measure and report to the Government the level of their emissions that arise in 2011 from the covered activities (i.e. fertiliser use and livestock farming). The report must be submitted by 31 March 2012. This is not mandatory and no penalties apply if the participant makes an error in their report.
- (b) agricultural participants *must* measure and report the level of their emissions that arise in 2012 from the covered activities. The report must be submitted by 31 March 2013. Penalties may apply if the participant incorrectly reports the level of emissions.

From 2015, agriculture is included in the NZ ETS with *full* obligations. This means that agricultural participants must report their 2015 emissions from fertiliser use and livestock farming by 31 March 2016, and then by 31 May 2016 surrender a number of emissions units equal to the tonnes of emissions reported.

In other words, agricultural participants will face a cost related to the level of their emissions from fertiliser use and livestock farming from 2015 onwards. This cost arises from the obligation to measure and report their level of emissions, and to surrender emissions units equal to that amount.

This regime of “staggered obligations” is designed to give agricultural participants time to develop their monitoring and reporting systems before facing full obligations from 2015.

5.2 Who are the agricultural participants in the NZ ETS?

As the law currently stands, the point-of-obligation for agricultural emissions is to be processors rather than individual farmers. This means that fertiliser manufacturing companies such as Ballance Agri-Nutrients and Ravensdown would have to account for the nitrous oxide emissions that result from fertiliser use on farms rather than individual farmers. Similarly, the meat, wool and dairy processors such as AFFCO and Fonterra would have to account for the livestock emissions produced on farms rather than individual farmers.

In other words, the Maori owners of Crown Forest Licensed Land who have deforested and converted that land into pasture, and are carrying out livestock farming, would not be *directly* liable under the NZ ETS for the emissions from their farm operations. They would not, therefore, have to carry out any measuring and reporting, nor surrender any emissions units to the Government. They would still feel a cost impact, however, as the liable processors sought to recoup the cost of meeting their NZ ETS liabilities from individual farmers.

Although the processor is currently the default point-of-obligation under the law, the CCRA contains a mechanism to transition the sector to a farm-level point-of-obligation in the future. If this transition occurs, individual farmers *would* have to account for the fertiliser and livestock emissions produced on their farms.

If this farm-level point-of-obligation is implemented, landowners will be the default participants for on-farm emissions. In this case, Maori owners carrying out livestock farming would be directly liable for their on-farm emissions under the NZ ETS. This means that they would have to measure and report their emissions, and surrender emissions units, to the Government, and thereby incur all the associated costs. This is similar to Maori owners being the NZ ETS participants in relation to their deforestation of Crown Forest Licensed Land: in both cases, the Maori owners are directly liable for the NZ ETS liabilities from the covered activities (i.e. deforestation of Pre-1990 Forest Land, fertiliser use, and livestock farming).

If the Government moves the point-of-obligation to the farm-level, the only situation where landowners will not be the participants for on-farm emission is where a third party is carrying out farming operations on the land under an agreement with the landowner that runs for 3 years or longer, in which case the third party will be the participant. For instance, a long-term leaseholder of land carrying out farming activities on the land would, in this case, be the participant and not the landowner.

5.3 Compliance requirements of agriculture participants

Agricultural participants (whether processors or individual farmers) will have the same compliance requirements as landowners who deforest Pre-1990 Forest Land, namely to:²⁵

- (a) notify MAF that they are participants in the NZ ETS;
- (b) obtain a holding account;
- (c) calculate the level of emissions associated with their farm activities each year;
- (d) file an emissions return by 31 March in the following year;
- (e) surrender emissions units to meet emissions liabilities by 31 May; and
- (f) notify MAF if they cease to be a participant.

The actual methods used to calculate emissions from the covered agricultural activities have not been determined. They will differ from those used for forestry, and will be set out in regulations that are yet to be made. The Government intends to consult on the draft regulations in 2010.

²⁵ See above, section 4.1.7

5.4 Entitlement to a free allocation of NZUs

The NZ ETS includes provision for a free allocation of NZUs to the agriculture sector. The free allocation is designed to shield the sector from the full impact of having to cover the cost of its greenhouse emissions. Recipients can use their freely allocated NZUs to meet their NZ ETS liability to surrender emissions units.

Free allocation to the agriculture sector will be made on an intensity or output basis. Eligible firms and individuals are entitled to a free allocation of NZUs equivalent to 90% of the carbon dioxide emissions per unit of production (based on an industry average). This level of assistance starts in 2015 and is phased out at a rate of 1.3% per year from 2016. There is no cap on the number of units that may be freely allocated to the agriculture sector.

The freely allocated NZUs will only go to NZ ETS participants in the agriculture sector, namely those firms or individuals carrying out the NZ ETS activities listed in Part 5 of Schedule 3 of the CCRA. This means that, while the agriculture point-of-obligation remains at the processor level, processing firms will receive the free allocation. If the point-of-obligation moves to the farm-level, it will be farmers who receive the freely allocated NZUs.

6. The market for emissions units

"Emissions units" are the "currency" traded in the NZ ETS and under the Kyoto Protocol. Table 5 provides a quick guide to the origin of different types of emissions units and their eligibility for compliance in the NZ ETS.

Table 5: Quick guide to eligibility of emissions units under the NZ ETS

Unit type: Kyoto units	Description	Current eligibility
<p>Assigned Amount Units ("AAUs")</p>	<p>Freely allocated to Annex B countries (countries with binding emissions reduction targets under the Kyoto Protocol) to match the level of their emissions reduction target.</p>	<p>AAUs issued by overseas countries cannot be surrendered for compliance purposes under the NZ ETS unless they meet conditions prescribed in regulations. No such regulations have been made so AAUs are not currently eligible to be surrendered for compliance purposes under the NZ ETS.</p> <p>AAUs issued by New Zealand can be surrendered for compliance purposes under the NZ ETS. AAUs issued by New Zealand may be received by a person under the Projects to Reduce Emissions programme, a Negotiated Greenhouse Agreement or the Permanent Forest Sink Initiative or a person converting NZUs to AAUs.</p>
<p>Certified Emission Reductions ("CERs")</p>	<p>Generated by emission reductions by projects in developing countries (known as Clean Development Mechanism (CDM) projects).</p>	<p>CERs can be surrendered for compliance purposes under the NZ ETS, except CERs from projects involving nuclear energy and non-permanent CERs, i.e. Temporary CERs ("tCERs") and Long-term CERs ("ICERs").</p> <p>tCERs and ICERs are issued for emission removals from afforestation and reforestation CDM projects. They are non-permanent because of the non-permanence of such removals. The non-permanence of these units is the reason why the Government has imposed the restrictions on their use in the NZ ETS (as summarised in part 2.2.5 above).</p>
<p>Emission Reduction Units ("ERUs")</p>	<p>Generated by emission reductions or emission removals by projects in Annex B countries (countries with binding emissions reduction targets under the Kyoto Protocol). These projects are known as Joint Implementation projects.</p>	<p>ERUs can be surrendered for compliance purposes under the NZ ETS, excluding projects involving nuclear energy.</p>

Unit type: Kyoto units	Description	Current eligibility
Removal Units ("RMUs")	Issued to Annex B countries (countries with binding emissions reduction targets under the Kyoto Protocol) for emission removals from land use, land-use change and forestry.	RMUs can be surrendered for compliance purposes under the NZ ETS.

Unit type: New Zealand Units ("NZUs")	Description	Current legal status
NZUs	Issued under the NZ ETS.	NZUs can be surrendered for compliance purposes under the NZ ETS.

Unit type: Approved overseas units	Description	Current legal status
Any overseas unit approved for use in the NZ ETS	Issued in countries other than New Zealand under those countries' own domestic emissions trading scheme (e.g. the European Union Emissions Trading Scheme).	Overseas units must be approved in regulations before they can be imported into New Zealand and used within the NZ ETS. No overseas units are currently approved for importation into or use in New Zealand.

Note: The Government has the power to make regulations that prescribe restrictions and conditions in respect of the transfer of units (section 30G(1)(b) of the CCRA) and the holding, surrender, conversion and cancellation of units (section 30G(1)(c) of the CCRA). As mentioned above, the Climate Change (Unit Register) Regulations 2008 impose certain restrictions on units. If any additional regulations are introduced, unit eligibility may change from that set out in the above table.

6.1 Overview of how the carbon market functions – buyers and sellers

Buyers include:

- (a) Kyoto Protocol Annex B countries, i.e. developed countries that have agreed targets for greenhouse gas emissions during the first commitment period of the Kyoto Protocol (2008-2012) (“**Annex B countries**”).
- (b) Participants with obligations under a domestic emissions trading scheme, such as the NZ ETS, who purchase units for compliance purposes. Until recently these have generally been limited to participants in the European Union Emissions Trading Scheme but other Emissions Trading Schemes are being established.
- (c) Carbon dealers such as banks and financial institutions who purchase units for on-sale at a profit.

Sellers of AAUs:

- (a) Sellers are generally eastern European countries. These countries have surplus AAUs due to the contraction of their economies in the early 1990s. This economic contraction caused emissions to fall significantly below target levels, leaving them with a large surplus of AAUs.
- (b) Carbon dealers are becoming involved in this market and may have also AAUs to sell.
- (c) New Zealand entities who have received AAUs from the Government may also be sellers. These include individuals and firms who have received NZUs from free allocation or in respect of Post-1989 Forest Land since NZUs can be converted to AAUs. Some firms may also have received AAUs under the Government’s other initiatives (the Projects to Reduce Emissions programme, Negotiated Greenhouse Agreements or the Permanent Forest Sink Initiative).

Sellers of CERs:

- (a) Primary market: sellers in the so-called ‘primary market’ are the developers of the projects that generate CERs. Generally the seller will agree to deliver to the buyer a certain quantity of CERs at a specified price and time, but delivery is not guaranteed if the project does not generate sufficient CERs for some reason. Such an off-take contract assists the seller to obtain funding for the project, some of which may be provided by the purchaser as part of the sale and purchase arrangement.
- (b) Secondary market: the ‘secondary market’ is the market for CERs that have already been generated by a project and issued in the Kyoto registry, so are available to trade. Sellers in the secondary market are generally banks and other carbon traders.

Sellers of ERUs:

- (a) The market for ERUs is similar to the market for CERs, although by comparison only a small number of “joint implementation” projects (i.e. emission reduction projects in Annex B countries, which is the type of project that generates ERUs) have been approved so the market for these units is still in its infancy.
- (b) New Zealand’s Projects to Reduce Emissions programme allows project owners to register projects as joint implementation projects and receive ERUs instead of AAUs. A number of

project owners such as Meridian Energy and Trustpower (in relation to their windfarm projects) have done this and sold their ERUs overseas.

RMUs: There is unlikely to be much, if any, trade in RMUs. For example, the New Zealand Government is likely to receive a significant quantity of RMUs in respect of Post-1989 Forest Land, but is likely to retain these units.

Sellers of NZUs are likely to be:

- (a) landowners freely allocated NZUs in respect of Pre-1990 Forest Land or who receive NZUs in respect of carbon sequestration on Post-1989 Forest Land;
- (b) individuals and firms in the industrial, agriculture and fishing sectors who are freely allocated NZUs.

The Government also has the ability to sell NZUs, but has not announced any intention to do so.

6.2 Overview of emissions trading transactions

There are a range of approaches to transacting emissions units.

6.2.1 Types of trade - spot or forward

Spot: in a spot trade, units are transferred to and paid for by the buyer immediately (or within a very short period such as 2 days after the deal is agreed) at the spot price (i.e. the price quoted for immediate settlement).

Forward: a forward agreement is an agreement to buy or sell units at a fixed price at a specified point in time in the future. Forward trades allow the buyer to lock in a future purchase of units at a specified price but defer payment until delivery.

6.2.2 Emissions trading mechanisms

The main mechanisms used to acquire emissions units on the market (apart from participating directly in emissions reduction projects) include:

- (a) 'over-the-counter' trades, i.e. privately negotiated trades between the buyer and seller (known as "OTC trades").
- (b) exchange trades; or
- (c) investment in carbon funds.

OTC trades: OTC trades may be on a spot or forward basis. They are generally documented on either:

- (a) multiple transaction agreements, such as an International Swaps and Derivatives Association Master Agreement ("ISDA"). This allows for multiple transactions to be entered into over time without having to negotiate the base terms for trade. International banks and other financial institutions that sell emissions units on a forward basis generally require counterparties to enter such master agreements. Other organisations such as the International Emissions Trading Association and the European Federation of Energy Traders have similar master agreements, but ISDA documentation is becoming standard in New Zealand.

- (b) once only agreements, commonly known as Emission Reduction Purchase Agreements ("**ERPAs**"). ERPAs are appropriate where the buyer and seller are only likely to enter into one trade or the seller is unfamiliar with documentation such as ISDAs.

OTC trades have accounted for a large majority (about three quarters) of the trades in the European carbon market to date.

Exchanges: a number of exchanges offer the ability to trade emissions units. The leading exchange is the European Climate Exchange ("**ECX**"). Among other things, it offers the ability to trade CERs on a spot or future basis (futures contracts are standardised exchange traded forward contracts).

Carbon funds: generally speaking, carbon funds pool investors' funds then invest directly in emission reduction projects. There are two main types of funds, namely compliance funds and investment funds. Compliance funds distribute the emissions units received by the fund directly to the investors so the investors can meet their compliance obligations under emissions trading schemes. Investment funds aim to sell the emissions units to third parties at a profit thus generating an investment return.

Derivatives: There is also an emerging market for carbon 'derivatives', i.e. financial instruments which allow entities to manage their carbon exposure. For example, the ECX offers option contracts for CERs. An option gives the holder of the option the right, but not the obligation, to purchase CERs on or before a future date at a specified price.

6.3 Protection of property right

Emissions units do not have a physical form. They exist only as an entry in an electronic registry. The Kyoto Protocol sets up an international system of registries to track the issue, holding, transfer and cancellation of units. New Zealand's registry is the NZEUR. A registry search result is prima facie evidence of the ownership of units. Units may not be transferred without the holders' consent.

A bank or other financier may take security over units by having its name recorded as the possessor of units in an account holder's account in the NZEUR (with the account holder's consent). The account holder may not transfer the units without consent of such person.²⁶

6.4 Carbon prices

The market price of emissions units is extremely volatile due to the infancy of the carbon market and the current financial crisis. There is no single carbon price as different units have different restrictions and risks associated with them. Prices are also subject to the exchange rate movements. Broadly speaking the current New Zealand dollar carbon price is around \$20 – \$25.

The future price path for carbon is impossible to predict. It will depend in large part on political decisions about the stringency of climate change regulation (that will determine supply and demand). However, the general market expectation is that carbon prices will substantially increase over time.

²⁶ Climate Change (Unit Register) Regulations, regulations 18-19.

7. Income Tax and GST treatment of emissions units

The tax rules for emissions units were developed in conjunction with the NZ ETS itself. Income tax rules have been in force since 25 September 2008, and further amendments to these rules applied from 1 January 2009. Specific rules relating to the GST treatment of supplies of emissions units have applied since 1 January 2009, with further amendments to those rules applying from 6 October 2009.

The income tax and GST rules apply to emissions units that can be traded within the NZ ETS, including NZUs and units created under the Kyoto Protocol.

7.1 Income tax

A number of provisions have been inserted into the Income Tax Act 2007 that specify how emissions units are to be treated for New Zealand income tax purposes. There are two distinct sets of rules:

- (a) the first set is general and will apply to the emissions units most participants will acquire to satisfy their NZ ETS obligations (“**general rules**”); and
- (b) the second set is more specific and applies to “forestry land units” issued to participants in the forestry sector. There are two types of forestry land units:
 - (i) Pre-1990 Forest Land Units issued to owners of Pre-1990 Forest Land in accordance with the Pre-1990 Forest Land Allocation Plan (see part 4); and
 - (ii) Pre-1989 Forest Land Units issued to those who elect to register as NZ ETS participants in respect of Post-1989 Forest Land (“**forestry rules**”).

Specific rules in the Income Tax Act 2007 specify how emissions units are to be valued for income tax purposes, and businesses are required to hold emissions units in separate “pools” for valuation purposes. For example Pre-1990 Forest Land units should be held separately to units purchased on the open market, to ensure that the correct tax treatment is applied to each type of unit.

Under the general rules, emissions units are normally taxed on the following basis:

- (a) emissions units are deemed to be “revenue account property” for income tax purposes. Accordingly, any amounts received from the disposal of the units must be treated as “income” for tax purposes and the costs associated with acquiring units will generally be deductible. Such deduction is only available in the year in which the relevant unit is sold or surrendered under the NZ ETS;
- (b) the effect of the above treatment is that profits derived from the disposal of emissions units will effectively be subject to tax at the taxpayer’s marginal tax rate (30% in the case of a company). Conversely taxpayers who incur losses from the disposal of emissions units (e.g. when they buy and sell at a loss, or where they buy and surrender) will generally be entitled to use those losses to offset their other income;
- (c) emissions units are not trading stock or financial arrangements for tax purposes. Accordingly, unrealised movements in the value of units are not recognised at the end of each year. Instead the tax consequences only materialise when the emissions units are sold or disposed; and

- (d) the disposal of units to satisfy a liability under the CCRA is generally treated as a transaction that produces income equal to the cost of the unit disposed. This prevents a double deduction arising.

Separate rules will apply when a business is allocated free emission units to compensate for increased costs as a result of the introduction of the emission trading scheme. Generally, such emission units will have a value of zero when first allocated, and will be assigned a market value in the emissions year to which the units relate (in effect ensuring that the overall net deduction does not include any amount which has been or could be satisfied by the free units). However if a business sells a free emissions unit the income from that sale would be taxable in the year of sale.

The forestry rules differ slightly in application depending on whether the relevant forestry land unit is a Pre-1990 Forest Land unit or a Post-1989 Forest Land unit. Broadly:

- (a) transactions involving Pre-1990 Forest Land Units are generally on capital account. This reflects the fact that such units are issued to Pre-1990 Forest Land owners as partial compensation for their mandatory participation in the NZ ETS, which may adversely impact on the capital value of their land. Accordingly, any profits the owners of Pre-1990 Forest Land derive from selling the units will generally not be taxable;
- (b) transactions involving Pre-1990 Forest Land Units could potentially be on revenue account (and taxable) if the owner of the Pre-1990 Forest Land holds the land on revenue account;
- (c) transactions involving Post-1989 Forest Land Units will normally be on revenue account. Accordingly, any profits derived from the sale of such units will generally be assessable income, and the costs of purchasing emissions units to surrender to meet a Post-1989 Forest Land obligation under the NZ ETS will generally be deductible in the year in which the relevant unit is surrendered.

As with non-forestry emissions units, there are specific rules in the Income Tax Act that provide for the valuation of forestry units.

7.2 Goods and services tax

Detailed rules applying to the supply of emissions units have been inserted into the Goods and Services Tax Act 1985.

The general rule is that most supplies of emissions units will be “zero-rated” for GST purposes (i.e. will be subject to GST at a 0% rate). In particular, the GST Act will zero-rate transactions involving emissions units where the supply involves:

- (a) an emissions unit being issued to a person by the Government under section 64 or Part 4 subpart 2 of the CCRA;
- (b) a participant surrendering emissions units to the Government under section 63 of the CCRA;
- (c) an emissions unit being issued under the Permanent Forest Sinks Initiative (from 6 October 2009);
- (d) the supply of goods or services in exchange for the emissions units issued/surrendered under paragraphs (a) or (b); or
- (e) the sale or disposal of an emissions unit.

8. Regulatory uncertainty

8.1 Sources of regulatory uncertainty

The legislation implementing the NZ ETS is currently in force, but there is a degree of uncertainty about the regulatory position going forward. This uncertainty arises from a number of sources, in particular:

- (a) The NZ ETS is a new and relatively complex regulatory instrument, and therefore subject to change to improve its effectiveness over time. In fact, the CCRA requires periodic reviews of the scheme's operation and effectiveness, the first of which will be undertaken and completed in 2011. This review is likely to suggest changes to improve the scheme's operation.
- (b) New Zealand's domestic response to climate change is driven by the nature of New Zealand's international climate change obligations. The NZ ETS in particular was developed to operate in the context of New Zealand having binding international commitments to reduce its greenhouse gas emissions, and the existence of an international emissions trading market. New Zealand's commitments run until the end of 2012 and so far countries have not agreed any binding commitments to take effect after 2012. This lack of binding international commitments calls into question the existence of an international emissions trading market after 2012, and therefore creates uncertainty about the future operation of the NZ ETS.
- (c) Even if countries agree a set of binding international commitments to take effect after 2012, New Zealand's commitments may differ significantly from those it currently has under the Kyoto Protocol. Any such differences are likely to be reflected in NZ ETS design, including the treatment of forestry under the scheme.
- (d) The 2009 amendments to the NZ ETS did not enjoy widespread political support. The Labour Party has said it will repeal many of the amendments if it leads the government after the 2011 general election.

8.2 International uncertainty: impact on forestry under the NZ ETS

As noted above, New Zealand's domestic response to climate change is driven by its international climate change obligations. International negotiations are currently underway regarding what (if any) emission reduction targets countries will take-on after 2012 following the expiry of the Kyoto Protocol's first commitment period. The most recent negotiations took place in December 2009 at the United Nations climate change conference in Copenhagen. These negotiations did not result in a binding set of climate change obligations to take effect after 2012.

What did emerge from the Copenhagen conference was the Copenhagen Accord. Countries who join the Copenhagen Accord recognise the need to keep global temperature increases below 2 degrees Celsius. Developed countries commit to implement economy-wide emissions reduction targets for 2020 in order to reach this goal, and agree to notify their specific targets to the United Nations. Major emitting developing countries agree to make voluntary pledges and communicate their actions to reduce greenhouse gas emissions every two years.

A number of countries have joined the Copenhagen Accord and submitted emission reduction targets. This includes New Zealand, which has pledged to reduce its greenhouse emissions 10-20 percent below 1990 levels by 2020. This target is conditional upon a number of factors, however, including comparable efforts by

other developed countries, the existence of a broad and efficient international carbon market, and effective international rules regarding land-use, land-use change and forestry (**LULUCF**). If these conditions are not met, New Zealand is likely to reduce its emission reduction target.

In spite of the uncertainty at the international level, and the uncertainty that this creates about the precise level of New Zealand's emission reduction target, New Zealand is likely to maintain some commitment to domestic emission reductions. Some form of domestic regulation to place a price on carbon – whether an emissions trading scheme or a carbon tax – is likely to remain a part of the policy response to help drive emission reductions. Accordingly, it is likely that the NZ ETS will remain in operation in some form or another in the long-term, although its design may be altered to reflect New Zealand's international obligations (or lack thereof) after 2012.

This could have significant implications for the treatment of forestry under the NZ ETS, particularly if New Zealand has no international commitments after 2012. Even if New Zealand has binding international commitments after 2012, the LULUCF rules may differ from the current LULUCF rules that are reflected in NZ ETS design.²⁷ The New Zealand government is seeking international rule changes to allow landowners of Pre-1990 Forest Land to offset deforestation on that land by planting trees on Post-1989 Forest Land. Rule changes are also being sought to allow landowners to account for emissions from harvested wood products as they actually occur, rather than when the trees are harvested. These issues remain live within the international negotiations, and if agreed as part of a binding set of international obligations after 2012, are likely to be reflected in NZ ETS operation from 2012.

8.3 Domestic uncertainty: impact on NZ ETS design

The 2009 amendments to the NZ ETS passed with a slim Parliamentary majority, opposed by the Labour Party, the Green Party and the ACT Party. The Labour Party has said it remains committed to a functioning emissions trading scheme, but that it would repeal many of the amendments made in 2009 if it leads the government after the 2011 general election. This creates further uncertainty about the future design and operation of NZ ETS.

Even so, it is not clear that this has any particular implications for the treatment of forestry under the NZ ETS. The Labour Party was primarily opposed to the adoption of an intensity-based free allocation to emission-intensive and trade-exposed firms, and the delayed entry of the agriculture sector into the scheme. Therefore, it may be these two areas rather than forestry that would be subject to the most change under any Labour-led government in the future.

This does have implications for the Maori owners of Crown Forestry Licensed Land that convert that land to agricultural uses. Those owners could face full NZ ETS obligations with respect to their agricultural emissions from that land earlier than the time currently prescribed, namely 1 January 2015.

²⁷ In particular, the different treatment of Pre-1990 Forest Land and Post-1989 Forest Land under the NZ ETS reflects the different treatment of those forests under the Kyoto Protocol's LULUCF rules.

Further resources

Government publications

Ministry of Agriculture and Forestry, "Pre-1990 Forest Land Allocation Plan (Consultation Draft)", October 2009.

Ministry of Agriculture and Forestry, "Forestry in a New Zealand Emissions Trading Scheme: Engagement Document", September 2007

Ministry for the Environment, "Stakeholder Briefing for Copenhagen Negotiations", November 2009

Ministry for the Environment, "The Framework for a New Zealand Emissions Trading Scheme", September 2007

Legislation

Climate Change Response Act 2002

Climate Change (Unit Register) Regulations 2008

Climate Change (Forestry Sector) Regulations 2008

Climate Change (Liquid Fossil Fuels) Regulations 2008

Climate Change (Stationary Energy and Industrial Processes) Regulations 2008

Climate Change (Unique Emissions Factors) Regulations 2009

Climate Change (Other Removal Activities) Regulations 2009

Crown Forest Assets Act 1989

Articles and reports

Peter B. Lough and Alastair D. Cameron, "Forestry in the New Zealand Emissions Trading Scheme: Design and Prospects for Success", *Carbon & Climate Law Review* 3, 2008: 281-291

Point Carbon, "Carbon 2009: Emission Trading Coming Home", March 2009 (this 2009 survey of the global carbon market is available from Point Carbon at <http://www.pointcarbon.com>)

Useful websites

Crown Forestry Rental Trust, <http://www.cftr.org.nz/>

Land Information New Zealand, <http://www.linz.govt.nz/crown-property/crown-forest-land/index.aspx>

New Zealand's Climate Change Solutions, <http://www.climatechange.govt.nz/>

New Zealand Emissions Unit Register, <http://www.eur.govt.nz/eats/nz/>

Ministry of Agriculture and Forestry, <http://www.maf.govt.nz/sustainable-forestry/ets/>

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Glossary Of Acronyms

AAU	Assigned Amount Unit
CCRA	Climate Change Response Act 2002
CDM	Clean Development Mechanism
CER	Certified Emission Reduction Unit
CPRS	Carbon Pollution Reduction Scheme
ECX	European Climate Exchange
ERPA	Emission Reduction Purchase Agreements
ERU	Emission Reduction Unit
ISDA	International Swaps and Derivatives Association
ICER	Long-term Certified Emission Reduction Unit
LULUCF	Land Use, Land-Use Change and Forestry
MAF	Ministry of Agriculture and Forestry
NZ ETS	New Zealand Emissions Trading Scheme
NZU	New Zealand Unit
NZEUR	New Zealand Emissions Unit Registry
OTC	Over the Counter
RMU	Removal Unit
tCER	Temporary Certified Emission Reduction Unit
Template CFL	Template Crown Forestry Licence

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