

Making the most of carbon farming at Rewanui

Rewanui is being developed to demonstrate ways of profitably integrating trees into hill-country farming systems. One way to generate cash flow from our trees is to make the most of opportunities created by the New Zealand Emissions Trading Scheme (ETS). Here we describe how we have entered our young plantations into the ETS at Rewanui, and how this could benefit us financially.



Stuart Orme describes one of our pine plantings.



A young redwood plantation.

Carbon farming at Rewanui

Rewanui became a participant in the Emissions Trading Scheme (ETS) in 2009. We have registered the following areas, all planted in either 2006 or 2007, as post-1989 forest:

	Total area (hectares)
Radiata pine	25.90
Exotic softwoods (mainly redwoods)	9.35
Exotic hardwoods (eucalypts)	2.15
Indigenous plantation	2.90

The ETS registration process

Our forest manager, Stuart Orme of Woodnet Ltd, completed the registration for us in 2009. One of MAF's main requirements is for an electronic 'shapefile' map of the property with the various forest areas indicated. We created this map using the on-line mapping tool available on the MAF website.

We also had to provide evidence that the land we were entering into the ETS did not have forest cover in 1989. The application fee payable to MAF is \$562.

How do we know how much carbon our trees are storing?

We can claim for all carbon stored or 'sequestered' by the trees from 2008 onwards. MAF provides a set of look-up tables showing the amount of carbon stored annually in different species of trees, by age of trees and by NZ region. These look-up tables must be used when we submit our claim for credits to MAF. The carbon accounting year is January 1st to December 31st, so we can submit a claim for credits sequestered in the previous year any time after January 1st the following year.

Converting carbon to cash

Part of the ETS registration process is to open an account with the NZ Emissions Unit Register (NZEUR). The NZEUR is a carbon credit bank, where credits are stored until owners are ready to sell them. Once we want to sell some of our stored credits, we can transfer them electronically from our NZEUR account to a broker or directly to a buyer.



How much is Rewanui's carbon worth?

ETS claims began in the 2008, so we have had three full calendar years of carbon sequestration for which we can make claims, 2008–2010.

By the end of the three years to December 2010, our ETS-registered plantings had sequestered a total of 1540 carbon units. ETS credits are called New Zealand Units (NZUs). The value of the carbon is determined by what the market will pay for it; 'the market' predominantly comprises companies such as power generators and industrial manufacturers who have to buy credits to offset their carbon emissions. Prices for NZUs have fluctuated between over \$20/tonne to below \$14/tonne since 2008.

In the first ten years from 2008, the Rewanui trees ETS-registered to date will sequester an estimated 6738 NZU.

As long as we replant after our eventual harvest, we will not have to surrender these units to the Crown, they can be used without obligation to fund forest operations and/or future investment.

As an example, at a carbon price of \$15/unit, our 6738 units are worth \$101,070.

There is no GST involved, but this income is taxable at normal income tax rates.

How we plan to manage our carbon at Rewanui

We have yet to actually sell any carbon; the units are 'banked' in the NZ Emissions Units Register, and we

can access them at any time. We now have the option to generate cash flow from the sale of carbon units if we need it. For example, we may want to sell some carbon to cover the costs of pruning and/or thinning our radiata pine and redwoods within the first 10–12 years after planting.

Overall, our plan is to always retain sufficient units to cover liabilities. Liabilities will arise when we harvest any of the ETS-registered trees, or if trees are lost in a catastrophic event such as a fire or severe gales.

Advice for landowners considering registering post-1989 plantings for the ETS

Landowners with forestry plantations, recently regenerated native bush, and/or considering new planting, need to understand the opportunities available from carbon farming; also, how and when to take advantage of current carbon farming incentives, and the associated liabilities.

Landowners can prepare their own applications for the ETS, but it is important to understand the eligibility criteria in detail, and the rules around liabilities. You must also provide MAF with the correct information when you register, or you may incur additional costs. Before you start:

- Read the guidelines provided by MAF on their website or available from them in hard copy
- Contact your local MAF field officer for guidance
- Go to any of the various seminars that may be happening in your area, organised by the Farm Forestry Association, MAF, and others
- Seek professional advice if in doubt.

More information

1. About the work at Rewanui

Montfort Trimble Foundation:
www.trimblefoundation.org.nz

Forestry and the ETS at Rewanui:
Stuart Orme, Woodnet
stuart@woodnet.co.nz

2. About forestry, farm woodlots, and the Emissions Trading Scheme

Ministry of Agriculture and Forestry:
www.maf.govt.nz

The NZ Farm Forestry Association:
www.nzffa.org.nz

Acknowledgements

MAF's Sustainable Farming Fund supported tree trials and monitoring work at Rewanui from 2008–2011.

Stuart Orme (Woodnet) manages the forestry areas. Ian Campbell (Chair, Montfort Trimble Foundation) oversees operations.

Rewanui is a typical hill-country sheep and beef farm in eastern Wairarapa. The 344-hectare farm belongs to the Montfort Trimble Foundation, a trust dedicated to growing trees for the benefit of local people. The farm is being developed as a trial and demonstration property, with the focus on new approaches to adding trees to the farming mix.

Photos: John Milne

