

FACTSHEET

Trees within farms: opportunities with carbon

Policy to profit - Understanding your farm landscape and carbon opportunities

Some farmers have chosen to get carbon credits for the trees within their farming operation. These credits can be allocated to eligible exotic and native forests. Once credits are allocated, farmers can choose to sell these to buyers in carbon markets or use them to market their meat products. However, carbon removals is only one of the benefits that these areas provide on farm.

The wider benefits of trees on farms

- Provide windbreaks, and shade for livestock
- Stock food during droughts or shortages of feed
- Help soil retention on steep slopes
- Provide landscape diversity and wildlife habitat
- Help diversify your income
- Reduce future greenhouse gas emission costs associated with a NZ pricing scheme.



The Emissions Trading Scheme (ETS)

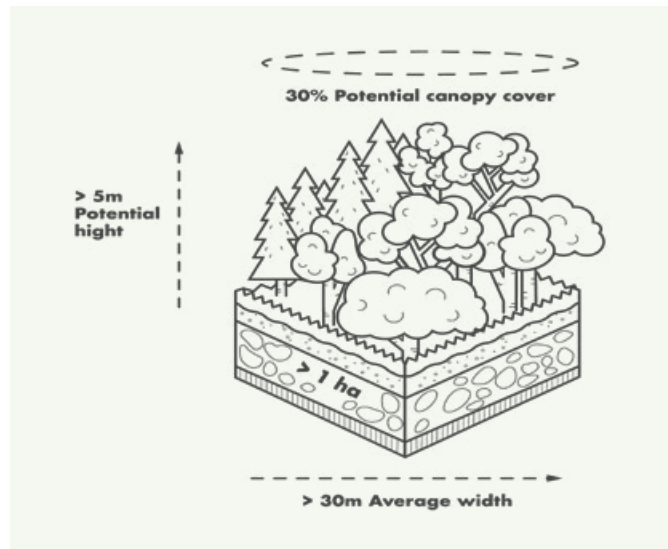
The ETS is NZ's primary policy tool for reducing GHGs. If you own forest land or have rights in forest land, you may be able to enter the ETS and earn carbon credits (aka NZUs).

The trees must meet the post-1989 'forest land' definition:

- Tree species (>5m height potential)
- A minimum of 1 hectare
- < 15m between potential canopy edge (mapping standard)
- > 30m potential average width
- > 30% potential canopy cover
- > 1 ha gaps removed

Farmers can enter trees that are intended to be harvested in the 'averaging' category of the NZ ETS and not-for-harvest trees into the 'permanent' category of the NZ ETS. The way carbon credits are accumulated is different in these two categories.

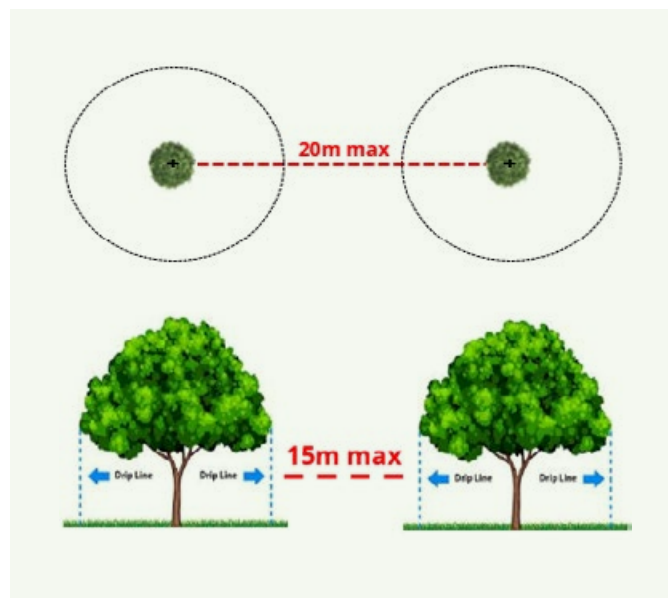
Trees registered in the scheme can earn carbon credits that can be sold into the NZ ETS carbon market. However, once the credits are sold, the land must stay in trees. To get out the land of the scheme, the quantity of units received, must be returned.



Riparian, wetlands and pole plantings – ETS eligibility tips

It can sometimes be challenging to enter alternative plantings into the ETS. Below are some tips on how to get your soil, biodiversity, or shade plantings into the scheme.

- Survival, location and spacing crucial (monitor and replant)
- Assess if **> 30% canopy cover** potential well met
- Manage irregular shapes with links of new pole plantings
- Use poles to get smaller riparian areas into the scheme
- Narrow canopy pole varieties = less canopy
- New poles - max 4m buffer; may be able to plant up to **20m apart, but 10m on perimeter poles to allow if one dies**
- Younger poles need higher stems per hectare (SPH)
- Mature trees eligible based on drip line (**maximum 15m to edge**)



Voluntary Carbon Markets

Voluntary carbon markets are for companies looking to voluntarily purchase carbon credits to reduce their greenhouse gas footprint. What can 'count' as a carbon credit in the voluntary market is mostly unregulated and conditions on what can receive carbon credits can change dramatically depending on the carbon credit certifier. Farmers can choose to sell the eligible carbon stored in their soils or on-farm vegetation into the voluntary carbon market.

Marketing Meat with Carbon

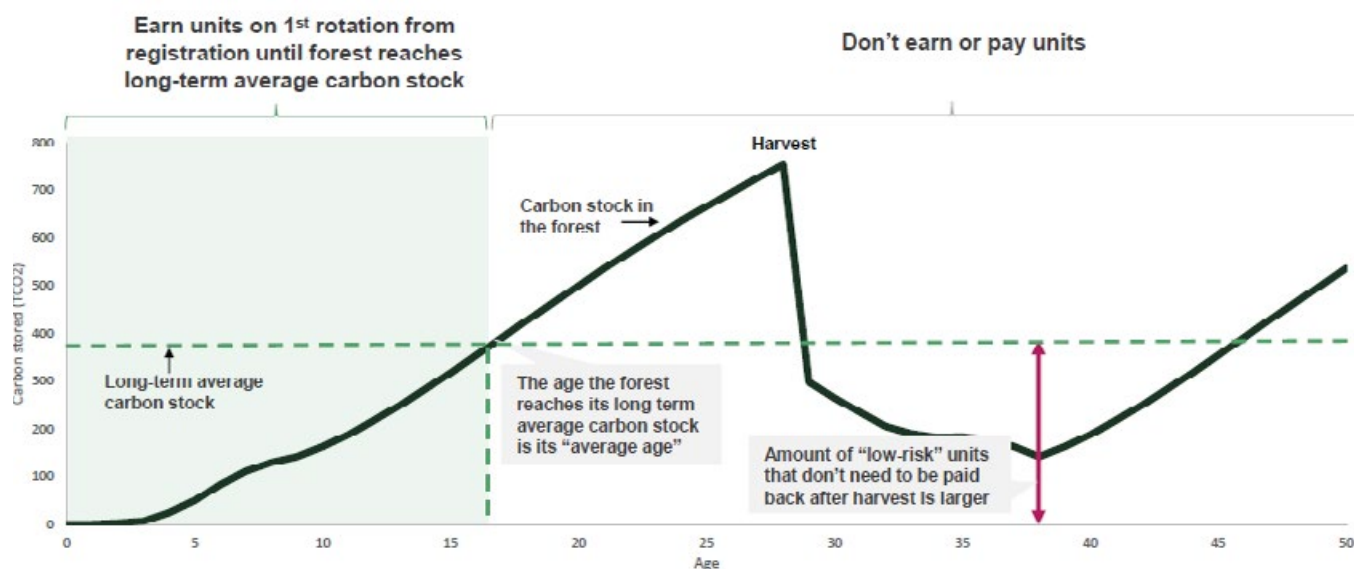
New Zealand farmers produce some of the lowest emissions animal products in the world, especially when counting their on-farm carbon removals. Some consumers are willing to pay a premium for these while others take it as a given. Farmers need to make a choice between using their on-farm vegetation to offset their own animal products emissions or to use this vegetation to offset other people's emissions (i.e. via the NZ ETS or Voluntary carbon markets).

Carbon / Cashflow in the ETS

Calculation of carbon stock in the ETS is dependent on forest type, size, and age. If you have less than 100ha registered, you will use MPI's default carbon tables (refer table below for accumulation rates under the 'averaging regime' in place in 2023). If you have more than 100ha registered, you will need to measure your own forest and create your own forest-specific carbon look-up table.

Species	Age (years)
Radiata pine	16
Douglas-fir	26
Exotic softwood	22
Exotic hardwoods	12
Native (indigenous) forest	23

Different types of forest absorb carbon at different rates. Tree species are grouped into 5 forest types in the ETS. Each forest type in the ETS has its own 'average' age that carbon can be gained up to. This means that if a forest is older than this age, it can't be registered or gain carbon credits as a new forest in the NZ ETS.



! Opportunities and risks

- Carbon credits can only be sold once. This means that the same area of land shouldn't be entered into multiple carbon schemes. It is important for farmers to decide which system works best for their circumstances.
- The carbon accounting method you are under will determine if credits must be surrendered if harvesting/clearing occurs - could be none, some after, or all. If you deforest or exit the ETS all credits allocated must be surrendered.
- Introduction of 'Averaging' carbon accounting method and 'Permanent Post-1989' category in 2021 with all new participants having to use these systems in 2023 (and beyond).
- It is possible to register indigenous reversion, larger riparian, and dense poplar planting areas – **often overlooked**.
- Credits can be sold overtime to improve cashflow and will likely increase in value in future. However, there are tax implications for when carbon credits are sold.

How to register in the ETS

- 1 Research and get advice
- 2 Gather evidence / resources
- 3 Imagery
- 4 Mapping
- 5 Registration

NZ Emissions Trading Register (NZETR)

Open an account to hold credits/NZUs:

www.emissionsregister.govt.nz

Ministry for Primary Industries (MPI)

Submit your ETS application:

www.mpi.govt.nz

Resources

Tree planting information and resources

NZ Farm Forestry: www.nzffa.org.nz

Poplars/Willows: www.poplarandwillow.org.nz

Tāne's Tree Trust: www.tanestrees.org.nz

Trees that Count: www.treesthatcount.co.nz

QEI National Trust: www.qeiiationaltrust.org.nz

Additional information

Carbon sequestration in woody vegetation:

<https://beeflambnz.com/knowledge-hub/PDF/carbon-sequestration-woody-vegetation.pdf>

GHG Calculator Factsheet: www.beeflambnz.com/knowledge-hub/PDF/blnz-ghg-calculator.pdf

Te Uru Rākau – New Zealand Forest Service's website:

www.canopy.govt.nz

More information

For further information freephone
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