



FACTSHEET

Trees within farms: opportunities with carbon

Enhance your farm's biodiversity

March 2022

Policy to Profit - Understanding your farm landscape and ETS opportunities

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
- Improve the productivity of your land
- Provide landscape diversity and wildlife habitat
- Absorbing carbon
- Help diversify your income
- By planting forest on your land, you may be able to claim carbon credits under the ETS
- Reduce future greenhouse gas emission costs associated with a NZ pricing scheme.

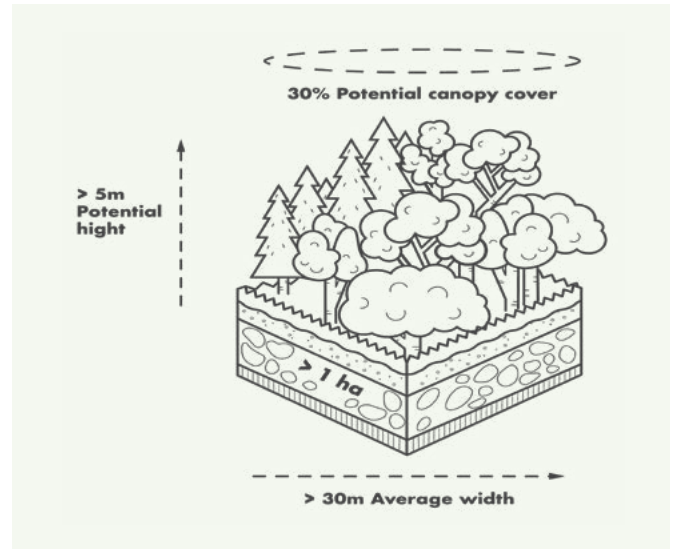


The Emissions Trading Scheme (ETS)

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:

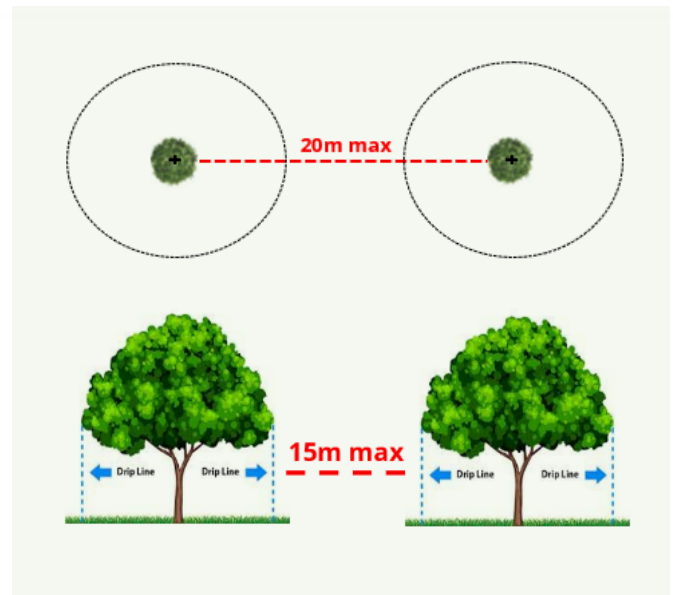
- Tree species (>5m height potential)
- A minimum of 1 hectare
- < 15m between potential canopy edge (mapping standard)
- > 30m potential average width
- > 30% potential canopy cover
- > 1 ha gaps removed



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**)



Carbon / Cashflow

Calculation of carbon stock 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.

Indicative Carbon Stock (units) per hectare

Species	Age (years)							Total
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	
Pinus radiata - regional tables								
Auckland	59	129	169	192	166	140	122	977
Waikato / Taupo	50	113	155	182	166	145	130	941
Bay of Plenty	51	118	131	168	154	133	118	873
Gisborne	77	142	153	186	164	139	124	985
Hawke's Bay / Southern North Island	71	139	151	186	165	140	126	978
Nelson / Marlborough	28	104	100	154	157	147	135	825
Canterbury / West Coast	15	110	61	114	135	134	128	697
Otago	26	115	73	147	160	153	143	817
Southland	35	139	98	163	169	156	146	906
Other species								
Douglas-fir	2	48	115	121	123	109	132	650
Exotic Softwoods e.g. Redwood, Cyprus, Spruce	26	69	68	86	81	70	65	465
Exotic Hardwoods e.g. Poplar, Willow, Eucalypt	63	188	158	117	92	67	44	729
Indigenous forest	8	32	55	63	56	43	29	286

**This table will no longer be applicable from 1 January 2023, when new participants with non-permanent forestry will be required to use the averaging approach.*



Opportunities and risks

- Claim carbon credits back to 2018 if your ETS application is 'approved' before the end of 2022 – MPI processing times 6 months+ and likely to increase
- The carbon accounting method you are under will determine if credits must be surrendered if harvesting/clearing occurs - could be none, some 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.

How to register

- 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

QEII National Trust: www.qeii-nationaltrust.org.nz

References

Potential carbon; Self and Funding Options Compared:

www.beeflambnz.com/hsni-condensed-slide

Carbon sequestration in woody vegetation:

www.beeflambnz.com/knowledge-hub/PDF/carbon-sequestration-woody-vegetation.pdf

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

More information

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