

Vegetation methods to sequester carbon and participate in the Emissions Reduction Fund

Vegetation sequestration methods set out the rules and instructions for undertaking sequestration projects, estimating carbon abatement and reporting to the Clean Energy Regulator and applying to claim credits under the Emissions Reduction Fund (ERF).

EACH ERF PROJECT must use an approved method to ensure that the abatement is measurable and verifiable. The methods below are options for broadacre farmers to participate in the ERF using vegetation to sequester carbon.

Reforestation by Environmental or Mallee Planting—FullCAM

- Establish permanent plantings of native trees to sequester carbon dioxide from the atmosphere and store it in the tree biomass and debris.
- Mallee plantings can only occur on land that receives 600mm or less annual rainfall as defined in the Carbon Farming Mapping Tool.
- Permanent plantings of trees must be established on land that has been cleared, or partially cleared, for at least five years or on land on which a known weed species is present and must be cleared.
- Grazing of livestock is permitted if it does not inhibit the modelled level of carbon stocks being reached.
- The trees cannot be harvested but 10 per cent of debris can be taken for personal use (firewood) each year.
- Carbon abatement is estimated using the Full Carbon Accounting Model (FullCAM)
- Permanent environmental plantings have a crediting period of seven years. Projects can be approved for a subsequent crediting period provided that the project activity remains eligible.
- Trees can be established in either blocks or belts.

Grazing can be introduced after tree plantations are established.



Trees can be planted in alleys or blocks of area greater than 0.2 ha.

Measurement based methods for New Farm Forestry Plantations

- The project area must have been cleared for at least 5 years prior to project commencement.
- A series of measurements must be made to calculate carbon abatement.
- The predicted project average carbon stocks of a harvest project must be estimated using FullCAM.
- This method can be either permanent mixed species plantings or a harvest plantation.
- Project size is determined by the rainfall in the project location; this is determined by the Carbon Farming Rainfall map.
- A permanent plantation may be changed to harvest project if it meets the requirements. A harvest project cannot be changed to a permanent planting.
- Debris can be included in the project.
- Project trees planted must have the potential to grow to more than 2m at maturity and reach 20% crown cover; a minimum number of trees are required.

Native forest from managed regrowth

- Establishing a native forest to sequester carbon from in-situ seed sources including rootstock and lignotubers.
- A project using this method determination must occur on land that has been cleared of forest cover and regrowth has occurred, but has not attained forest cover.
- A project using this method determination must occur on land that, without the project, would be cleared for agricultural use.
- The amount of carbon stored in the forest is estimated using the Full Carbon Accounting Model (FullCAM). This accommodates baseline scenarios that allow for fluctuations in carbon stocks.
- Native forest from managed regrowth projects have a crediting period of 25 years.
- Projects can be approved for a subsequent crediting period provided that the project activity remains eligible.

Reforestation and Afforestation V2.0

- Reforesting cleared land and afforestation on land where no forests previously existed in order to sequester carbon.
- Reforestation and afforestation projects can involve any type of tree species, except for declared weeds.
- The amount of carbon stored by the forest is estimated by directly measuring trees in sample plots using infield measurements such as full inventory and permanent sample plot assessment.
- There are three versions of this methodology determination. The versions differ on requirements for infill planting, calculating the initial carbon stocks, plot sampling and estimating root biomass.
- Reforestation activities have a 15 year crediting period. Projects can be approved for a subsequent crediting period provided that the project activity remains eligible.

Avoided deforestation V1.1

- The project area must have native forest cover at the time of project registration.
- The project area must have a clearing consent issued before 1st July 2010.
- Additional abatement may be achieved by managing the native forest in a way that enhances carbon stocks.
- The amount carbon stored by the forest is estimated by directly measuring trees in sample plots using infield measurements.
- Native forest protection projects have a crediting period of 15 years. Projects can be approved for a subsequent crediting period provided that the project activity remains eligible.

Human Induced Regeneration of Even-aged Native Forest

- Establishment of permanent native forest through assisted regeneration from in-situ seed sources.
- This method involves managing or removing external pressure that is preventing regrowth from occurring.
- Method involves land management activities such as—keeping livestock out of the area, managing grazing, feral animal control, mechanical or chemical suppression activities.
- Land must have been cleared and regrowth suppressed for at least 10 years.
- Carbon storage in the project area is modelled using FullCAM.
- Livestock may be permitted in certain circumstances.
- Trees may be thinned for ecological purposes after project commencement.

Avoided Clearing of Native Regrowth

- Project area must have native forest cover.
- Project area must have been cleared twice in the past and used for grazing or cropping after clearing.
- Proponent must have clearing and regeneration history for the project area.
- Native forest cover is dominated by trees that can grow greater than 2m tall and have a crown cover of 20% of the area.
- FullCAM is used to model the amount of carbon that will regenerate on your land after a 'modelled' clearing; this is the baseline clearing event.
- This method allows for multiple projected series of events to be modelled over a 100 year period.

Important things to think about

- Participation in the Emissions Reduction Fund is subject to ongoing conditions and contracts; these should be considered before progressing with a project under the ERF.
- All income from participation in the ERF is taxable.
- Participation also requires a series of specialised skills for applying for the project and measuring, modelling and auditing the amount of carbon stored or sequestered as a result of the new activity. The skills to do this work are often outsourced and the cost of doing this must also be considered.
- The rate of carbon sequestration in tree plots is directly related to the type of trees, their suitability to the conditions where they are planted, and how fast they grow.
- Sequestration projects under the ERF require the carbon to be stored in vegetation or soil for 25 or 100 years. The 25 year option involves a 20% reduction in the amount of credits that can be allocated to the project.
- Trees planted prior to project registration are not eligible for use in a sequestration project under the ERF.
- Individual farmers looking to revegetate or permanently re-plant small areas of their farm may be able to participate in the Emissions Reduction Fund through an aggregator. Aggregators can develop projects that aggregate small areas of revegetation across multiple properties. The aggregator can pay participating landholders for their carbon rights upfront and then manage every aspect of the revegetation project on their land. In this case, the aggregator is also the recognised offsets entity, so they have the responsibility for the project and receive the carbon credits.

The information in this factsheet is current as of 31 December 2015.

Disclaimer

The contributing organisations and their representatives do not assume liability of any kind whatsoever resulting from any person's use or reliance upon the content of this document.

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