Wwantfa carbon farming

Methods to sequester carbon in soils and participate in the Emissions Reduction Fund

Soil carbon 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 measureable and verifiable.





THE METHODS BELOW are options for broadacre farmers to participate in the ERF using Change to soil to sequester carbon.

Sequestering carbon in soil in grazing systems

- Land must have been continuously cropped or under permanent pasture for 5 years prior to project commencement.
- Project area can include cropland converted to permanent pasture, rejuvenating pastures or changing grazing patterns.
- Projects must include at least one new management activity; activities can be chosen by the person implementing the project.
- Management activities can include pasture cropping, changing pasture irrigation, applying fertiliser—inorganic or organic, and rejuvenating pastures by seeding.
- Soil carbon stocks are measured by regular soil sampling and analysis; completed by qualified technician and analysis completed in accredited laboratories.
- Baseline soil carbon surveys may be conducted before project application.
- Greenhouse gas emissions from performing the project must be calculated to find the net abatement from the project.
- Carbon stored in the soil in the project area must be maintained for 25 or 100 years.

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Estimating sequestration of carbon in soil using default values (model based soil carbon)

- This method uses specific management actions to increase soil carbon stores.
- Soil carbon storage is estimated using default values derived from the Full Carbon Accounting Model (FullCAM).
- A qualified person is required to prepare the project management strategy; a qualified person has national accreditation in the area of interest.
- Project activities include—sustainable intensification (managing nutrients, managing soil acidity, new irrigation, renovating pasture), stubble retention, and conversion to pasture.
- Sustainable intensification projects must be run with two of the activities listed.
- Project activities must be new activities not run in the project area for 5 years prior to project registration; existing practices are excluded
- Other land management activities that are not part of the project can still be run in the project area.
- Crop residue can be removed from a stubble retention project area, once every 5 years.
- Pasture renovation projects must have been under pasture for 2 years prior to project application
- Baseline emissions must be calculated for the project area for the 5 years prior to project registration.
- Carbon stored in the soil in the project area must be maintained for 25 or 100 years.



Important things to think about

- The potential to store soil carbon depends on soil type, climate and management history. Soil carbon projects may not be viable in all parts of Australia.
- The default values set using the FullCAM modelling are conservative figures. No sampling is required.
- The sequestering of carbon in soils using default values requires a qualified person to create the project management strategy. The cost of this activity must be considered.
- The sequestering carbon in soils in grazing systems method requires a qualified technician to take all soil samples and conduct soil analysis. The cost of this activity must be considered.
- 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.
- 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.
- Aggregators can develop small soil carbon projects 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

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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