Australian Government
Clean Energy Regulator

EMISSIONS REDUCTION FUND

Participating in the Emissions Reduction Fund

A guide to the Farm Forestry method

The Emissions Reduction Fund

The Emissions Reduction Fund is a voluntary scheme that aims to reduce Australia's greenhouse gas emissions by providing incentives for a range of organisations and individuals to adopt new practices and technologies to reduce their emissions.

Emissions Reduction Fund projects must be conducted according to an approved method. A number of activities are eligible under the scheme and individuals and organisations taking part may be able to earn Australian carbon credit units (ACCUs). One ACCU is earned for each tonne of carbon dioxide equivalent (tCO_2-e) stored or avoided by a project. ACCUs may be sold to generate additional income, either to the Government through a Carbon Abatement Contract or on the secondary market.

Why participate?

As well as contributing to Australia's efforts to reduce the amount of greenhouse gas entering the atmosphere and the opportunity to earn ACCUs, running an Emissions Reduction Fund project may offer a range of other benefits for scheme participants. Examples include increases in biodiversity, better air quality, reduced energy consumption or income from electricity generation exported into the grid. Landholders may wish to establish a farm forestry plantation to reduce the amount of greenhouse gases from the atmosphere.

Using this guide

This guide provides an introduction to conducting a farm forestry plantation project using the *Carbon Credits (Carbon Farming Initiative—Measurement Based Methods for New Farm Forestry Plantations) Method 2015*, which you can access through the Clean Energy Regulator website. Methods set out the rules for conducting activities under the Emissions Reduction Fund to earn ACCUs.

The guide is complementary to the *Carbon Credits (Carbon Farming Initiative) Act 2011* (the Act), the associated legislative rules, approved method and explanatory statement, but does not replace them. It has been prepared by the Clean Energy Regulator, an independent Australian statutory authority responsible for administering legislation to reduce carbon emissions and increase the use of clean energy.

Undertaking a Farm Forestry project

What is a Farm Forestry project?

A Farm Forestry project involves establishing and maintaining trees in any part of Australia on land that has previously been used for grazing or cropping. Trees can be grown as either permanent plantings or in harvest plantations.

To run a Farm Forestry project, you will require access to forestry expertise – either your own or from external sources – to run the measurements and calculations in the method.

The project helps to reduce the amount of greenhouse gas in the atmosphere because carbon is drawn from the atmosphere and stored in the trees as they grow.

The carbon stored is called carbon stock, while the term 'abatement' refers to the overall reduction in greenhouse gases as a result of a project. The net amount of abatement in greenhouse gases during a project's reporting period is calculated by subtracting emissions from fuel use and fires from the amount of carbon stock.

What are the eligibility requirements to run a Farm Forestry project?

Part 2 of the method and explanatory statement provides details of what is required for a project to be considered eligible by the Clean Energy Regulator, including the evidence that shows how the project area meets those requirements.

> Following the amendment of the CFI Rule on 16 August 2017, any proposed project must first be assessed by the Minister for Agriculture for its potential to have an adverse impact on agricultural production in the region. This assessment is done through a plantations notification.
>
> All questions about the notification process should be referred to the Department of Agriculture and Water Resources' Climate Policy team. The Climate Policy team can be contacted on 02 6272 3933 or via email at ERFnotification@agriculture.gov.au.

For all projects

In summary:

- A Farm Forestry project must be located within Australia in areas where there is Full Carbon Accounting Model (FullCAM) coverage. This covers all of Australia, but excludes external territories such as Christmas Island and Norfolk Island.
- For at least five years before project commencement, the area must have included land used for grazing or cropping, or land that was fallow between grazing or cropping. Areas such as roads, water courses and large rock outcrops are not included as part of a project area.
- A Farm Forestry project can be either a permanent planting (no harvest) or a harvest plantation.

Permanent plantings

In a permanent planting project, commercial harvesting of the trees is not permitted.

A permanent planting must have been established:

- on or after 1 July 2007
- before 1 July 2007, if you can provide evidence to show that the primary purpose of the planting was to generate carbon offsets
- between 2001 and 30 June 2010, if it is an accredited forestry project under the Australian Government's Greenhouse Friendly™ initiative
- between 1 January 2005 and 30 June 2012, if it is an accredited forestry project under the ACT Greenhouse Gas Abatement Scheme
- between 1 January 2003 and 30 June 2012, if it is an accredited forestry project under the NSW Greenhouse Gas Reduction Scheme.

Harvest plantations

In a harvest project, commercial harvesting of project trees is permitted.

A harvest plantation must have been established:

- on or after 1 July 2010, if it is a new farm forestry project
- between 2001 and 30 June 2010, if it is an accredited forestry project under the Australian Government's Greenhouse Friendly™ initiative.

In addition, all harvest plantations in new Farm Forestry harvest projects must conform to the following criteria, as found in section 1.3 of the method.

Rainfall criteria are based on long-term average annual rainfall as per the "CFI rainfall map".

- if rainfall is more than 400 mm per year, plantations can occupy an area no more than 100 hectares, or 30 per cent of a farm (whichever is the smaller)
- if rainfall is less than 400 mm per year, plantations can occupy an area no more than 300 hectares, or 30 per cent of a farm (whichever is the smaller).

How does a Farm Forestry project operate?

Part 4 of the method covers the operation of a Farm Forestry project.

All projects

- Trees can initially be planted as seedlings or seeds.
- Regardless of the type of project or the species of tree, trees must be planted at a density that will allow them to achieve forest cover. This means that trees must have the potential to grow to at least two metres tall, and reach a crown cover of at least 20 per cent of the area (see Box 1).
- Trees may be established as either belt or block plantings.

- In general, project trees must not be removed once established, with the main exception being for harvest if you choose to run a harvest project. Any other removal of project trees is only permitted for specific reasons, such as taking sample trees to calculate the amount of carbon stored, or to manage natural disturbances, such as flood, fire, drought or disease.
- Any non-project trees, such as native forest, must not be removed from the project area, except in certain circumstances.
- Trees that can be removed include prescribed weeds, and non-native forest trees that are less than two metres tall when the project begins.

Box 1: Crown cover

Crown cover is the amount of land covered by the outer edges of a tree or group of trees. To work out the planting density required to reach 20 per cent crown cover, multiply the number of trees per hectare by the crown area in hectares. For example, for a tree species with a crown diameter of 3.5 to 4 metres, about 150–200 trees per hectare would be required. Table 1 of the Explanatory Statement provides additional information.

You are encouraged to plant more than the minimum number of trees required, to allow a buffer for tree mortality or thinning.

Permanent plantings

Once established, plantings must be maintained in such a way that they can reach and maintain crown cover.

Trees must not be removed from the project area, except where their removal complies with sections 4.3 and 4.4 of the method. Permitted removals include (but are not limited to) prescribed weeds, or where required by law, for management of natural disturbances, removal of debris for fire management, or in accordance with traditional indigenous practice or native title rights.

As a sequestration activity, that is, an activity that stores carbon in vegetation or soil, a Farm Forestry project is subject to a 'permanence obligation'.

If a fire or other disturbance occurs in the area during the project, causing a decline in the amount of carbon stock, regrowth must be managed to allow the carbon stock to return to previously reported values. Alternatively, ACCUs equivalent to the loss of carbon caused by the disturbance can be relinquished.

Harvest plantations

If you are planning a harvest project, you must propose a specific management regime (see Division 4.5 in the method).

The proposed regime may include practices such as planting, weed control, harvesting, debris removal, and rotation length (i.e. the length of time between planting and harvesting). Harvesting is permitted as long as it is done in accordance with the management regime. After harvesting, you must re-establish the project trees by planting, seeding or coppice regrowth, and begin a new management regime cycle.

The management regime cycle must continue for the life of the project, and the practices used in each reporting period must be included in the offsets report for that period. Each management regime will be modelled using the computer modelling tool FullCAM to establish projected carbon stocks for that cycle.

As a sequestration activity, that is, an activity that stores carbon in vegetation or soil, a Farm Forestry project is subject to a 'permanence obligation'. In the case of a harvest project, this means committing to a harvest and replanting cycle for the duration of the permanence obligation.

If a fire or other disturbance occurs in the area during the project, causing a decline in the amount of carbon stock, regrowth must be managed to allow the carbon stock to return to previously reported values. Alternatively, ACCUs equivalent to the loss of carbon caused by the disturbance can be relinquished.

In certain circumstances, a permanent planting project may be changed to a harvest project, but harvest projects cannot be changed to permanent planting projects. You can change a permanent planting project to a harvest project only if:

- the permanent planting meets the requirements for a new farm forestry plantation, and
- the total number of ACCUs that have been issued for the project is less than the predicted project average carbon stocks (PPACS) value calculated for the project (See Box 2 and Subdivision 4.1 of the method).

How is abatement calculated?

To estimate the carbon stored in project trees, Farm Forestry projects combine physical measurements of trees with modelling using FullCAM.

Information from the FullCAM model is used in some equations in Part 6 of the method (Division 6.2), in particular for measurements relating to harvest projects.

The CO_2-e net abatement as result of a project is calculated by following the sequence of equations given in Figure 2.

CO_2-e is a unit of measurement that allows the effect of different greenhouse gases to be compared using carbon dioxide as a standard unit. It refers to the amount of carbon dioxide that would give the same warming effect as the greenhouse gases emitted or stored by an activity.

All projects

Measurements are performed against the project trees – that is, trees used for the purposes of storing carbon in a Farm Forestry project. They can be either living or dead, and can also be fire-affected, but must be standing.

Forest litter and fallen dead wood, known as coarse woody debris, can optionally also be counted as part of the project.

Harvest plantations only

In addition to the measurements outlined above, FullCAM is used to calculate the predicted project average carbon stocks (PPACS) over each stratum and the project as a whole for the reporting period. See Box 2 for an outline of 'PPACS' and 'PSACS' values. These provide the upper limit of ACCUs that can be issued for that period.

Instructions for calculating PSACS and PPACS in FullCAM are found in the document 'Guidance for using FullCAM in Measurement Based Methods in New Farm Forestry Plantations' available at http://www.environment.gov.au/node/37301.

Box 2: What are PPACS and PSACS?

PPACS stands for Predicted Project Average Carbon Stocks. It is an estimate (prediction) of what the average carbon stocks in a project will be over the life (permanence period) of a project. As future carbon stocks cannot be measured, model projections must be used, and this is done using the FullCAM model. For harvest projects, the PPACS sets the upper limit to the number of ACCUs that can be issued for that period.

PSACS stands for Predicted Stratum Average Carbon Stocks. A project area is divided into smaller, uniform areas called strata (singular: stratum) for the purposes of measuring and modelling carbon stocks. The PSACS values for all strata in a project area are then added together to calculate the PPACS value.

The PPACS value effectively sets the limit on the amount of change in carbon stocks that you can claim when calculating the net abatement of your project (see the example in Table 2). You cannot claim credits for carbon stocks if this would mean that the total credits received exceeds the PPACS value given in your most recent offsets report (see Division 4.10 in the method).

To determine the PSACS value, FullCAM models your project's management regime in each stratum over a permanence period. The PSACS (and PPACS) value therefore depends on the particular management regime used in a project, and factors such as species and natural disturbances.

What else do I need to run my project?

The following documents are extensively referenced in this Guide, and are essential for running a Farm Forestry project.

- The Carbon Credits (Carbon Farming Initiative) (Measurement Based Methods for New Farm Forestry Plantations) Methodology Determination 2014 and Explanatory Statement
- The *Carbon Credits (Carbon Farming Initiative) Act 2011* (the CFI Act) and *Carbon Credits (Carbon Farming Initiative) Regulations 2011* (the CFI Regulations)
- The Carbon Farming Initiative (CFI) Mapping Guidelines
- The Technical Reference Guide for Farm Forestry
- The Carbon Farming Mapping Tool, which includes the CFI rainfall map (requires Internet access)
- The Full Carbon Accounting Model (FullCAM) software package (requires Internet access and a Windows-capable computer)
- The Guidance for using FullCAM in Measurement Based Methods in New Farm Forestry Plantations.

Remember to download a copy of the explanatory statement to read along with the farm forestry method. Explanatory statements provide further detail about each part of the method and are important documents for interpreting and understanding a method.

Setting up and running a Farm Forestry project

Parts 3, 4, 5, 6 and 7 of the method and explanatory statement describe in detail how to set up a project, and how to calculate changes in carbon stock, as well as the net abatement that has occurred, and what to submit in the required offsets reports. The Technical Reference Guide for Farm Forestry provides all the detailed instructions for the techniques used in running a project.

The main steps involved in setting up and running a Farm Forestry project are described in the following sections.

Establish the project area and divide into strata

1. Identify the area in which your project will occur.

   Use the Carbon Farming Mapping Tool (or other GIS software) and Carbon Farming Initiative (CFI) Mapping Guidelines, and follow Method 1 of the 'Technical Reference Guide for Farm Forestry' (the Technical Reference Guide) and Part 3 of the method.

2. Divide the project area into one or more strata.

   Use the 'Carbon Farming Initiative (CFI) Mapping Guidelines' and follow Method 2 of the 'Technical Reference Guide for Farm Forestry'. (Note that under the Mapping Guidelines, a stratum is also known as a 'carbon estimation area'.)

   A stratum (plural: strata) is the base land unit used to calculate changes in carbon stock occurring within the project area.

   - A stratum must consist of an area with at least one species of project tree.
   - It cannot include land that is either wholly outside of the project area or that is non-project forest.
   - You can also define a stratum based on many other characteristics. These include geography, climatic conditions, soil type, tree age and species, disturbance history and management regime (see Division 3.2 in the method).

   Two types of strata are used in Farm Forestry projects: measurement strata and modelling strata (see Box 3). Note that one defined stratum can be both modelled and measured to cover the different requirements.

Box 3: Measurement and modelling strata: what's the difference?

Measurement strata are used for all measurements as part of a carbon inventory (see 'Run a carbon inventory') to calculate estimates of the amount of carbon stored in your project. They are used in both permanent plantings and harvest plantations.

Measurement strata must be established following Method 2.3 of the Technical Reference Guide.

Modelling strata are used if estimating the amount of carbon stored in tree roots (using a calculation called the root:shoot ratio), as an alternative to physically digging up and weighing the roots.

Modelling strata are also used in harvest projects for FullCAM modelling purposes. They are required for the long-term projections of carbon stocks over the permanence period to calculate the PPACS value for each stratum.

All conditions in a modelling stratum that will affect the model predictions must be uniform (e.g. species, soil type, and cultural treatments such as thinning.) They must also consist exclusively of project trees.

Modelling strata must be established following Method 2.4 of the Technical Reference Guide.

There is not the same requirement for uniform conditions within measurement strata as there is in modelling strata. For example, a measurement stratum could include more than one species or soil type, and could include reforestation areas in different locations with different amounts of annual rainfall. Therefore, measurement and modelling strata may have the same geographic extent, or they may cover different areas. Often, a measurement stratum will include several modelling strata.

Run a carbon inventory

The abatement in your project area is estimated by conducting a carbon inventory. You must conduct your initial carbon inventory within six months of the end of the first reporting period. Subsequent inventories must be conducted at least every five years from the first offsets report and subsequent offsets report that calculates a carbon stock for the stratum. Subdivision 5.1.2 in the method and Method 5 in the Technical Reference Guide cover the carbon inventory.

A carbon inventory estimates the amount of carbon stored in each stratum by assessing smaller areas within the stratum, called 'sample plots'. Sample plots can be either temporary or permanent. All project trees in a sample plot are measured to estimate their biomass (the amount of living and dead material in a tree), and therefore their carbon stocks, for the carbon inventory.

A representative sample of trees is also selected for destructive sampling to estimate the amount of biomass they hold (see 'Assess sampling plots'). These are known as biomass sample trees, and they must come from a temporary sample plot.

Growth disturbances such as fires and outbreaks of disease can have a long-term influence on carbon stocks, and therefore the amount of abatement. Any disturbed strata may need to be revised, following Part 3 of the method and Method 4 in the Technical Reference Guide.

Create sampling plots

Plots are areas of at least 0.02 hectares. You must establish a network, or grid, of plots in each stratum of your project area (Figure 1).

Methods 7, 8 and 9 in the Technical Reference Guide describe in detail how to establish plots. These methods also specify the minimum number of plots required for project areas of different sizes (Table 1).

Figure 1: Sample plot locations in a stratum

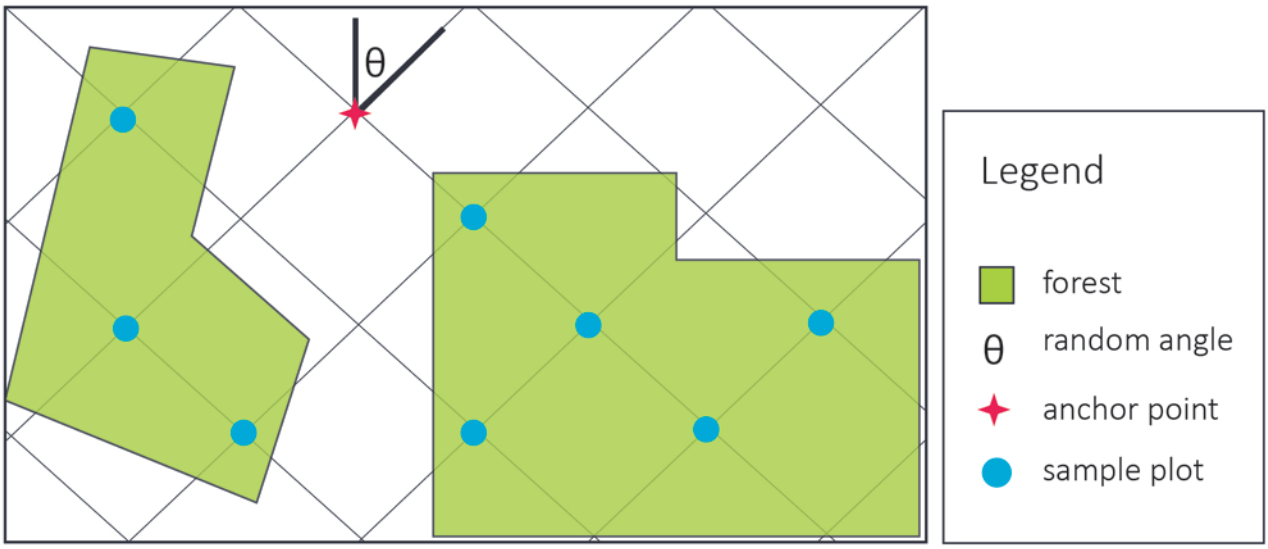


Table 1: Minimum number of plots to be established in the project area

Project area	Minimum number of plots
≤ 30 ha	30
> 30 – 100 ha	50
> 100 – 1,000 ha	70
> 1,000 – 10,000 ha	100

Create a sampling plan

Before you assess your plots, you first need to create a sampling plan. Sampling plans include information such as plot location, size and shape. Method 6 in the Technical Reference Guide describes how to develop and document a sampling plan.

The minimum amount of information required for a sampling plan includes:

- a description of the activities to be undertaken (e.g. sampling trees as part of a carbon inventory)
- the dates over which the activities occur
- the sampling requirements for the activities (see Section 6.2–6.4 in the Technical Reference Guide).

Assess sampling plots

Plots must be assessed each time you conduct a carbon inventory, using Method 8 in the Technical Reference Guide. This is to ensure that plots are in the correct location, are the right shape, and that you have sufficient plots to calculate carbon stocks to the required level of accuracy (see Division 5.3 in the method).

During plot assessment, individual biomass sample trees are cut down, measured and their components are weighed.

The requirements for the biomass sample trees are:

- All biomass sample trees must be live and unburnt.
- Above-ground biomass (stems and branches) and, optionally, below-ground biomass (roots) components are measured.
- Measurements are performed following Method 11 of the Technical Reference Guide.

The measurements collected from measuring the biomass sample trees are used to develop and validate mathematical equations called **allometric functions** (see the following section, and Subdivisions 5.1.3–5.1.5 in the method).

The allometric functions are then used in the equations that estimate carbon stocks (Equations 7.1–7.8 in Figure 2).

Develop and use allometric functions to calculate project biomass

Allometry is a technique that uses mathematical equations to determine the relationships between different parts of living things. In a Farm Forestry project, allometric functions are used to estimate the amount of biomass (and therefore carbon) in a project tree from something that is easily measured, such as stem diameter, tree height or crown dimensions. These measures are known as *explanatory variables*.

Allometric functions are developed using live trees. Accounting for dead or burnt trees is optional (see Box 4).

Method 11 in the Technical Reference Guide explains how to measure the biomass of sample trees and how to develop allometric functions. Method 13 describes how to test the applicability and validity of the developed allometric functions.

To make sure that the allometric functions developed can accurately estimate tree biomass, and therefore carbon stocks, a range of mathematical equations are used to reduce uncertainty and error. All required calculations must be performed when undertaking a carbon inventory; the results provided in your offsets reports will be audited to ensure that the correct procedures have been followed before any ACCUs will be issued.

Box 4: Assessing biomass in dead or burnt trees, and in coarse woody debris or litter

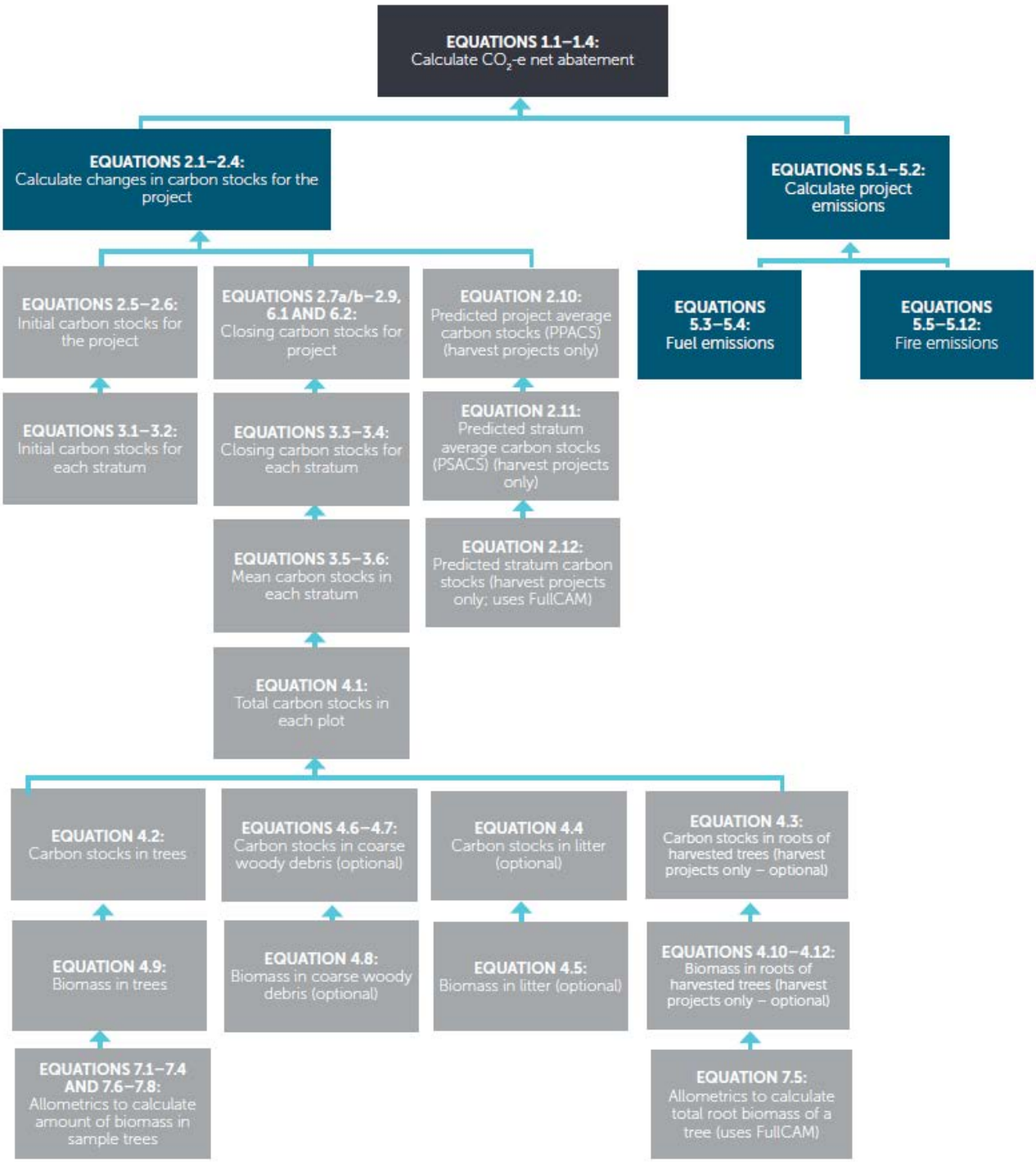
In Farm Forestry projects, accounting for carbon stocks in the biomass of dead and burnt trees is optional. If you decide to include these sources, follow Method 12 in the Technical Reference Guide and Subdivision 5.1.7 in the method.

Assessing carbon stocks in the biomass of coarse woody debris and in forest litter is also optional. Follow Methods 14 and 15 in the Technical Reference Guide and Subdivision 5.1.8 in the method.

In Farm Forestry projects, accounting for carbon stocks in the biomass of dead and burnt trees is optional. If you decide to include these sources, follow Method 12 in the Technical Reference Guide and Subdivision 5.1.7 in the method.

Assessing carbon stocks in the biomass of coarse woody debris and in forest litter is also optional. Follow Methods 14 and 15 in the Technical Reference Guide and Subdivision 5.1.8 in the method.

Figure 2: All equations lead to working out the net abatement achieved by your project



To calculate the net CO_2-e abatement from a Farm Forestry project, you need to follow a sequence of equations.

The allometrics required for your project are developed and validated using Equations 7.1–7.8. The allometrics are then used in the carbon inventory to estimate the amount of biomass in the trees (Equation 4.9), and optionally in coarse woody debris (Equation 4.8), litter (Equation 4.5), and the roots of harvested trees (Equations 4.10-4.12).

Equations 4.2–4.4, 4.6 and 4.7 convert the amounts of biomass to carbon stock in tonnes of CO_2-e per hectare. The total amount of carbon stocks in each plot is then calculated using Equation 4.1, and the mean value for a stratum is calculated with Equations 3.5 and 3.6. The results are then used to calculate the stratum's closing carbon stocks for the reporting period (Equations 3.3 and 3.4).

To determine the project's total closing stocks, Equations 2.7–2.9, 6.1 and 6.2 are used. Harvest projects must also take the project's PPACS into account at this stage using Equations 2.10–2.12.

If the project trees in a stratum were planted before the project's declaration date, then the initial carbon stocks for a stratum are calculated using Equations 3.1 and 3.2. If not, then the initial carbon stocks are calculated as zero. To determine the initial carbon stock for the whole project area, Equations 2.5 and 2.6 are applied.

The total change in carbon stock over the reporting period is calculated using Equations 2.1 and 2.3 (for the first reporting period) and Equations 2.2 and 2.4 (for subsequent reporting periods).

To determine the project's net CO_2-e abatement, the project's emissions from fuel and fire during the reporting period (Equations 5.1–5.12) are subtracted from the change in carbon stocks in the reporting area over the reporting period (Equations 1.1–1.4). The resulting amount of abatement, in tCO_2-e, is used to apply for ACCUs.

Data needed to complete the sequence of equations is drawn from a number of sources. Some data will come from physical measurements and FullCAM, while other data are readily available from the *National Greenhouse and Energy Reporting (NGER) Measurement Determination* and *NGER Regulations*. Information recorded by the person responsible for the project, such as fuel use, is also an essential source of data.

Calculate project baseline

The project baseline represents what would happen if your project did not occur. As described earlier, Farm Forestry projects must take place on land that had been used for grazing or cropping, or land that was fallow between grazing or cropping, for at least five years before a project begins.

Any emissions and tree removals associated with this baseline scenario are therefore assumed to be zero.

Estimate net abatement

The information from the carbon inventory is applied to the previously-developed and validated allometric equations to estimate the biomass of trees in each plot. The estimates of biomass are then converted to estimates of carbon stocks using Equations 4.1 to 4.12 (Figure 2).

Once the carbon stocks of each plot are known, you can work out the carbon stocks of a stratum by multiplying the mean value of the carbon stock from all plots within that stratum by the area of the stratum (Equations 3.5 and 3.6 in Figure 2).

The amount of carbon stored in each stratum at the beginning of a project or a reporting period is known as the *initial carbon stocks*, and the amount of carbon stored in each stratum at the end of each reporting period is known as the *closing carbon stocks*.

If your project trees were planted after your project started, the initial carbon stocks are taken as zero. If your project trees were planted before the project start date, the initial carbon stocks for each stratum are calculated using Equations 3.1 and 3.2 (see Figure 2). These equations take into account the closing carbon stocks for the stratum at the end of the previous reporting period.

The closing carbon stocks for each stratum are calculated using Equations 3.3 and 3.4. When you have calculated the initial and closing carbon stocks for each stratum, use Equations 3.1 to 3.4 to calculate the initial and closing carbon stocks for all strata in your project area (Figure 2).

PPACS and harvest projects

The predicted project average carbon stocks (PPACS) is a prediction of the amount of carbon stored in your project trees at the end of each reporting period of a harvest project (see Box 2).

The PPACS is estimated using FullCAM and Equations 2.10–2.12, and is based on project trees growing in the modelling strata. Trees growing in the measurement strata are used to estimate the actual carbon stocks during a carbon inventory to determine when the PPACS limit has been reached. See sections 4.9–4.10 in the method for PPACS estimation.

Note that a carbon inventory is not required for a project once the carbon stock for the project has reached the calculated PPACS value.

Once the PPACS value has been estimated, it feeds into the calculations of your project's closing carbon stocks (Equations 2.7 to 2.9 in Figure 2).

> The PPACS must be estimated using FullCAM within three months prior to submission of the offsets report.
>
> Instructions for setting up FullCAM to model the PPACS are in Part 6 of the 'Guidance for using FullCAM in Measurement Based Methods in New Farm Forestry Plantations' document.

Calculate emissions from the project

Every project needs to take into account emissions that arise from running it (see Division 5.2 in the method). This is to ensure these emissions are included in calculations that determine changes in carbon stock and net CO_2-e abatement for a reporting period and crediting period.

Emissions from fire and from fuel used in the running of the project are subtracted from the total amount of CO_2-e abatement to arrive at the net amount (see Subdivision 6.2.4 of the method).

Calculate the net amount of abatement

You must undertake all data collection and calculations within the final six months before the end of any reporting period.

For the first reporting period of a Farm Forestry project, you must work out the total change in carbon stock using Equations 2.1 and 2.3. For subsequent reporting periods, use Equations 2.2 and 2.4. This takes into account the closing carbon stocks at the end of your previous reporting period, and ensures that ACCUs are only issued for individual reporting periods, and not cumulatively.

Use Equations 5.3 and 5.4 to work out emissions from fuel use, and Equations 5.5 to 5.12 to determine the amount of emissions from fires. Apply the results to Equations 5.1 and 5.2 to determine the total emissions from the project. Then, use Equations 1.1 to 1.4 to calculate the project's net abatement in greenhouse gases, by subtracting the total emissions from the total change in carbon stock (see Figure 2).

Monitoring and record keeping

The Clean Energy Regulator recommends you draw up a plan for the monitoring, data collecting and record keeping required for an offsets report as specified in Divisions 6.3, 7.2 and 7.3 of the method and Part 7 of the explanatory statement. The means of collecting and recording data will need to be in place from the start of the project. Should an offsets report and associated audit show that data collection and record keeping has not been in place for the entire reporting period, ACCUs may not be issued for some or all of that reporting period.

It is important that participants of registered projects comply with specified reporting, monitoring and record keeping requirements. Failure to do so could constitute a breach of the legislation, with consequences for continued participation in the ERF and/or a financial penalty.

When developing your plan, make sure you have the right controls and processes around your data. Are you collecting your data efficiently? Are all data backed up adequately to guard against the accidental loss of records?

Farm Forestry project monitoring can take the form of on-ground inspections and surveys, as well as remote monitoring such as interpretation of aerial or satellite imagery. Any changes or disturbances should also be monitored to make sure that the project trees have reached or have the potential to reach the height and crown cover requirements. If they do not have the potential to reach the height and crown cover requirements, you cannot include these areas in your calculations and the carbon stock within them will be taken to be zero. For details on how to monitor your project, see Division 7.2 of the method.

The different types of records that must be kept for a Farm Forestry project include descriptions of strata, project trees, sampling plans, fuel use, and data used for calculations of carbon stocks. The complete list of records required can be found in Subdivisions 7.3 to 7.10 of the method.

Prepare and submit audit and offsets reports

You need to report on your project to the Clean Energy Regulator and may report as frequently as once a month, where allowed for, in the legislative rules made under the Carbon Credits (Carbon Farming Initiative) Act (2011). Audits are required where indicated in the project's audit schedule – which is provided following registration (for more information on audits see www.cleanenergyregulator.gov.au).

Applications for ACCUs can be made at the same time as you submit your project and audit reports using the Certificate of Entitlement form available on the Clean Energy Regulator website. The Clean Energy Regulator will not issue ACCUs automatically on receipt of a project report.

Carbon Farming Initiative projects are able to generate credits throughout their crediting period. Crediting periods for each type of offsets project are set out in Part 5 of CFI Act and CFI Regulations. The crediting period for a Farm Forestry project is 15 years.

The information required for Farm Forestry offset reports can be found in Division 7.4 of the method. This is separated into two main sections: the information required for the first offsets report (Subdivision 7.4.1) and the information required by both the first report and all subsequent reports (Subdivision 7.4.2).

The role of audit

Audits assess whether a project complies with the Eligible Offsets Project declaration, the relevant method and legislative requirements for the reporting period. Audit reports must be prepared by a registered Category 2 Greenhouse and Energy Auditor; a list of auditors is available on the Clean Energy Regulator website.

You will receive an audit schedule following successful project registration. This schedule will advise when a project audit must be conducted. All projects will need to include an audit report with their first project report.

The Clean Energy Regulator recommends you engage your auditor early when developing your project to ensure the project is auditable and to assist the auditor to plan activities throughout the reporting and post-reporting periods. The costs of any audit are your responsibility. You must make available to the auditor all necessary documents and information, including data records, receipts and other supporting documentation, and calculation spread sheets.

Changes to my project

You must notify the Clean Energy Regulator of any changes to your or your project's circumstances or operations that may affect project ownership, the project's eligibility or the amount of abatement reported and the number of ACCUs claimed. You must seek approval from the Regulator if you intend to make a significant change from the project as outlined in the application. This applies to all vegetation project types.

As explained earlier, for Farm Forestry projects, permanent plantings may be changed to harvest projects, but harvest projects cannot be re-classified as permanent planting projects.

Resources

- For more information on participating in the ERF - www.cleanenergyregulator.gov.au
- For more information regarding method development – www.environment.gov.au
- www.comlaw.gov.au is the site where you can find all legislative instruments including the:
  - *Carbon Credits (Carbon Farming Initiative) Act 2011 (current version)*
  - Carbon credits (Carbon Farming Initiative) Regulations 2011
  - Carbon Credits (Carbon Farming Initiative) Rule 2015
  - The Carbon Credits (Carbon Farming Initiative) (Measurement Based Methods for New Farm Forestry Plantations) Methodology Determination 2014 and Explanatory Statement.
- Enquiries on participating in the ERF - 1300 553 542, or enquiries@cleanenergyregulator.gov.au
- Enquiries on the plantations notification process – 02 6272 3933, or ERFnotification@agriculture.gov.au