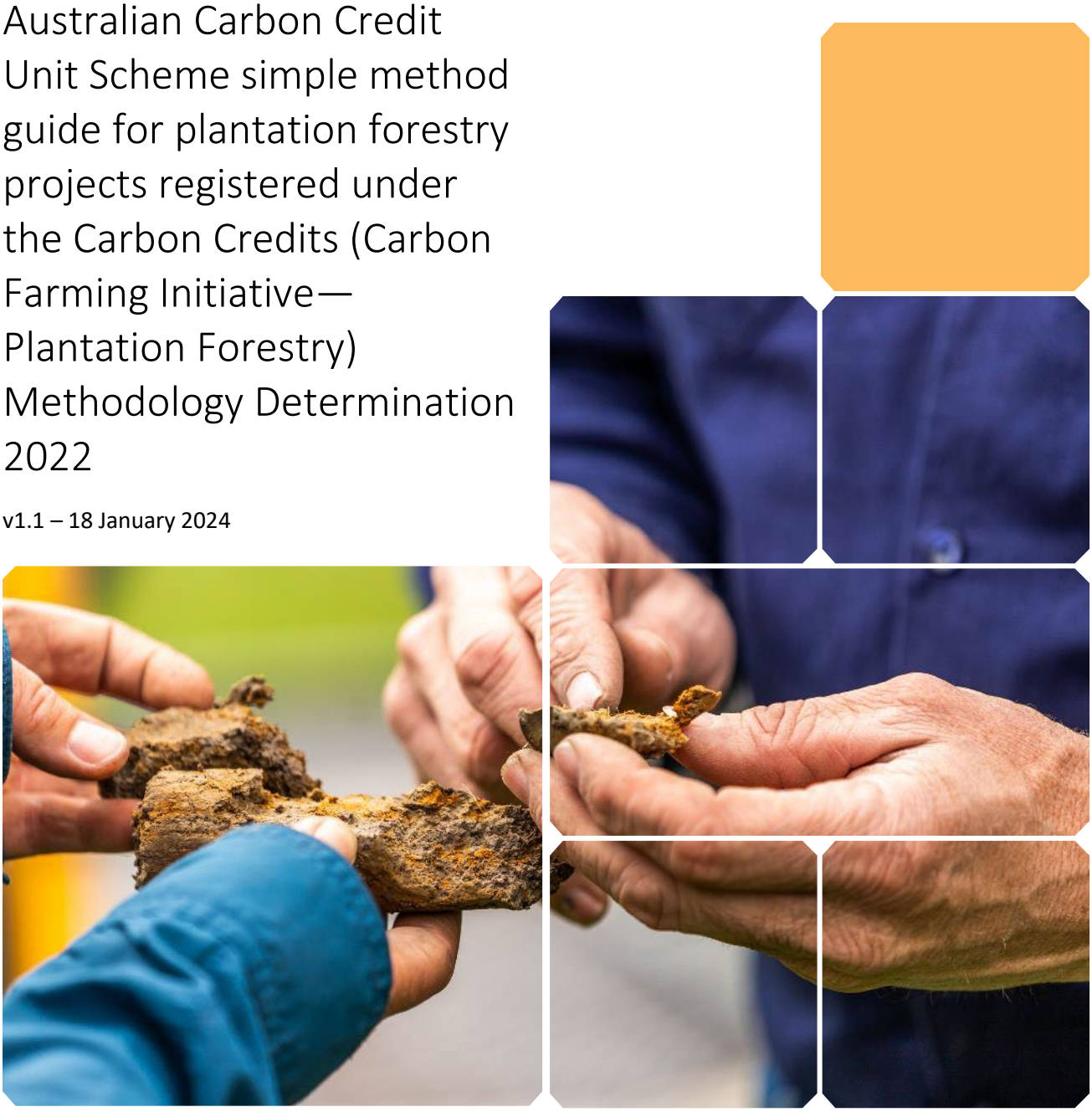
Australian Government
Clean Energy Regulator

Understanding your plantation forestry project

Australian Carbon Credit Unit Scheme simple method guide for plantation forestry projects registered under the Carbon Credits (Carbon Farming Initiative—Plantation Forestry) Methodology Determination 2022

v1.1 – 18 January 2024



Australian Carbon Credit Unit Scheme

Contents

Using this guide

This document provides a high-level step-by-step guide on how to plan, register, deliver and report on a plantation forestry project under the 2022 plantation forestry method. It supports the Carbon Credits (Carbon Farming Initiative—Plantation Forestry) Methodology Determination 2022 (the 2022 plantation forestry method). The method is a key technical part of the legislation that details the rules for how to run plantation forestry projects.

In addition to the 2022 plantation forestry method and this document, further details on how to run a plantation forestry project are included in the:

- Plantation Forestry FullCAM Guidelines, which have been developed to assist project proponents to calculate abatement in FullCAM as required by the 2022 plantation forestry method.
- Forest Management Plan Guidance, which has been developed to assist proponents to prepare a forest management plan as required by the 2022 plantation forestry method.
- Financial Assessment Guidance, which has been developed to assist proponents to prepare a financial assessment as required by Schedules 3 and 4 of the 2022 plantation forestry method.

There are a range of factors which may influence a decision to participate in the Australian Carbon Credit Unit (ACCU) Scheme. The agency recommends that you seek independent technical, legal, audit and/or financial advice regarding your circumstances and requirements.

The 2022 plantation forestry method

The 2022 plantation forestry method builds on the 2017 plantation forestry method (the 2017 method) to provide more opportunities for the plantation forestry industry to participate in the ACCU Scheme. A project under the 2022 plantation forestry method will accumulate or sequester carbon as the trees grow. Carbon stored in debris and harvested wood products (where relevant) will also be accounted for. The abatement calculations under the method also account for carbon stock changes and emissions due to management activities such as thinning, pruning, harvesting, fertilising and controlled burning, and material emissions from fossil fuel use.

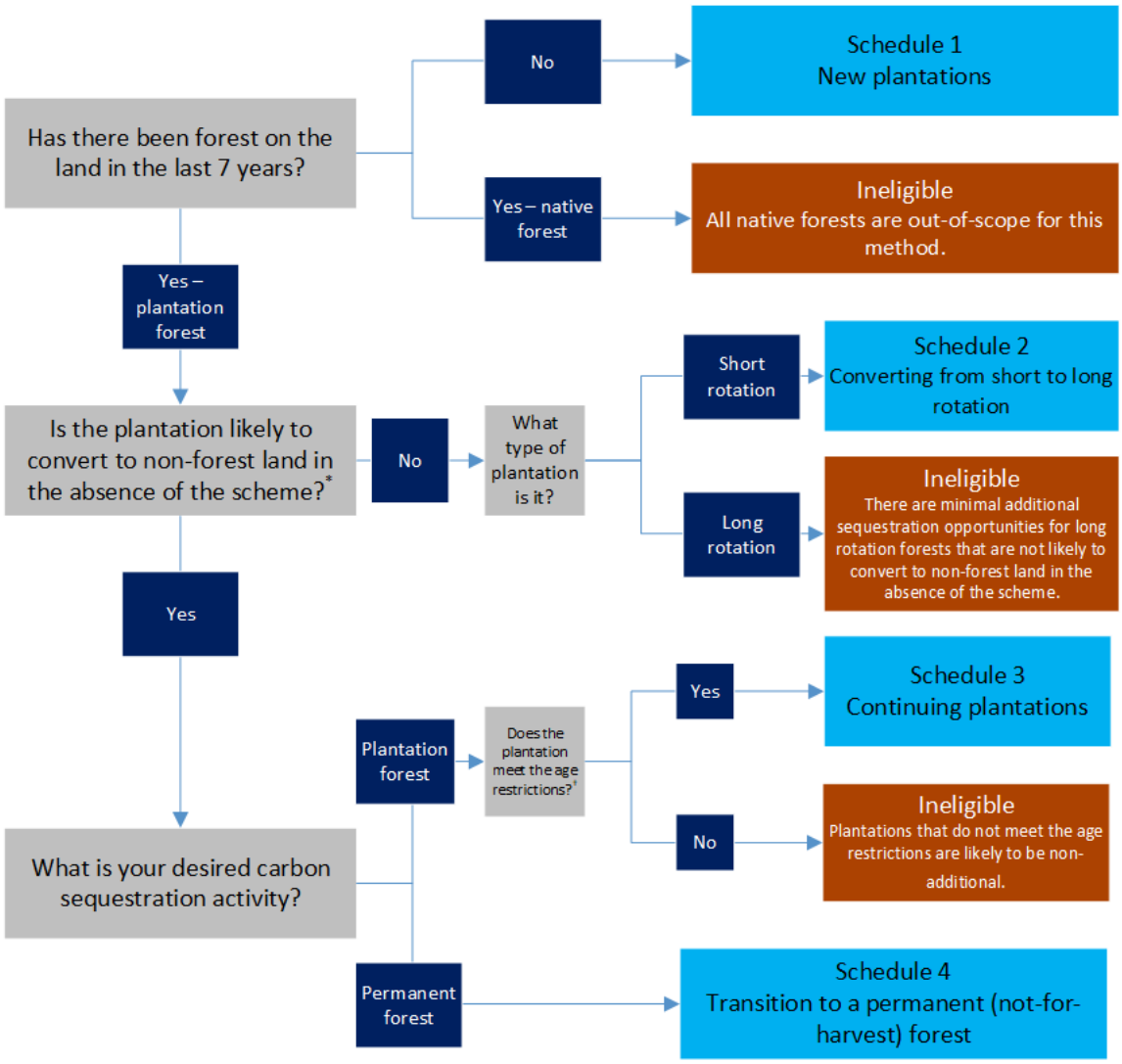
Two activities have been retained from the 2017 method: establishing a new plantation and conversion from short rotation to long rotation. There are also two new activities that can earn Australia carbon credit units (ACCUs) for retaining forest where the land would have otherwise been converted to non-forested land. These activities maintain permanent not-for-harvest plantings or continue plantation activities, where the avoided conversion of plantation land is demonstrated to be additional and go beyond business-as-usual activity.

Each activity available under the 2022 method is in a different schedule (Table 1). Figure 1 below provides a high-level overview of the activities in each schedule and is intended to assist in quickly assessing which schedule might be appropriate for an individual project's circumstances. Please note that additional eligibility criteria also apply under each schedule, which are discussed throughout this document.

TABLE 1: PROJECT ACTIVITIES UNDER THE 2022 PLANTATION FORESTRY METHOD

Schedule	Details	Activity type
Schedule 1	Establishing a new plantation	Retained from the 2017 method with some updates
Schedule 2	Converting an existing plantation from a short to a long rotation	
Schedule 3	Continuing plantation forestry activities	New avoided conversion activities to retain forest where it would otherwise be converted to non-forested land
Schedule 4	Transition to a permanent (not-for-harvest) forest	

FIGURE 1: 2022 PLANTATION FORESTRY METHOD DECISION TREE



*Subject to eligibility based on additionality assessment.

†See 'Framework for assessing the additionality of Schedule 3 and 4 projects'

New activities and key changes from the 2017 method

The 2022 plantation forestry method builds on the 2017 method by:

- making targeted changes to the available activities
- introducing new activities.

Key changes and new activities in the 2022 method are outlined in Table 2 below.

TABLE 2: SUMMARY OF KEY ISSUES AND APPROACHES

Issue	Details	Page
Cross-cutting issues		
In lieu of newness provisions	We have introduced in lieu of newness provisions to permit some project activities to be undertaken after a complete registration or area variation application has been submitted and prior to project registration or approval. These activities include site preparation and planting activities for Schedule 1, in addition to harvesting, clearing, or thinning the existing forest for Schedules 2, 3 and 4.	12-13
Plantations outside of National Plantation Inventory (NPI) regions	Plantations outside of National Plantation Inventory (NPI) regions are permitted to participate in the 2022 method, subject to eligibility requirements. Schedule 2 and 3 projects are required to be located within 100km and 50km of an NPI region, respectively, and Schedule 2 projects need to conform to the requirements and restrictions of the closest NPI region.	20
Excluded species	African Mahogany and Indian Sandalwood plantations were excluded from the 2017 method as evidence at the time indicated that the estates of these species were expanding. However, updated Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) data shows that the estate of these species is now in decline, supporting their inclusion in the 2022 method as they are likely to be additional.	10-11
Estimating carbon	The 2022 method continues to use a modelled only approach using FullCAM. Updated FullCAM guidelines for use with 2016 FullCAM have been developed to accompany the 2022 plantation forestry method.	31
Harvested wood product parameters	We have updated the harvested wood product parameters (located in the FullCAM guidelines) to reflect updated international emissions accounting rules, current market conditions and allow abatement to be calculated outside of NPI regions.	FullCAM Guide-lines
Forest Management Plan	The forest management plan supersedes the requirements of the management schedule (from the 2017 method) for all schedules.	18,24, 26-28

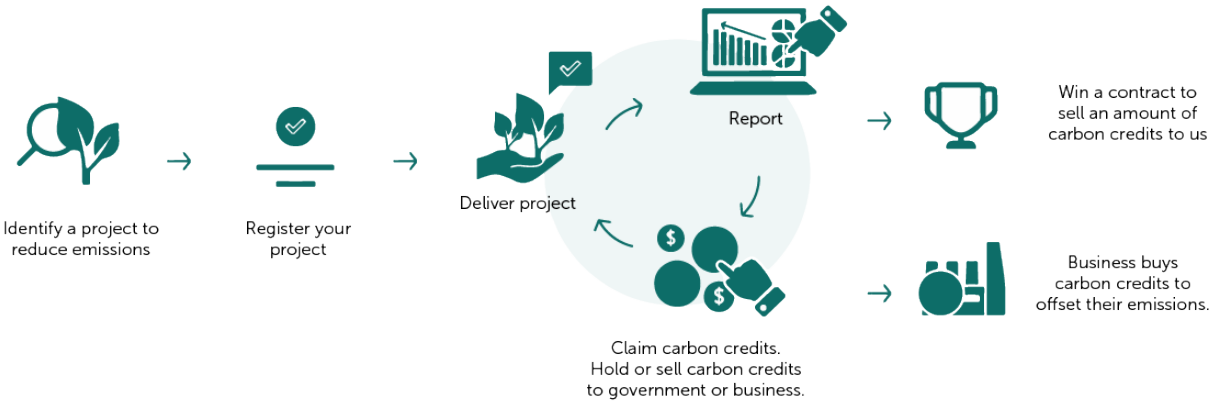
	Schedules 2, 3 and 4 projects are subject to specific requirements to manage additionality, permanence and adverse impact risks.	
Schedule 2		
Species lists	Targeted changes have been made to the species lists in the 2017 method to allow for increased uptake while still meeting the offsets integrity standards. This includes expanding the types of evidence that can be provided to demonstrate intent to manage a plantation as a short or long rotation plantation, and updating the lists based on the latest ABARES data.	10-11
Schedules 3 and 4		
Schedule 3 project activity	Schedule 3 is a new project activity in the 2022 method. This schedule involves the continuation of rotational harvest cycles in a plantation forest, in situations where that plantation is at risk of being converted to non-forested land.	24
Schedule 4 project activity	Schedule 4 is a new project activity in the 2022 method. This schedule involves transitioning a plantation forest to a permanent forest, in situations where that plantation is at risk of being converted to non-forested land.	25-29
Additionality framework	A framework has been developed to assess the additionality for Schedules 3 and 4 projects. Key elements include: • The provision of a 'transformation statement' (via a declaration by the CEO or CFO of the project proponent), which declares that the plantation is likely to convert to non-forest land in the next 24 months. • An independent financial assessment which demonstrates that the plantation is likely to convert to a feasible and financially attractive alternative land use relative to continuing plantation forestry. • Evidence of a feasible and financially attractive alternative land use relative to continuing plantation forestry. Age restrictions for Schedule 3 (must be within two years or older than the average clearfell age for the relevant species and region) are to reduce additionality risks (as plantations are unlikely to clear midway through a rotation) and to avoid incentivising the clearing of immature plantations.	12-14

Participating in the Emissions Reduction Fund

The ACCU Scheme offers landholders, communities, and businesses the opportunity to run new projects in Australia that reduce or remove greenhouse gas emissions from the atmosphere.

By running a project, you can earn ACCUs and sell them to the Australian Government, or to companies and other private buyers. Each ACCU represents one tonne of carbon dioxide equivalent emissions stored or avoided (noting that legislated discounts apply to abatement from projects that store carbon).

FIGURE 2: EMISSIONS REDUCTION FUND PROJECT LIFECYCLE



There are four general steps in running a project and participating in the ACCU Scheme:

1. Plan your project, make sure the project is eligible, and ensure you hold legal right.
2. Register your project with the ACCU Scheme.
3. Run your project and deliver on a project activity.
4. Report on your project and claim ACCUs. You can sell your units to us or other buyers.

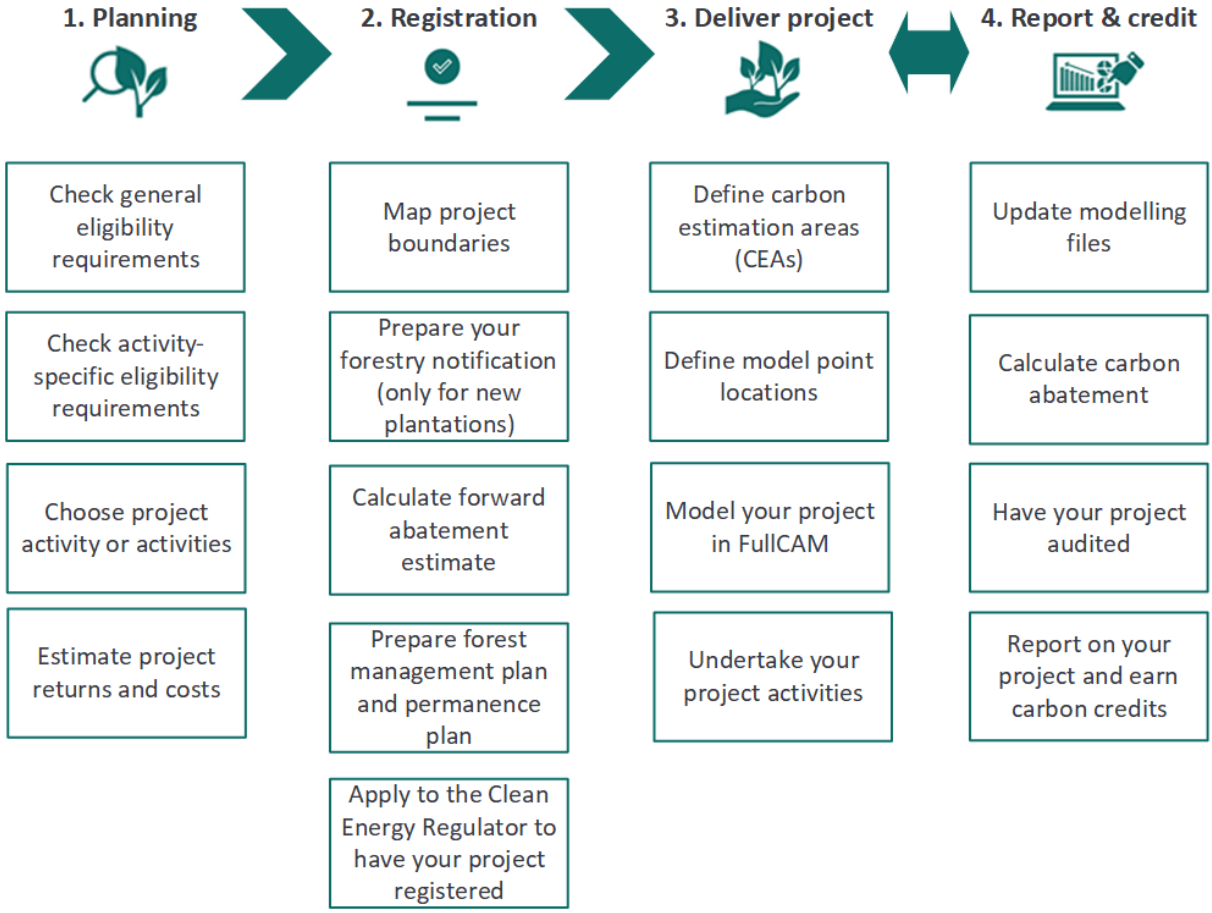
See our website[1] for more information on selling your ACCUs to the Australian Government or other interested buyers

[1] http://www.cleanenergyregulator.gov.au/ERF/Forms-and-resources/auctions-and-contracts

Project lifecycles for projects under the 2022 plantation forestry method

The key steps required in a 2022 plantation forestry method are outlined in Figure 3 below.

FIGURE 3: KEY STEPS INVOLVED IN A 2022 PLANTATION FORESTRY PROJECT (ILLUSTRATIVE ONLY)



Step 1: Planning your plantation forestry project

1.1 General eligibility requirements

Key considerations are highlighted below. For more information on eligibility, visit our website[2].

Hold legal right

You need to demonstrate that you hold and maintain the exclusive legal right and forestry right[3] to run your project and claim ACCUs. It is likely that you have the legal right if you own or hold a lease to the project land. You may need a written agreement if there are multiple owners or leaseholders to show you have the exclusive legal right to run the project and earn ACCUs.

[2] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Planning-a-project

[3] Forestry rights are the rights to plant, establish, manage, and maintain vegetation on the land. Each state and territory has its own forestry legislation.

Eligible interest-holder consent

You will need consent from all eligible interest-holders before you can submit an offsets report for your project. These are stakeholders who hold an interest in the land. They may include:

- Any mortgagees — typically banks.
- Other people or parties that share, have ownership or leases or native title rights to the land. See our website[4] for more information.
- For leased Crown land – the Crown Lands Minister needs to provide consent, usually through a relevant state or territory lands department.

You can demonstrate eligible interest-holders have consented to your project by getting each eligible interest holder to sign a Clean Energy Regulator eligible interest-holder consent form[5].

Regulatory approvals

You need to ensure you have all relevant approvals, licenses or permits that are required to carry out your plantation forestry activities, such as obtaining relevant planning or environmental approvals.

Deadlines for consent and approvals

All eligible interest-holder consents and regulatory approvals must be supplied to us before the end of your first reporting period (which will be, at the latest, five years after your project start date). Your project will be registered 'conditionally' until all consents and approvals are provided. Conditionally registered projects cannot receive ACCUs. You can apply to remove conditions by providing consents through a project variation application (see 'Making changes to your project'[6] for more information).

Fit and proper person assessment

You need to be recognised, and continue to be recognised, as a **fit and proper person**[7] for the purposes of the scheme. The fit and proper person test involves declarations about any convictions or insolvency and considers whether a person has the necessary capabilities to run a project.

Excluded Offsets Projects

Under the Carbon Credits (Carbon Farming Initiative Regulations 2011 ('the CFI Regulations') and the Carbon Credits (Carbon Farming Initiative) Rule 2015 ('the CFI Rule'), projects are ineligible to participate in the ACCU Scheme if:

[4] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Planning-a-project/native-title
[5] http://www.cleanenergyregulator.gov.au/ERF/Choosing-a-project-type/Opportunities-for-the-land-sector/eligible-interest-holder-consent
[6] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Making-changes-to-your-project#Vary-your-conditional-registration
[7] http://www.cleanenergyregulator.gov.au/About/Policies-and-publications/fit-and-proper-person-posture

- For new plantation projects: The Minister for Agriculture determines that the project may lead to an undesirable impact on agricultural production in the region in which the project is to be located (please see the plantation forestry notification section on pages 19-20).
- The plantation is currently being managed under a forestry managed investment scheme (MIS). This does not restrict ex-MIS plantations from participating if they are no longer managed under that scheme, or
- The land has been cleared of a native forest or drained of a wetland within the 7-year period prior to applying to register your project (CFI Regulations).
  - » This requirement is 5 years if there has been a change in ownership of the land after the clearing or draining event.
  - » Note that clearing native forest after registration (excepting plantations) is also not permitted under the scope of the legislation.

Excluded Offsets Projects—specified tree planting ('the water rule')

Regulation 3.37[8] ('the water rule') enables plantation forestry and farm forestry projects in higher rainfall areas to proceed with registration under the ACCU Scheme if located in an area where tree planting is unlikely to materially impact water availability. These requirements intend to help manage the impacts of commercial tree plantings on water availability.

Projects are considered to meet the water rule if it meets one of the criteria in in subregulations 3.37(2) to 3.37(8), such as:

- The project is a permanent planting that is also an environmental planting as defined in the CFI Regulations.[9] This is only relevant for specific Schedule 4 (permanent planting) projects, or
- The project is located in a 'specified region'.[10] These are regions that receive more than 600mm of long-term average rainfall and that have been determined by the Department of Climate Change, Energy, the Environment and Water as regions where the planting of trees is unlikely to have a material adverse impact on water availability. The specified regions may be updated from time to time. Current specified regions maps can be found on the Department of Climate Change, Energy, the Environment and Water's website.

If your project is not a permanent environmental planting or located in a specified region, there are other exemptions for the water rule (for example, if there is a suitable water access entitlement or the project can

[6] Carbon Credits (Carbon Farming Initiative) Regulations (2011)
[9] Ibid.
[10] As at December 2021, specified regions for subregulation 3.37(4A) include:
- North East New South Wales
- South West Slopes of New South Wales and Victoria
- Gippsland
- The Green Triangle
- Kangaroo Island
- South West Western Australia
- Specified regions of Tasmania.

Please refer to the link for maps: https://www.industry.gov.au/sites/default/files/2020-07/plantation-forestry-specified-regions-for-subregulation-3-37-4a.pdf

be shown to manage dryland salinity[11]). If one of these exemptions is not applicable the Clean Energy Regulator will need to seek advice from the relevant state water agency. Please contact us on 1300 553 542 for further information on the water rule status of potential sites.

Species restrictions

The method is not restrictive on the tree species that can be grown under Schedules 1, 3 and 4, provided:

- The plantation can be expected to reach forest cover (defined in the method) before clearfelling, and
- The plantation does not involve growing a species that is a known weed species.

Schedule 2 projects are subject to restrictions on what can be grown in the baseline or project scenarios (see page 23).

Schedule 6 of the 2022 method contains three species tables, summarised below in Table 3 below.

TABLE 3: SUMMARY OF SCHEDULE 6 SPECIES LISTS AND RELEVANT SCHEDULES

Schedule 6	Details	This part applies to:
Part 1	A list of species presumed to have a short rotation, and their maximum and default clearfell ages	• The definition of 'short rotation' and 'SR species' for Schedule 2 • Plantation forest requirement for Schedule 3*
Part 2	A list of species presumed to have a long rotation, and their default clearfell ages	• The definition of 'short rotation' and 'SR species' for Schedule 2 • Plantation forest requirement for Schedule 3*
Part 3	A list of all plantation forestry species and their default clearfell ages	• Plantation forest requirement for Schedule 3*

*The plantation forest requirement for Schedule 3 is that the plantation forest is of, or was harvested at, an age that is within 2 years or older than the relevant default clearfell age.

1.2 Project returns and costs

Decide on a business model

To run a plantation forestry project under the ACCU Scheme, you will need to decide on a business model that is right for you by choosing who the **project proponent** will be. The project proponent is the person or organisation legally responsible for running an ACCU Scheme project. Choosing who the project proponent will be is an important business decision. For more information see our Being a Proponent factsheet[12].

You can be the project proponent yourself, or you can engage another person or organisation to be the proponent. You can also be the project proponent and engage an agent to act on your behalf.

[11] http://www.environment.gov.au/climate-change/government/emissions-reduction-fund/publications/cfi-salinity-guidelines

[12] http://www.cleanenergyregulator.gov.au/csf/how-it-works/Pages/Being-a-project-proponent-information-for-landholders.aspx

Estimating returns

The amount of ACCUs earned over a 25-year crediting period will depend on the size, species, activity, and the geographic location of your project.

The Clean Energy Regulator runs regular auctions to buy ACCUs from projects. By bidding at an auction you can secure a contract to sell ACCUs to the Australian Government — see our website[13] for more information on what it means to enter into a contract with us to sell ACCUs if you are successful at an auction.

Selling ACCUs to us is not your only option: you can also sell ACCUs on the secondary market to other parties that hold a contract with us or to individuals, private companies or state and local governments looking to offset their emissions.

Estimating costs

There are establishment, operating (including monitoring and record-keeping), reporting and audit costs associated with running a plantation forestry project.

Establishment and operating costs could include:

- Investing in establishing a project (e.g. buying seeds/seedlings, planting costs).
- Conducting management activities (e.g. thinning, pruning, fuel reduction, harvesting).
- Engaging consultants to assist with mapping and modelling of the estimated abatement.

You should also factor in time needed for monitoring and record-keeping.

Preparing offsets reports may have costs, mainly if hiring assistance (e.g. carbon service providers).

You will need to report at least once every five years.

You need to engage an auditor to prepare an audit report.

- At least 3 audits are required over the 25-year crediting period.
- The first audit is due with your first offsets report.

1.3 Additionality under the Emissions Reduction Fund

Under the ACCU Scheme, project activities must be additional – that is, they would be unlikely to occur under normal business conditions, in the absence of the ACCU Scheme. The scheme has a number of requirements that relate to additionality:

- At the method level, the Emission Reduction Assurance Committee's approach for the additionality standard has been to apply two tests:
  - » **Project test:** Whether activities covered by the method would occur in the absence of the incentive provided by the scheme.
  - » **Baseline test:** what emissions or sequestration would be if the project was not implemented (i.e. sets the baseline for crediting abatement).

[13] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Step-2-Contracts-and-auctions/understanding-carbon-abatement-contracts

- The ACCU Scheme also has three project-level additionality tests embodied in both the legislation and, for particular project types, in methods. The three additionality tests under the Act are:

  1. **Newness:** The project must not have begun at the time the ACCU Scheme project is registered. However, methods can set out in lieu of newness requirements.

     For the 2022 plantation forestry method, the following activities are permitted to be conducted after a complete application to register or vary the area of a project has been submitted, and prior to project registration or approval:

     - For all schedules: Leasing or purchasing a tangible asset for the purpose of site preparation or planting activities, site preparation and planting activities, and preparation of the forest management plan.
       - For the above, site preparation involves any action that would be undertaken to prepare fallow land for planting. This includes (but is not limited to) windrow and burning, fertiliser application and weed control.
       - For the above, planting activities involve purchasing seeds and seedlings, and planting, seeding or coppicing to establish a new plantation or commence a new rotation.
     - For Schedules 2, 3 and 4: Harvesting, clearing or thinning the existing forest.

     When undertaking these activities prior to registration, project proponents should be aware of the risk that project registration is not guaranteed.

  2. **Regulatory additionality:** the project must not be required to be carried out by or under a law of the Commonwealth, a State or a Territory.

     - The Clean Energy Regulator has released guidance outlining an approach that allows the regulatory additionality test to be met in certain situations where other Government laws require reducing or offsetting emissions whereby project proponents remove ACCUs used to meet those obligations from the market by transferring them permanently into a Commonwealth holding account

     Regulatory additionality tests are applied in the 2022 plantation forestry method to avoid crediting plantations that are already protected from conversion to non-forest land, such as under long-term conservation agreements, lease arrangements that require replanting or other commitments.

  3. **Government programs:** the project must not be likely to be carried out under another Commonwealth, State or Territory government program or scheme.

1.4 Framework for assessing the additionality of Schedules 3 and 4 projects

There is an increasing trend to convert Australia's plantation estate to non-forest, largely agricultural, land. Australia's plantation estate declined by 10% between 2014–15 and 2019–20. The hardwood plantation estate decreased by 22% over the same period, while the softwood plantation estate decreased by 0.7%.[14]

The 2022 method includes two new activities to avoid this conversion by:

- Continuing plantation forestry activities (Schedule 3), or
- Transitioning a plantation forest to a permanent planting (Schedule 4).

[14] https://www.awe.gov.au/abares/research-topics/forests/forest-economics/plantation-and-log-supply

Projects can only be considered additional if there is strong evidence that the plantation would likely convert to non-forest land in the business-as-usual (BAU) scenario.

To ensure that ACCUs are only earned for activities that would not occur under BAU, projects are only eligible to participate in Schedules 3 and 4 if it can be demonstrated under the framework below that the plantation would have likely converted to non-forest land in the BAU scenario.

Overview of additionality framework for Schedules 3 and 4

The additionality framework for assessing the additionality of Schedule 3 and 4 projects has several requirements that all need to be met for projects to be eligible. The framework aims to balance the need for a standardised additionality assessment at the method level to minimise subjectivity and administrative burden, while incorporating standardised project-level requirements to ensure integrity.

Transformation statement

Project proponents must provide a transformation statement which articulates and provides evidence of how the project activity (either transitioning to a permanent forest or continuing plantation forestry activities) is different to the BAU (what would have otherwise occurred in the absence of participation in the ACCU Scheme).

The transformation statement must include a declaration signed by the CEO or CFO.[15] The requirements for the declaration will depend on the current ownership or tenancy of the land.

Where there has been no change in ownership over the last 12 months, the declaration must:

- state that the plantation forest would have been converted to a viable[16] non-forest land use within the next 24 months of submitting a project registration application, or
- state that the fallow land, where there has been a plantation in the last 7 years, already has, or would have converted to a viable, non-forest land use within the next 24 months of submitting a project registration application.
- identify and explain what the BAU would have been (i.e. sell or use the land for a non-forested use, such as grazing or cropping), and
- explain how financial and other broader strategic considerations would have influenced these decisions. For example, if the plantation was owned by a forestry company with long-term supply contracts, the statement should explain why converting the land to a non-forest land use or not re-establishing the planting would not be counter to broader forestry company objectives.
- where there was or currently is a short rotation plantation undertaking a Schedule 3 project, the CEO or CFO declaration must also include a statement that it is unlikely that the plantation would have been converted to a long rotation plantation under Schedule 2, even when ACCUs are taken into account. This requirement intends to reduce the risks of short rotation plantations applying to participate in Schedule 3 when they could otherwise have participated in Schedule 2 and were therefore not genuinely at risk of conversion.

[15] The CEO/CFO of the project proponent is the individual who is primarily responsible financial matters in relation to the project proponent. This definition allows individuals such as landholders, or agents or carbon service providers to sign the declaration, in the instance that they are the project proponent.

[16] The requirement that the non-forest land use must be viable ensures that it is realistic to assume that the conversion would happen in the BAU scenario. There may be factors relating to specific plantation land such as soil type and slope that mean that not all plantation forest land will be suitable for an agricultural land use.

Where the ownership or tenancy has changed over the last 12 months, the declaration must:

- state that the plantation forest or fallow land (where there has been a plantation forest in the last 7 years) was purchased during the last 12 months by the project proponent, or the project proponent entered into a lease for at least the duration of the project's permanence period for the forest or fallow land during the last 12 months, with the intent to change its land use relative to what it would have been under the previous owners or leaseholders
- explain how financial and other broader strategic considerations would have influenced these decisions.

The declaration must be underpinned by:

- an independent financial assessment that demonstrates that continuing subsequent plantation forestry rotations would have been less financially attractive (all things being equal) relative to converting the land to non-forest land in the BAU scenario. The financial assessment must also be informed by an independent land valuation, or where there has been a change in ownership or tenancy over the last 12 months, the sale or lease price.
- a forest management plan (page 18) signed-off by a qualified independent person.

The declaration may also be supported by other evidence, such as company reports, investor mandates, board minutes, firm offers to purchase a site, photos of the site etc.

Independent financial assessment

A financial assessment will be required to be undertaken by a qualified independent person[17] and must:

- be provided to the agency for assessment of completeness and compliance with the guidance.
- demonstrate that the plantation forest is likely to convert to a feasible and financially attractive alternative land use relative to continuing plantation forestry in the absence of the scheme.
- demonstrate that, with projected revenue from ACCUs and harvesting, the proponent expects to receive enough revenue to continue the project activity for the entirety of the permanence period. This is intended to ensure that the method does not incentivise projects to register that will not be financially viable for the entirety of the permanence period.

The qualified independent person must declare that the independent financial assessment demonstrates that the plantation forest is likely to convert.

To ensure that the financial assessment considers recent market conditions, it must have been undertaken within the last 12 months.

Guidance has been developed to provide project proponents with further information on how to satisfy the requirements of the independent financial assessment.

[17] A qualified independent person is a person who:

- holds qualifications, determined by the Regulator to be necessary to hold, to provide an opinion to meet the method requirements, and
- who has no financial interest in the project, noting that a person does not have a financial interest in the project merely because they are being paid to review the forest management plan.

As specified in the financial assessment guidance, this includes a qualified auditor, accountant or valuer who has been certified by a nationally recognised professional body and has demonstrated experience in the forestry sector, or a Registered Forestry Professional under Forestry Australia's registered forestry professional accreditation scheme with demonstrated experience in financial assessments or financial reporting.

Evidence of the business-as-usual scenario

As part of the financial assessment, project proponents will also be required to provide evidence of what the BAU scenario would have been, including a land valuation where there has been no change in land ownership in the last 12 months, to demonstrate that the stated intent for the alternative land use is a feasible and financially attractive alternative relative to continuing plantation forestry.

The land valuation must be undertaken by a qualified independent rural property valuer and provide an explanation where the land valuation of the property site is materially different to nearby non-forest properties. To ensure that the valuation considers recent market conditions, it must have been undertaken within the last 12 months. Where the plantation or land has changed ownership in the last 12 months, evidence of the sale price or lease costs must be provided.

Additionality test for Schedule 4 environmental planting projects under specific circumstances

The requirements for a financial assessment and valuation under the additionality framework are waived for Schedule 4 environmental planting projects under a specific set of circumstances, where a plantation forest is not permitted to be replanted for regulatory or other reasons, but an environmental planting would be allowed, but not required. Instead, project proponents are required to provide a letter from a state or territory government organisation confirming that the plantation is not permitted to be replanted, and that an environmental planting is permitted, but is not required to be established on that land.

Restrictions on the age of eligible plantations for Schedule 3 projects

Only plantations that are, or were harvested at, an age that is two years or older than the default clearfell age for the species in that region will be eligible to undertake a Schedule 3 project. To avoid incentivising the clearing of immature plantations, plantations that are harvested after the date the method was released for public consultation (26 October 2021) must have been harvested within two years or more of the default clearfell age for the species in that region.

The default clearfell ages are specified in Schedule 6 of the 2022 method and are based on industry averages, underpinned by the ABARES plantation survey data. Proponents must refer to the relevant clearfell default age, that is:

- the age listed in Parts 1 or 2 of Schedule 6 if available for the relevant management regime, species and region, otherwise
- the relevant age listed in Part 3 of Schedule 6 for the relevant management regime, species and region. If a species is commonly grown as either a short or long rotation, two ages will be listed – the relevant age must be used to determine eligibility, and a qualified independent person must confirm in the forest management plan that the age used is consistent with the management regime.

Projects with multiple coupes of varying ages

Proponents may wish to include multiple blocks of coupes of varying ages into one project to reduce administration costs. Possible approaches to do so include:

Adding project areas over time

- Existing scheme rules allow land to be added to a project after registration via project area variations.

- Proponents with multiple coupes of varying ages could add new areas over time as the coupes approach harvest age, which could reduce the number of audits that would need to be undertaken compared with registering each coupe as an individual project.
- To add land to a project, proponents will still be required to meet the additionality requirements of the method. That is, they will need to provide a new transformation statement with a CEO/CFO declaration, and an independent financial assessment and land valuation for that coupe which was undertaken within the last 12 months to ensure that the additionality of the projects are underpinned by an assessment which considers recent market conditions.
- Please also note that adding new areas may push out the end date of the permanence period.

Optimising the timing of registration application to bring in multiple coupes of various ages into one project

- Alternatively, project proponents may wish to include multiple coupes in one project registration application to reduce the costs of meeting the financial assessment and land valuation requirements. The method specifies that land is eligible if there is currently a plantation forest on it, or if there was a plantation forest on it in the last 7 years. Thus the project proponent may wish to wait until all the land is eligible, and then register a project with multiple coupes.
- For example, a project proponent has three coupes, with plans to harvest in 1, 3 and 5 years. If the project proponent harvests the first two coupes and leaves these fallow, it would be possible to register the project at year 3 and include all three coupes in the project area, provided that eligibility requirements are met.

Step 2: Registering your project

Register your project with us before you start any project activities. You can apply to register your project via our website[18]. As well as making sure that you demonstrate that you meet all the eligibility criteria described in the relevant schedule, you may need to submit a **plantation forestry notification**, and will need to submit a project area map and a forward abatement estimate (how much abatement in ACCUs you expect your project will deliver) as part of your application. We will assess your registration application as quickly as possible and within the statutory timeframes (90 days) unless further information is required. We are currently making enhancements to our systems to streamline registration and crediting processes, reduce regulatory burden and delivering faster application processing times. These enhancements aim to reduce current processing times by half.

[18] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Step-1-Apply

Map project boundaries

Provide us with a map identifying the boundary of the area you are registering as a project. Create your map using geographic information system (GIS) software. QGIS (free), Google Earth (free) and ArcGIS (paid) are examples of commonly used GIS tools. You will need to define areas where you will carry out project activities. These are known as carbon estimation areas (CEAs).

See the Carbon Farming Initiative Mapping Guidelines[19] for further mapping instructions.

Calculate a forward abatement estimate

You need to provide us with a forward abatement estimate.[20] This is your best estimate of the number of ACCUs likely to be earned during the 25-year crediting period. This information is used to assign an audit schedule to your project that will require at least 3 audits. You can calculate this in accordance with the relevant activity schedule for each CEA.

Estimating crediting and abatement

Please refer to *Step 4: Reporting and Crediting* for details on how abatement and crediting is estimated under each project activity. Projects using this method will calculate abatement using the Full Carbon Accounting Model (FullCAM[21]) in accordance with the FullCAM Guidelines[22].

Project activity information

For each area identified in your maps, you will need to specify the project activity you will undertake (i.e. which schedule(s) your project will be registered under and what the associated activities are).

You will also need to provide evidence that the land in your project meets the eligibility criteria described in the relevant section. This evidence needs to include time-stamped and geo-referenced imagery covering the 7 years before you apply to register your project. For example, under Schedule 1 (for a new plantation project) this could include satellite images for the past 7 years showing no plantation forest and no native vegetation was on the land.

Forest management plan

A forest management plan (FMP) is a document which sets out the management actions and activities, as well as disturbance events and other relevant information for a project under the 2022 plantation forestry method. The FMP sets out:

- how the project has been and will be run for modelling in FullCAM, and
- where relevant, other information about how the project has been and will be managed, including the management activities that have been or will be implemented to address identified adverse impacts and permanence risks.

The requirement for an FMP supersedes the requirement for a management schedule in the 2017 method. All projects are required to submit an FMP under the 2022 method. The requirements for an FMP will vary

[19] https://www.environment.gov.au/climate-change/government/emissions-reduction-fund/publications/cfi-mapping-guidelines
[20] http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund/Step-1-Apply/Forward-abatement-estimates
[21] https://www.industry.gov.au/regulations-and-standards/methods-for-the-emissions-reduction-fund/plantation-forestry-method
[22] ibid

according to the project activity being undertaken. For example, there are additional requirements to manage the integrity and permanence risks associated with the new activities introduced in the 2022 plantation forestry method. The circumstances under which an FMP is required to be submitted to the agency and be signed off by a qualified independent person will also vary according to the project activity being undertaken.

A guidance document has been developed to provide project proponents with further information on how to satisfy the requirements of the forest management plan under all schedules.

Participants must also provide a permanence plan (see below). As the Clean Energy Regulator is not prescriptive about the form a permanence plan can take, participants may either include a permanence plan in the FMP to streamline reporting requirements or provide a permanence plan separate to the FMP.

Permanence plan

You need to provide an explanation of how you will retain stored carbon during the entire **permanence period**[23]. This is known as a permanence plan. This may include:

- An explanation of management activities that maintain the plantation or permanent planting for 25 or 100 years. For example, maintaining fire breaks, controlled burning, fertilisation and weed control; and
- An explanation of how you will respond to potential risks that could reduce the carbon stored by the plantation or permanent planting. For example, a fire management plan is required.

Permanence obligations

It's important to know that you may have to return some – or all – of your earned ACCUs if, before your permanence period ends, *you terminate your project, stop plantation activities or carbon stores are reversed*.

Permanence period and discounts

When registering a project, you can choose a 25 or 100-year permanence period during which the project activities must be maintained. The permanence period starts when your project first receives ACCUs.

Because sequestered carbon must be stored for 100 years to have a so called 'permanent' benefit to the atmosphere, ACCU Scheme sequestration projects electing a 25-year permanence period generally receive a 20% reduction in ACCUs issued for sequestration abatement. This is called the 'permanence period discount', which covers the risk that carbon stored in the plantation is later returned to the atmosphere, reducing the environmental benefit. The CFI Act also allows for alternative discounts to be established through the CFI Rule.

ACCU Scheme sequestration projects are generally subject to the risk of reversal buffer of a 5% reduction in ACCUs issued for sequestration abatement. The risk of reversal buffer is intended to protect the ACCU Scheme against temporary losses of carbon and residual risks that cannot be managed by the other permanence arrangements.

[23] http://www.cleanenergyregulator.gov.au/ERF/Choosing-a-project-type/Opportunities-for-the-land-sector/Permanence-obligations

Specific discounts that apply to each of the project activities under the 2022 plantation forestry method are outlined in Table 4 and discussed in further detail below.

TABLE 4: DISCOUNT FOR 25 AND 100-YEAR PERMANENCE PERIOD PROJECTS

Permanence period	Relevant schedule	Permanence discount	Total discount, including 5% risk of reversal buffer
25 years	All projects, unless specified below	20%	25%
25 years	Short rotation plantations under Schedule 1, or short or long rotation plantations under Schedule 3	25%	30%
25 years	Permanent non-environmental plantings under Schedule 4	20% + additional discount of 25% for certain CEAs*	25% + additional discount of 25% for certain CEAs*
100 years	All schedules	Nil	5%

*The additional discount of 25% intends to manage permanence risks and will apply to abatement from permanent plantings CEAs that do not contain an environmental planting ('permanent planting (ex-commercial) CEAs' or 'remnant plantation CEAs'). That is, if a project chooses to retain or plant exclusively commercial species, there will be an additional 25% discount for abatement from that CEA. Note that because the commercial species discount is applied prior to the risk of reversal and permanence period discounts, the total discount will be 43.75%, not 50%. Please see Schedule 4 (page 25-29) for further details.

Both short and long rotations under Schedule 3 receive a higher 25% permanence discount, consistent with the existing 25% discount for Schedule 1 short rotation plantation projects. It was considered there was an elevated risk (based on industry trends at the time the 2017 method was made) that short rotation plantations may not replant after the end of the 25-year permanence period and the projects could have been over-credited as a result. As eligibility for Schedule 3 is underpinned by evidence that the plantation is otherwise at risk of conversion to non-forest land (if not for participating in the scheme), there is also an elevated risk that both short and long rotation plantations may not be replanted after the end of the 25-year permanence period and are therefore subject to the same discount rate. This discount has been implemented through an amendment to the CFI Rule, while the additional discount for permanent planting (ex-commercial) CEAs is implemented through the net abatement calculations for Schedule 4 projects.

Plantation forestry notification

For Schedule 1 projects (new or expanded plantations), the CFI Rule requires that the **Minister for Agriculture assess and make a determination as to whether the project may lead to an undesirable impact on agricultural production** in the region in which the project is to be located. This is because new plantations are commonly established on land previously used for agriculture. This assessment is made through the submission of a *Plantation Forestry Notification* and it is submitted on the same day or up to 18-months prior to submitting an ACCU Scheme application.

There is no prescribed 'application form' for a proponent, instead a notification is to take the form of a written statement sent to the Department of Agriculture, Water and the Environment via email. Find more information on the Department of Agriculture Water and Environment - Emissions Reduction Fund

Plantation Forestry Notification[24] website. The notification, and any supporting information must be included in your registration application to the Clean Energy Regulator.

Note that the area in your plantation forestry notification can be larger than the area of your proposed plantation forestry project. This can be useful if you were planning on breaking your land up into multiple plantation forestry projects or adding more project areas over time (i.e. it is possible to cover them with a single plantation forestry notification). Where the Agriculture Minister does determine that the project would have an undesirable impact on agricultural production in the region, the project is deemed ineligible to participate in the ACCU Scheme.

Plantations outside of the National Plantation Inventory regions

Plantations outside of the National Plantation Inventory (NPI) regions (see Appendix 1 for a map of NPI regions) are eligible to participate in the 2022 plantation forestry method under all schedules.[25] Under the 2016 option of FullCAM, all plantations located outside NPI regions are required to use the mixed-species environmental plantings calibration. The release of the updated FullCAM in 2022 ('2022 FullCAM') will include a new capability to model plantations using species-specific options outside the NPI (though within a functional domain, that is, there will still be spatial and regional limitations based on the data that FullCAM is calibrated to).

Restrictions related to NPI regions include:

- Schedule 2 (conversion from short to long rotation) projects must be located within 100kms of an NPI region to ensure that the species restrictions, which are based on NPI regions, remain appropriate. Schedule 2 projects are required to conform to the species restrictions for the NPI region closest to their project.
- Schedule 3 (continuing plantations) projects must be located within 50kms of an NPI region to minimise the risk of supporting sub-optimal plantations.

[24] https://www.agriculture.gov.au/ag-farm-food/climatechange/cfi/plantation-forestry-notifications

[25] Plantations outside of NPI regions were not eligible under the 2017 method due to limitations in data availability outside those regions that did not allow: 1) the FullCAM model to be calibrated appropriately, and 2) evidence to be collected that supported that the activities were additional.

Step 3: Delivering your plantation forestry project

Schedule 1: Establishing a new plantation

Background

The rate of new plantation establishment in Australia has been declining since 2006–07 in response to changing economic conditions, and there has been minimal new establishment since 2012. [26] This trend is expected to continue, and establishment of new plantations in most regions of Australia is unlikely to occur in the ordinary course of events. As such the establishment of new plantations in areas without a recent history of such activity is considered to be additional at the national scale.

Project activity

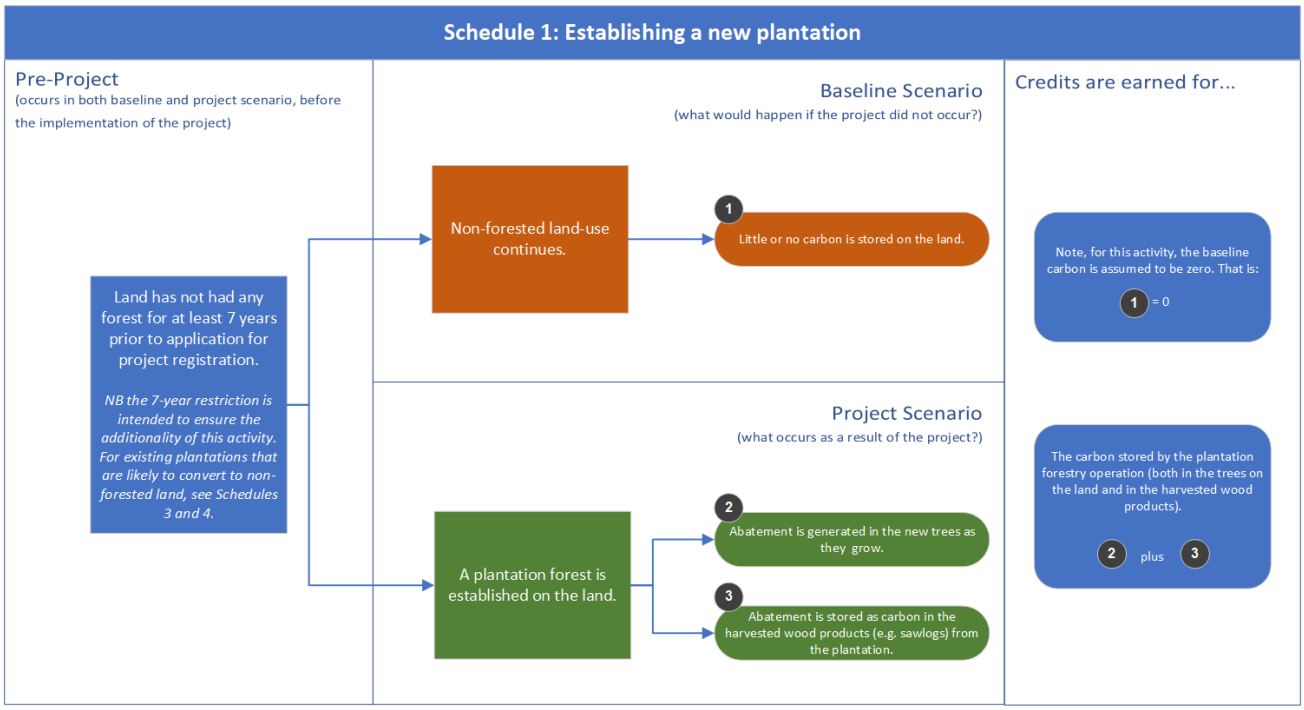
Under this schedule, ACCUs are issued for projects that establish new plantations.

Estimating abatement and crediting

Activities that rely on ongoing plantation activity will have fluctuations in the carbon stock as trees are grown and harvested in an ongoing cycle. To ensure that the projects do not receive more ACCUs than the carbon that would be accrued over the project life, ACCUs are not issued for any growth in trees beyond the estimated long-term average carbon stock for the project.

Refer to *Step 4 – Reporting and Crediting* (pages 31-35) for further information on estimating abatement and crediting for Schedule 1.

FIGURE 4: SCHEDULE 1 OVERVIEW



Schedule 2: Converting an existing plantation from a short rotation to a long rotation

[26] https://www.awe.gov.au/abares/research-topics/forests/forest-economics/plantation-and-log-supply

Project activity

Under this schedule, 2022 plantation forestry method ACCUs can be issued for projects that convert an existing short rotation plantation to a long rotation plantation to extend the growing time of the trees and sequester more carbon. The conversion can occur either part-way through the short-rotation cycle or following harvest of a short-rotation plantation. ACCUs are issued evenly over 15 years, based on net increases in the carbon stocks stored on the land and in harvested wood products due to this conversion, averaged over 100 years.

The conversion of a plantation from short to long-rotation is considered additional based on the assumption that where land is currently managed for short-rotations it would likely continue to be managed as such.

Project proponents will be required to provide evidence that:

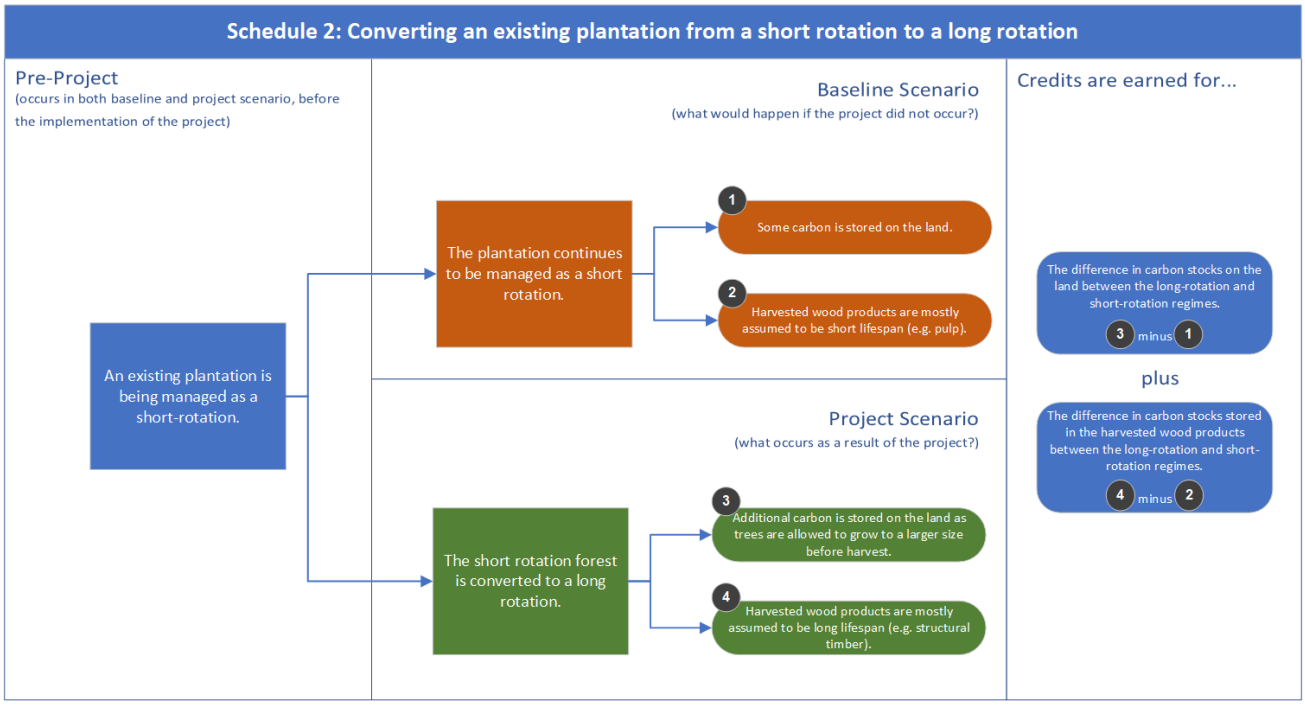
1. at registration, their plantation was being managed as a short rotation.
2. as a result of implementing the project, their project will be managed as a long rotation.

See 'Species Restrictions' below for restrictions on the species permitted to be used for short and long rotation management, and for how to evidence the management regime.

Estimating abatement and crediting

Refer to *Step 4: Reporting and Crediting* (pages 35-36) for information on estimating abatement and crediting for Schedule 2.

FIGURE 5: SCHEDULE 2 OVERVIEW



Species restrictions

The 2017 method contains restrictions on the species that can be grown in the conversion activity, both in the baseline scenario and in the project scenario. These restrictions are designed to ensure that conversion projects only convert from a species that is typically grown as a short rotation to a species that is typically grown as a long rotation.

The 2022 method contains an update of the framework for these species restrictions, to address stakeholder feedback that these are a barrier to entry for species that can be managed as either a long or short rotation. Schedule 2 of the 2022 method divides plantation species into three categories (contained within Schedule 6 Parts 1 and 2 of the method):

Part 1: Species that can be presumed to have a short rotation (species in regions where >97%[27] of plantations are managed as a short rotation). These species can only be grown in the baseline scenario.

Part 2: Species that can be presumed to have a long rotation (species in regions where >97% of plantations are managed as a long rotation). These species can only be grown in the project scenario.

Undefined rotation ('UR') species: Species that require additional evidence of intent to manage as either a long or short rotation (species in regions where data shows they can be grown as either a long **or** short rotation). These species can be grown in either or both of the baseline and project scenarios, provided that a permissible form of evidence can be provided.

Note that as the UR species are all species that are not named in Categories 1 or 2, there is no need for an inclusive list of these species. Rather, the method references 'all species that are not named in Parts 1 or 2'.

The permissible additional evidence required for UR species is:

- Evidence that at least one rotation of the same species has been harvested as a short rotation on the project area (retained from the 2017 method)
- Spatially explicit data to demonstrate that the relevant species has been harvested as a short or long-rotation within 100 kms to the proposed conversion CEA (i.e. to demonstrate that the rotation type is likely and viable for that area), or
- A financial assessment undertaken by an independent auditor or equivalent showing that a long rotation would not be commercially viable in the baseline scenario.

All participants with a UR species that have not completed one short rotation of that species will also be required to provide a signed declaration by the CEO or CFO of the plantation to state their intended management regime (either in the baseline scenario or the project scenario) and a forest management plan signed off by a qualified independent person that outlines how the management of the plantation forest has changed between the baseline and project scenarios.

[27] The 97% threshold is applied to ensure that the only species for which there is a high degree of certainty of the management regime are eligible by default for the conversion activity. Note that alternative means to demonstrate additionality exist for species where there is less certainty.

Schedule 3: Avoided conversion of a plantation to non-forest land by continuing plantation activity

Project activity

The project activity in **Schedule 3** involves the continuation of plantation forestry activity on land where it would otherwise be converted to non-forest land in the absence of the ACCU Scheme. Schedule 3 projects must meet the requirements of the additionality framework outlined on pages 13-15 to be eligible.

The continuation of the plantation activity can occur by:

managing an existing eligible plantation (aged 24 months or older of the average clearfell age for the relevant species and region) until harvest and then replanting at the end of a planned rotation

immediately harvesting and replanting, or

replanting on land that has been harvested in the last 7 years (and would therefore be excluded under Schedule 1).

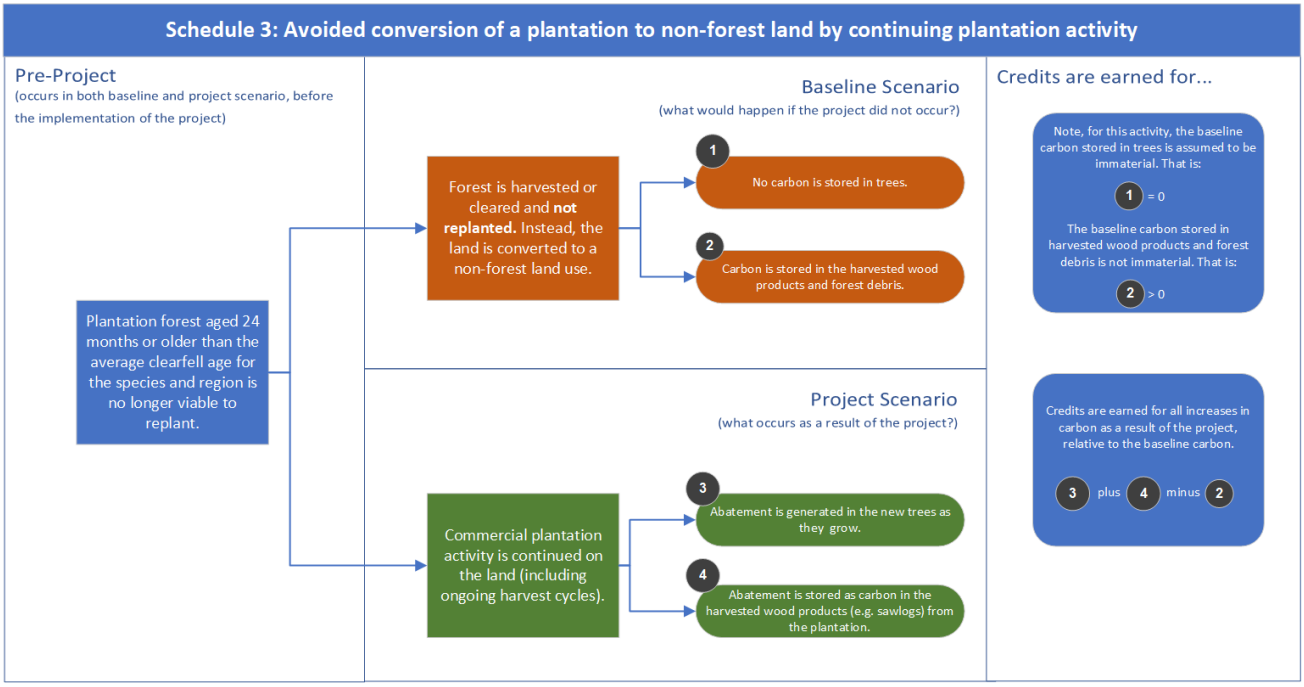
Forest management plan

Proponents are required to submit a forest management plan that, in addition to the requirements outlined on pages 16-17, is signed off by a qualified independent person who deems the plan as viable for ongoing cycles of harvesting and planting over the permanence period.

Estimating abatement and crediting

Refer to *Step 4: Reporting and Crediting* (pages 37-39) for information on estimating abatement and crediting for Schedule 3.

FIGURE 6: SCHEDULE 3 OVERVIEW



Schedule 4: Transition to a permanent forest

Background

There is an increasing trend to convert Australia's plantation estate to non-forest, largely agricultural, land. A project that keeps land under forest in circumstances where it would have otherwise been converted to non-forest land is considered additional. Schedule 4 projects must meet the requirements of the additionality framework outlined on pages 13-16 to be eligible.

Project activity

The project activity in Schedule 4 involves the transition of an existing eligible for-harvest plantation forest to a permanent, not-for-harvest forest. Land which has had a for-harvest plantation forest on it but harvesting or replanting ceased sometime in the last seven years is also permitted to undertake this activity.

Schedule 4 provides flexibility around how plantation forests are transitioned to a permanent not-for-harvest forest and allows for the scenarios outlined in the table and breakout box below. Further information on CEA stratification requirements is available on pages 29-30.

TABLE 5: PERMITTED SCENARIOS AND ACTIVITIES UNDER SCHEDULE 4

Project activity	CEA*	Scenario	Before application	Before crediting period begins	After crediting period begins	New plantings requirements
A	Remnant plantation A CEA	No clearing – the plantation forest is retained as a permanent forest.		n/a	Certain actions are only permitted for ecological purposes.	No planting requirements
	Permanent planting (ex-commercial) CEA	Clearing and replanting – the plantation forest is (or has been) cleared, and subsequently replanted or coppiced with a permanent (not-for-harvest) planting.	Clearing permitted.	Clearing permitted. A permanent forest must be established (through replanting or coppicing) after registration application and before the crediting period begins.	Certain actions are only permitted for ecological purposes	No species restrictions
B	Remnant plantation B CEA ↓ Permanent planting (environmental) CEA	Gradual transition to environmental planting – the plantation forest is retained as a permanent forest at the start of the project and gradually transitioned to an environmental planting.		n/a	The remnant plantation is cleared and replaced with environmental plantings, with carbon stocks maintained over the permanence period.	Environmental plantings only

*All Schedule 4 CEAs are also 'ex-plantation' CEAs

At the commencement of the crediting period, the permanent, not-for-harvest will consist of the:

- Retained plantation trees (referred to as a 'remnant plantation CEA' in the method), and/or

- New plantings (referred to as a 'permanent planting CEA' in the method).

Please note that Schedule 4 projects that establish permanent environmental plantings[28] are exempt from the 'water rule'.

To avoid incentivising clearing of naturally regenerated forest, this activity is not permitted to be undertaken on plantation land where a plantation has been historically cleared and native forest[29] has regenerated. Schedule 4 species restrictions are discussed in the next section.

Permanent planting project activities A and B

The project activities in Schedule 4 are split into two categories – A and B. A summary of these two activities is provided below. See also 'Step 4: Reporting and Crediting' for more information on the crediting for these activities.

[28] As defined in the CFI regulations, where an environmental planting means a planting that consists of species that:
(a) are native to the local area of the planting; and
(b) are sourced from seeds:
(i) from within the natural distribution of the species; and
(ii) that are appropriate to the biophysical characteristics of the area of the planting; and
(c) may be a mix of trees, shrubs, and understorey species where the mix reflects the structure and composition of the local native vegetation community.

[29] As defined in the CFI regulations, where native forest means an area of land that:
(a) is dominated by trees that:
(i) are located within their natural range; and
(ii) have attained, or have the potential to attain, a crown cover of at least 20% of the area of land; and
(iii) have reached, or have the potential to reach, a height of at least 2 metres; and
(b) is not a plantation.

Permanent Planting Project Activity A

Project activity A covers the majority of potential project scenarios under Schedule 4, and involves planting, seeding or coppicing as necessary to establish the land as a permanent planting with a stocking density of at least 200 stems per hectare. If the project involves retaining remnant plantation forest, these actions may not be necessary, as the planting may already have a stocking density of 200 stems per hectare.

Permanent Planting Project Activity B

Project activity B is only applicable if there is plantation forest on the land at the time of project registration, and you wish to harvest this plantation forest to establish a permanent environmental planting during the crediting period for the project. The activity involves maintaining the remnant plantation, conducting a clearfell harvest and then re-establishing the land with a permanent environmental planting.

Required activities – Forest management plan

The permanent forests will be required to be actively managed and will be subject to different requirements and restrictions to those in Schedules 1, 2 and 3, in order to minimise permanence risks and the risk of adverse impacts associated with permanent forests.

Proponents are required to create and actively manage a permanent forest in accordance with a forest management plan (page 18), which is required to:

- Be provided with the project registration application and be updated with each offsets report and if management activities change
- Be signed off by a qualified independent person
- Set out how the project will be run
- Identify and set out a plan to manage the risk of adverse impacts (e.g. weeds, pests, fire)
- Outline how restricted activities will be conducted in accordance with the specified restrictions
- Demonstrate that the forest is being managed for carbon and not for harvest (that is, no thinning or pruning has been undertaken to prepare the trees for harvest during each reporting period. Note that thinning and pruning for ecological purposes (e.g. drought resilience or pest and disease recovery) is permitted)
- Demonstrate that the management activities being undertaken are consistent with that of a viable permanent forest over the permanence period, and
- For environmental plantings, provide evidence that it is a planting that is native to the local area, sourced from seeds that are appropriate for the area, and a be comprised of a mix of trees, shrubs and understorey species reflective of a local native vegetation community (as defined in the CFI Regulations).

For further information on requirements for the forest management plan, please refer to the forest management plan guidance.

Project proponents are also required to manage the permanent forest so that the carbon stock does not fall below that already credited in the project. For example, if thinning, fire or another disturbance occurs in the area during the project, causing a decline in the amount of carbon stock, regrowth must be encouraged or new planting undertaken to allow the carbon stock to return to previously reported values.

Restricted activities

After the commencement of the crediting period, participants are permitted to conduct management activities such that the forest is managed for ecological and risk minimisation purposes, but not commercial harvest activities.

The following management actions are permitted:

- planting
- seeding
- fertilisation
- weed control
- controlled burn

Other management actions (e.g. thinning and pruning) are only permitted under project activity A if they fulfill an ecological or risk management purpose (e.g. drought resilience, preventing managing or recovering from pests or disease etc). Biomass may be removed from a CEA, provided no more than 5% of total biomass from new plantings (that is, from permanent planting CEAs) is removed on average per calendar year.[30]

A management action must not be undertaken in a remnant plantation B CEA unless it is consistent with the planned management actions set out in the forest management plan that support:

- maintaining the remnant plantation without harvest for a period; and
- then conducting a clearfell preparatory to creating an environmental planting.

Species restrictions and discounting

There are two elements to the species restrictions for Schedule 4:

species grown in the baseline period (and potentially retained in the project scenario), and

species planted as new plantings if the forest is thinned.

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[30] Participants should note that while biomass that is permitted to be removed from a CEA for ecological purposes may be sold for commercial purposes, projects that establish permanent and environmental plantings that do so will not be exempt from the Water Rule, as they will not meet the CFI Regulations' definition of a permanent planting. As defined in the CFI Regulations, a permanent planting means a planting:

(a) that is not harvested other than:

(i) for thinning for ecological purposes; or

(ii) to remove debris for fire management; or

(iii) to remove firewood, fruits, nuts, seeds, or material used for fencing or as craft materials, if those things are not removed for sale; or

(iv) in accordance with traditional indigenous practices or native title rights; and

(b) that is not a landscape planting.

In the interests of flexibility and consistency with other ACCU Scheme methods, no restrictions are imposed on the tree species that participants can choose for either of these activities (besides the existing restriction on known weed species imposed by CFI Regulation 3.36).

This approach opens a potential permanence risk in situations where participants choose to retain or establish a forest that contains commercial plantation species and elect a 25-year permanence period. Where this occurs, the Clean Energy Regulator has limited assurance — beyond the requirements to manage the forest for carbon rather than for harvest — that the proponent will not harvest the forest at the expiry of the permanence period, despite being credited on the basis of a permanent forest (i.e. under this schedule participants are not subject to accounting for emissions resulting from harvesting with the result that, all things being equal, the permanent plantings will receive more ACCUs than plantations subject to commercial harvest).

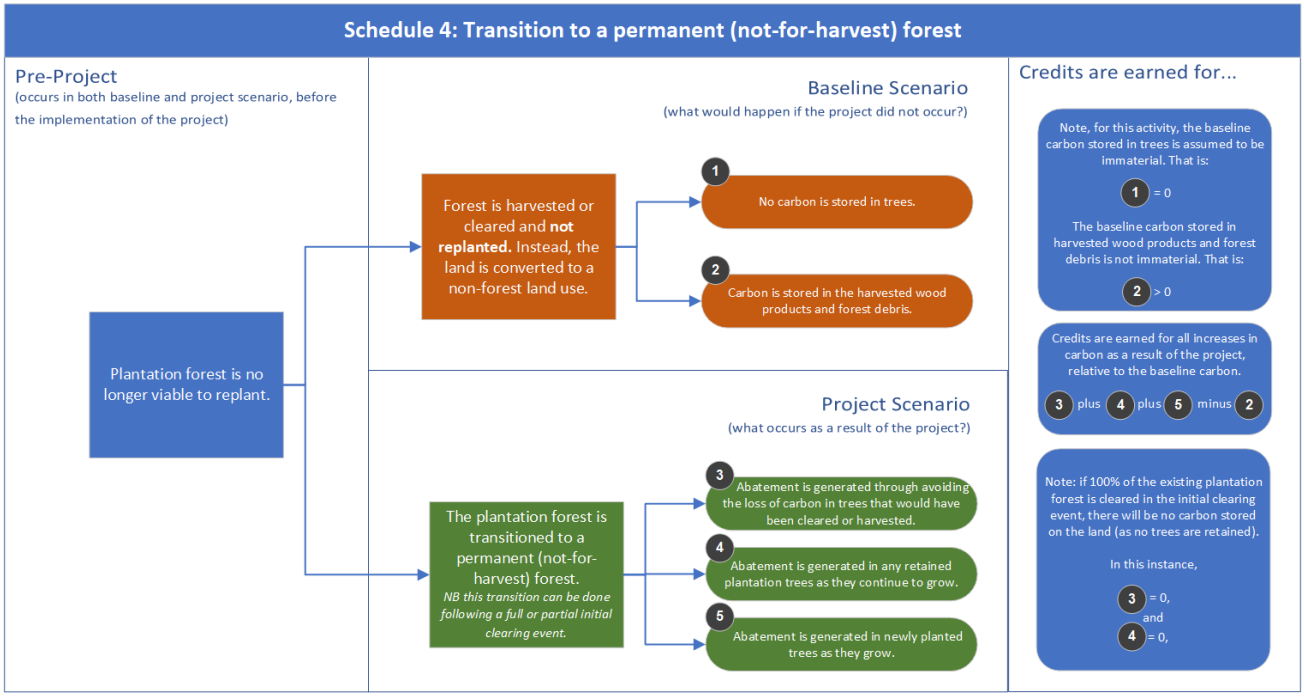
Given the permanence risks of permitting commercial species in Schedule 4, the method imposes a discount on projects that do not establish environmental plantings and elect a 25-year permanence period. The discount applies only to abatement from permanent planting (ex-commercial) CEAs or remnant plantation CEAs.

Estimating abatement and crediting

ACCUs will be earned for emissions avoided from retaining carbon in the existing plantation (less any thinning), both for the initial biomass (which would have cleared in the absence of the scheme) and new carbon stored if the trees are still growing, which will depend on the age of the plantation. ACCUs will also be earned for the carbon in the in-fill plantings, assuming those trees were not present in the baseline.

Refer to *Step 4: Reporting and Crediting* (pages 39-41) for information on estimating abatement and crediting for Schedule 4.

FIGURE 7: SCHEDULE 4 OVERVIEW



Stratification

To ensure that the abatement achieved by your project is modelled accurately, you will need to separate your project into one or more CEAs. There are a number of requirements for CEAs, contained in section 14 and the project activity schedules of the method, including that CEAs must:

- be allocated to a single project activity,
- have the same responsible landholder,
- have a consistent forest start date for the whole CEA, and
- have an area of at least 0.2 hectares.

CEAs may consist of two or more discrete areas of land, provided they are not separated by more than 250 metres. All CEAs must also have a model point, which is represented by a latitude and longitude which:

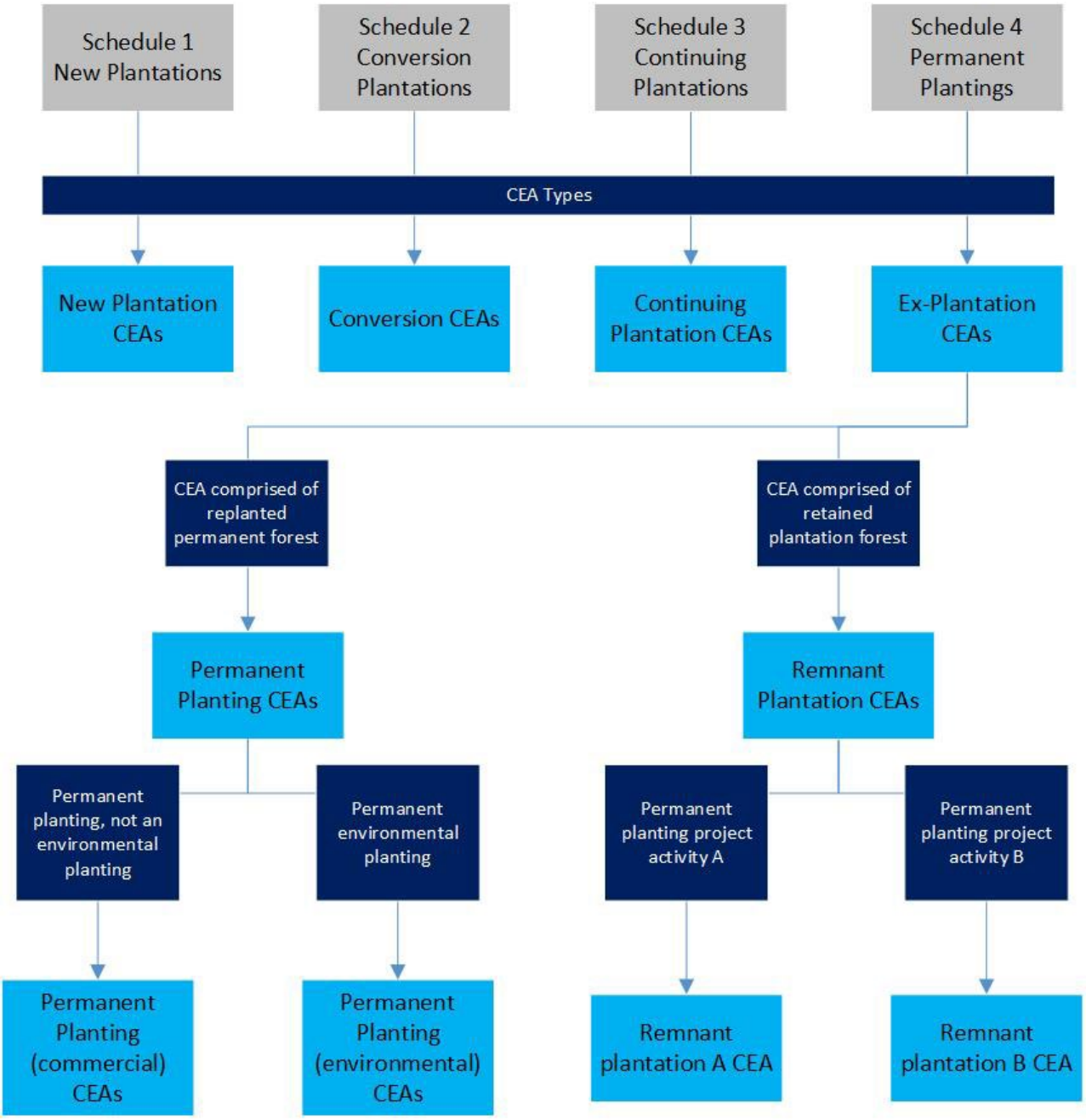
- is at the approximate centre of the CEA
- is representative of the CEA
- is within the CEA boundaries.

CEAs are classified based on the project activity being undertaken in them. Where the project activity is the permanent planting project activity, CEAs are further classified based on the type of forest that is established or maintained as a result of the project. Figure 8 below outlines the classification of CEA types under the method.

The Carbon Farming Initiative Mapping Guidelines[31] also contain further instructions for mapping.

[31] https://www.environment.gov.au/climate-change/government/emissions-reduction-fund/publications/cfi-mapping-guidelines

FIGURE 8: TYPES OF CEAS UNDER THE 2022 PLANTATION FORESTRY METHOD



Note: These are hierarchical classifications, and as such where a sub-classification applies to a CEA, the higher-order classifications also apply. For example, a permanent planting (environmental) CEA is also a permanent planting CEA and an ex-plantation CEA.

Step 4: Reporting and crediting

Projects earn ACCUs by modelling the change in stored carbon and reporting results to the Clean Energy Regulator.

You choose the length of each reporting period, which can be between 6 months[32] and 5 years. The time between reports is referred to as the 'reporting period' and are consecutive within the crediting period (i.e. there can be no gaps between reporting periods).

Importantly, you will also need to deduct material **increases in greenhouse gas emissions that are emitted in undertaking the project** that are above levels in the baseline period (for example, from fuel use, fertiliser application, controlled burning and others).

Estimating abatement and crediting

FullCAM

Projects under the 2022 plantation forestry method calculate abatement using the Full Carbon Accounting Model (FullCAM) in accordance with the FullCAM Guidelines. FullCAM is the model that is used for Australia's National Inventory emissions reports, which track Australia's progress towards its Paris target. It is also used to estimate abatement for five existing ACCU Scheme vegetation methods. Projects use the version of FullCAM in force at the end of the reporting period. As at December 2021, this is 2016 FullCAM. Changes made for the 2020 public release of FullCAM updated the estimation of carbon sequestration in other vegetation methods under the ACCU Scheme, however did not include updated calibrations for plantation forestry. In recognition of this, DISER has commenced an update of the plantation forestry modelling in FullCAM, which is expected to be released in 2022. Until the update is released, participants are required to use the 2016 FullCAM option, as available on DISER's website. We have developed FullCAM guidelines for use with 2016 FullCAM to support the release of the 2022 method.

Key assumptions

Under the 2022 method, ACCUs are issued based on the difference between the carbon stored as a result of the project and the carbon stored in the baseline scenario.

Activities that rely on ongoing plantation activity (i.e. Schedules 1, 2 and 3) will have fluctuations in the carbon stock as trees are grown and emissions from harvesting occur in an ongoing cycle. To ensure that projects do not receive more ACCUs than the carbon that would be accrued over the project life, ACCUs are not issued for any growth in trees beyond the estimated long-term average carbon stock for the project. The long-term average carbon stock refers to the net abatement (sequestration from trees growing and carbon stored in harvested wood products minus emissions from harvesting, thinning, fire, fuel and fertiliser use) resulting from the project. The long-term average carbon stock is calculated over 100 years for Schedules 1, 2 and 3, which is also the time period used by convention as a proxy for permanence.

The Schedule 4 project activity permits a single harvest event during the crediting period (in some cases), where the harvested areas are replanted with a permanent environmental planting. To account for the emissions introduced by this single harvest event, ACCUs are issued based on total carbon that will be present in the permanent forest at the end of the crediting period.

[32] Note that you may elect a reporting period of a minimum of 1 month if the net abatement amount calculated for the reporting period is 2,000 tonnes of carbon dioxide equivalent or more.

Scenarios and timing

Participants under the 2022 method are required to model three scenarios for CEAs present in the project:

- the baseline scenario: to model what would have occurred in the absence of the project
- the project scenario: to model what has occurred since project commencement as a result of the project
- the long-term project scenario: to model what has occurred since project commencement **and** what will occur in the future as a result of the project.

Each scenario requires a separate FullCAM plot file, which may have different start and finish start dates. Table 6 below outlines the timings of these scenarios in more detail.[33]

TABLE 6: START AND END DATES FOR SCENARIO SIMULATIONS IN FULLCAM

Project activity	Baseline scenario	Project scenario	Long-term project scenario
Schedule 1 – Establishing a new plantation	N/A – no modelling required as the baseline scenario is non-forested land.	**Start:** day before the forest start date.	**Start:** day before the forest start date.
		End: last day of the reporting period.	**End:** last day of the modelling period (which is 100 years after the forest start date).
Schedule 2 – Converting an existing plantation from a short to a long rotation	**Start:** day before the forest start date.	**Start:** day before the forest start date.	**Start:** day before the forest start date.
	End: last day of the modelling period.	**End:** last day of the reporting period.	**End:** last day of the modelling period (which is 100 years after the forest start date).
Schedule 3 – Continuing plantation forestry activities	**Start:** day before the rotation that was being grown prior to project registration.	**Start:** day before the forest start date.	**Start:** day before the forest start date.
	End: 100 years after the modelled harvest of the rotation that was being grown prior to project registration.	**End:** last day of the reporting period.	**End:** last day of the modelling period (which is 100 years after the forest start date).

[33] Also see sections 38 – 41 of the 2022 method.

Schedule 4 – Transition to a permanent (not-for-harvest) forest	**Start:** day before the rotation that was being grown prior to project registration.	**Start:** day before the forest start date.	**Start:** day before the forest start date.
	End: last day of the modelling period (which is the last day of the crediting period).	**End:** last day of the reporting period.	**End:** last day of the modelling period (which is the last day of the crediting period).

Note: The 'forest start date' is defined as either the start date for the rotation that was in progress at project commencement (if applicable) or the start date for the first rotation after project commencement.

Schedule 1 crediting

Baseline

The carbon stored in the baseline scenario is assumed to be zero, as the land would have continued to be managed as non-forested land in the absence of the project.

Project scenario

The project scenario involves the establishment of a new plantation forest. This plantation can be a short rotation or a long rotation.

ACCUs are issued each time a project reports abatement to the Clean Energy Regulator[34], and will directly correlate to increases in carbon during the reporting period up to the long-term average carbon stock for the project.

Figures 9 and 10 below display illustrative abatement profiles for a long and short rotation plantation under Schedule 1. Figures 11 and 12 display the annual illustrative credit issuances to these same projects.

In Figures 11 and 12, ACCUs stop being issued once the cumulative ACCUs that have been issued reaches the long-term average carbon stock.

[34] Projects must report at least once every 5 years. See 'Reporting and Crediting' on page 29 for more information.

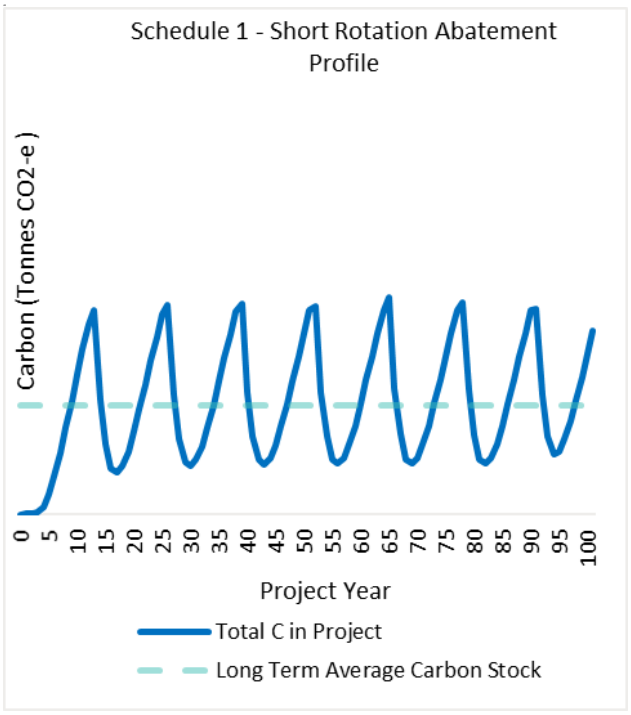


Figure 9: Project carbon and long-term average carbon stock for a new 13-year rotation plantation of Eucalyptus globulus.

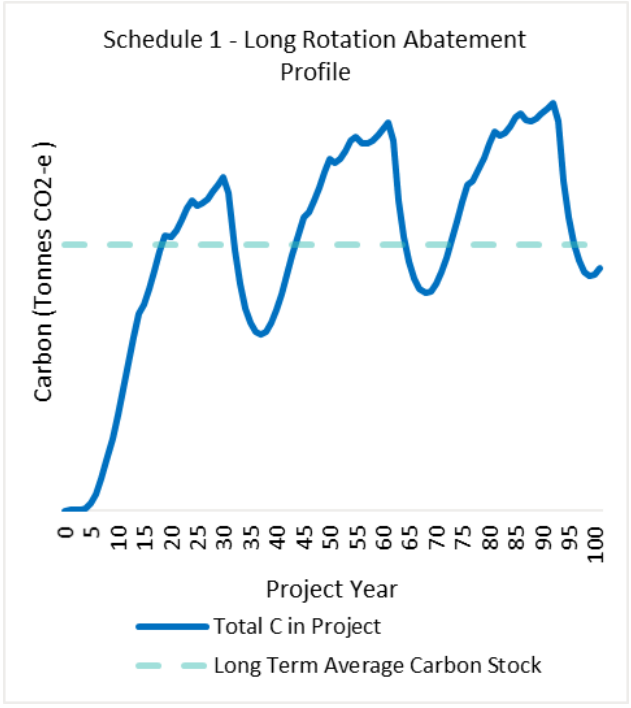


Figure 10: Project carbon and long-term average carbon stock for a new 30-year rotation plantation of Pinus radiata.

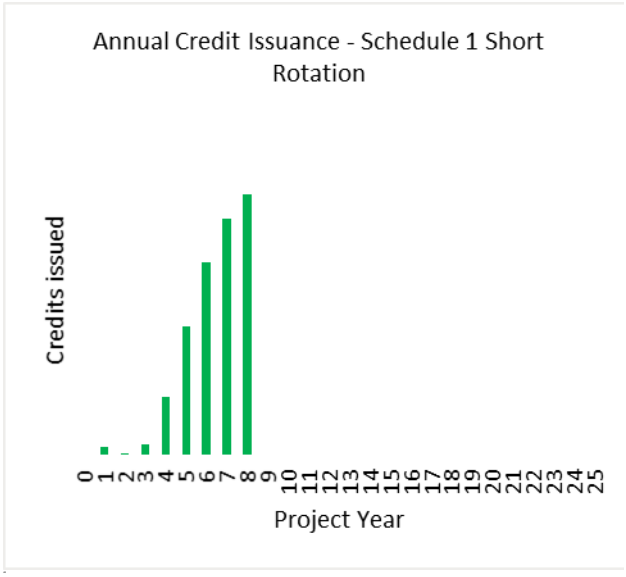


Figure 11: Annual credit issuances for the plantation presented in figure 9. Credit issuances cease after year 8, as credits issued equal long-term average carbon stock at this point.

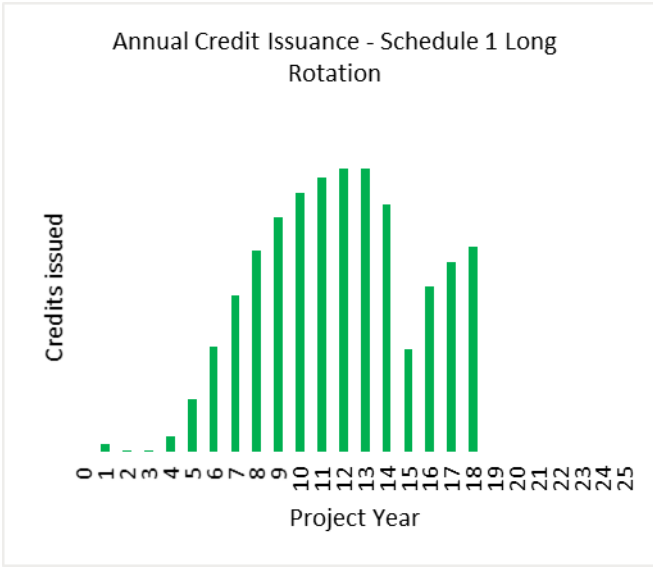


Figure 12: Annual credit issuances for the plantation presented in figure 10. Credit issuances cease after year 18, as credits issued equal long-term average carbon stock at this point. Note that the drop in issuances in year 15 of the project corresponds with a thinning event at year 15 of the project scenario.

Schedule 1 worked example

Under Schedule 1 credits are issued for the abatement generated by the establishment of a new plantation.

Figure 9 provides an illustrative example of the establishment of a new short-rotation plantation – in this case a plantation of *Eucalyptus globulus* that is harvested every 13 years. The carbon stored in the plantation

increases over time as the trees grow during the plantation's growth phase. The trees in the plantation contain 238 tonnes of carbon dioxide equivalent (tCO_2-e) per hectare prior to the harvest at the end of the 13-year rotation. During the growth phase, some carbon is also attributed to the debris pool, in the form of deadwood, bark litter, leaf litter and roots. This represents 25 tCO_2-e per hectare immediately before the end of the 13-year rotation with the total carbon stock in the plantation being 238+25 = 263 t CO2-e/ha.

After the harvest event in year 13, the carbon in the trees moves out of the trees and into the harvested wood products and debris pools, where it decays at varying rates. Immediately after the harvest event, the harvested wood products contain 146 tCO_2-e per hectare and the debris pool contains 117 tCO_2-e per hectare (so 263 t CO2-e/ha in total still). The carbon in the harvested wood products becomes emissions very rapidly, as the harvested wood products are mostly paper, which decays almost fully in 3 years. As such, the carbon stored in the plantation declines between years 13 and 16 as emissions from the debris pool or harvested wood pools. From year 16 until the next harvest in year 26, the carbon stored in the plantation increases as the tree regrowth offsets emissions from other carbon pools.

Crediting for this abatement profile occurs on the basis of the long-term average carbon stock. This smooths out both the impacts of the harvest events on carbon stocks and the amount credited. In this example, the long-term average carbon stock in the project when averaged over the 100-year period, (the light blue line above) is equal to 152 tCO_2-e per hectare. This number is calculated by adding up the total carbon present in each month of the project scenario, and then dividing this total by the 1200 months present in the 100-year averaging period. This is the total credit entitlement that the project will be able to be issued throughout the 25-year crediting period.

Credits are apportioned to align with carbon stocks in the project (i.e. the dark blue line above). For this example, the annual credits issued are shown in Figure 11 above, where the project is issued the majority of the credits in years 4 to 8 of the project, as these are the years where the trees are experiencing the fastest growth, after initial slow growth in years 1 to 3. At the end of year 8, the project has been issued its total credit entitlement, and as such crediting ceases. However, the project must continue to report until the end of its crediting period at year 25 to ensure that the impacts of any changed management actions or disturbance events are accounted for.

Note: all values given in this section are examples only. FullCAM estimates vary by region and species. You should conduct your own FullCAM modelling to obtain abatement estimates for your project.

Schedule 2 crediting

Baseline

- The baseline carbon for Schedule 2 is assumed to be ongoing short-rotation harvest cycles.
- At registration, you are required to model the baseline scenario (which consists of the baseline management regime of harvesting and replanting short rotations repeated over 100 years), and calculate the long-term average carbon stock associated with the continuation of that regime.

Project scenario

The project scenario involves converting the short rotation plantation to a long rotation.

- At registration, you are required to model your intended management actions for the long-rotation regime, over 100 years, and calculate the long-term average carbon stock associated with these actions.
- You are entitled to credits for abatement that arises as a result of the change in management activity brought about by the project. Thus, the total credits that you are entitled to over the crediting period as a result of your project can be calculated with the equation:

$$Credit\ entitlement = \frac{Long\ term\ average\ carbon}{stored\ in\ project\ scenario} - \frac{Long\ term\ average\ carbon}{stored\ in\ baseline\ scenario}$$

- This credit entitlement is then split into equal apportionments over the first 15 years of the crediting period. This removes crediting discrepancies between projects that commence with standing forest and those that commence with fallow land. The crediting period itself remains as 25 years and you will need to continue to report for this period regardless of whether you are still receiving credits. This ensures that the impacts of any changed management actions or disturbance events are accounted for.

Figure 13 below displays an illustrative abatement profile for a conversion project under Schedule 2. Figure 14 displays the annual illustrative credit issuances to this same project.

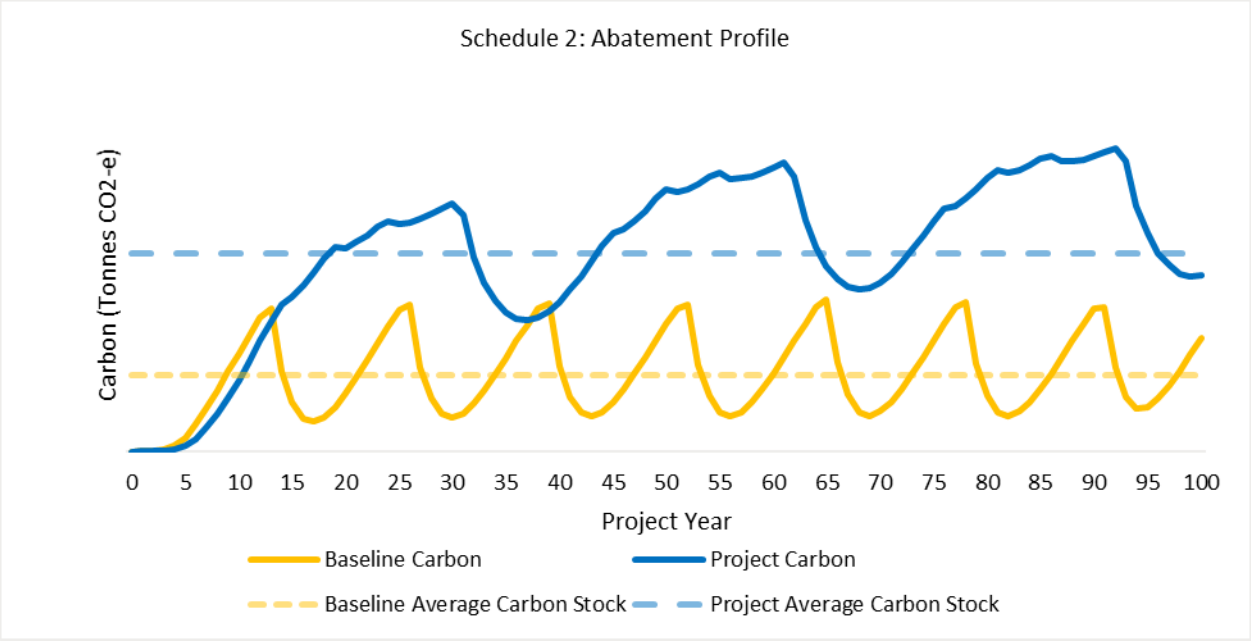


Figure 13: Carbon stored by the project scenario and baseline scenario for a Schedule 2 project. The baseline scenario is a 13-year rotation Eucalyptus globulus plantation, and the project scenario is a 30-year rotation Pinus radiata plantation.

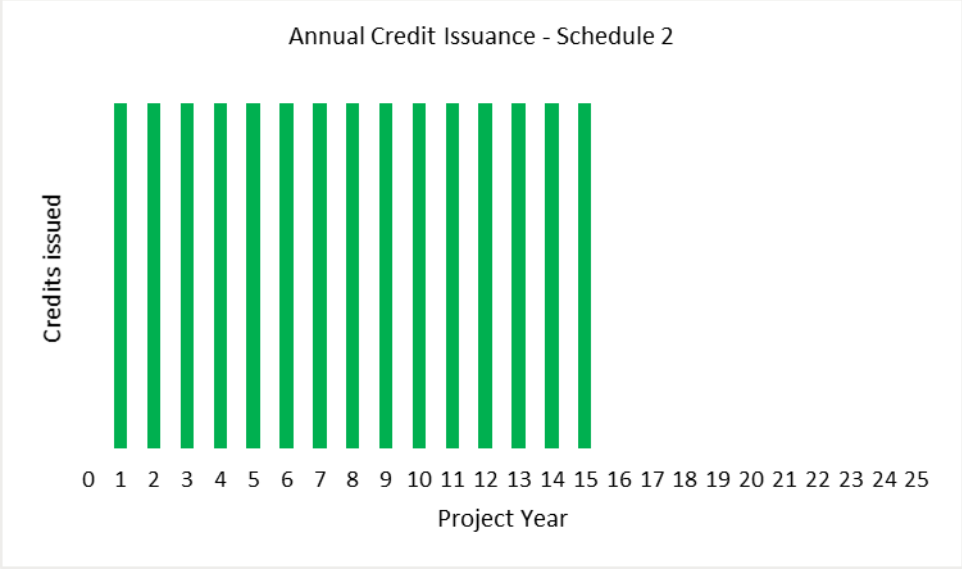


Figure 14: An even averaged apportionment of credits is received for the first 15 years of the project, after which crediting ceases.

Schedule 3 crediting

Baseline

- The baseline carbon for Schedule 3 is assumed to be a single harvest event, followed by conversion to a non-forested land use. As such, the baseline carbon stock is entirely comprised of carbon stored in the debris and harvested wood product pools.
  - » The baseline carbon is required to be modelled because the carbon stored in the harvested wood products from a single harvest event are material, particularly for long rotation plantations due to the extended growth age and the greater proportion of harvested wood products being used for construction.
- At registration, participants are required to model the baseline scenario, and calculate the long-term average carbon stock associated with the harvest event.

Project scenario

- The project scenario involves continuing the plantation forest.
- At registration, you are required to model your intended management actions for the plantation forest, over 100 years, and calculate the long-term average carbon stock associated with these actions.
- You are entitled to credits for abatement that arises as a result of the of the change in management activity brought about project. Thus, the total credits that you are entitled to as a result of your project can be calculated with the equation:

$$Credit\ entitlement = \begin{matrix} Long\ term\ average \\ carbon\ stored\ in\ project\ scenario \end{matrix} - \begin{matrix} Long\ term\ average \\ carbon\ stored\ in\ baseline\ scenario \end{matrix}$$

- This credit entitlement is then split into equal apportionments over the first 15 years of the project. This removes crediting discrepancies between projects that commence with standing forest and those that commence with fallow land. The crediting period itself remains as 25 years and you will need to continue to report for this period regardless of whether you are still receiving credits to ensure that the impacts of any changed management actions or disturbance events are accounted for.

Figures 15 and 16 below display illustrative abatement profiles for short and long rotation Schedule 3 projects. Figures 17 and 18 display the annual credit issuances to these same projects.

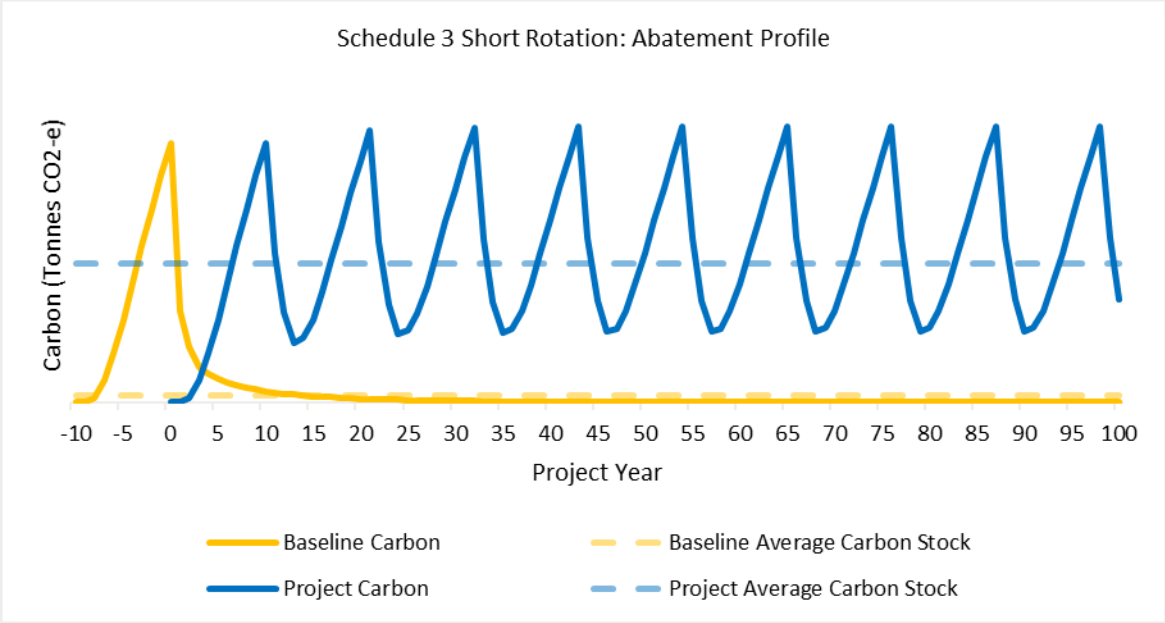


Figure 15: Abatement profile for a Schedule 3 project that continues an eligible Eucalyptus globulus plantation with 10-year rotation lengths. Credits are issued based on the difference between the project average carbon stock (dotted blue line) and the baseline average carbon stock (dotted orange line).

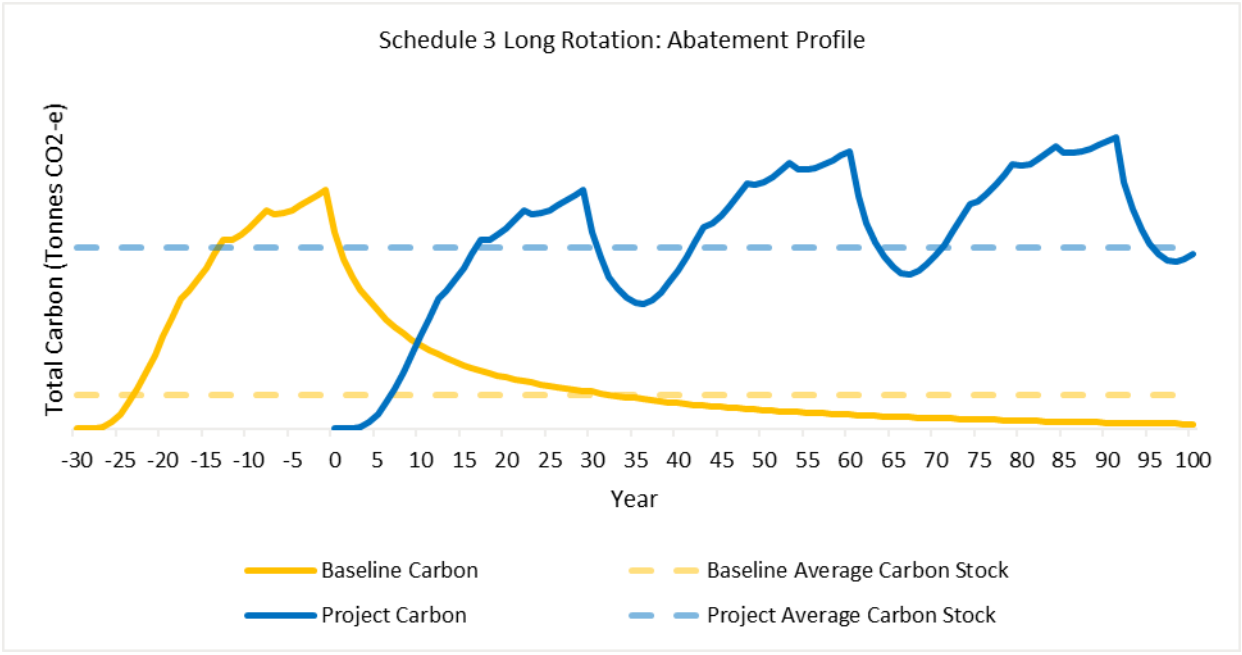


Figure 16: Abatement profile for a Schedule 3 project that continues an eligible Pinus radiata plantation with 30-year rotation lengths. Credits are issued based on the difference between the project average carbon stock (dotted blue line) and the baseline average carbon stock (dotted orange line).

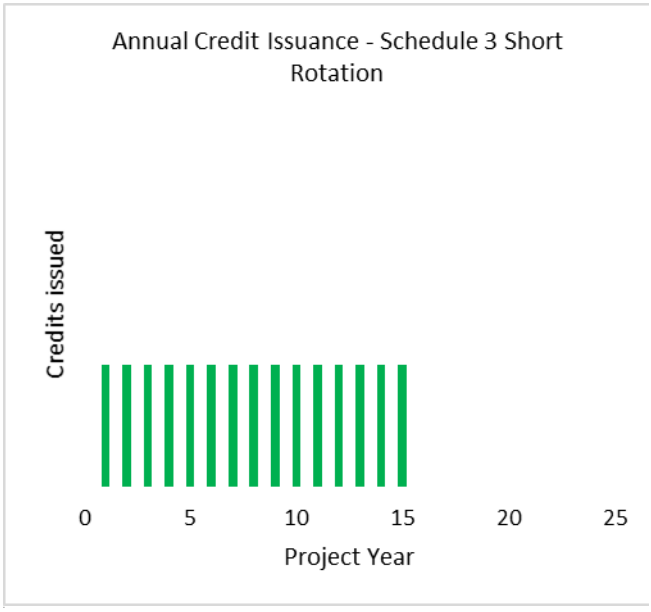


Figure 17: Annual credit issuances for the Schedule 3 project represented in Figure 15. An even apportionment of credits is received for the first 15 years of the project, after which crediting ceases.

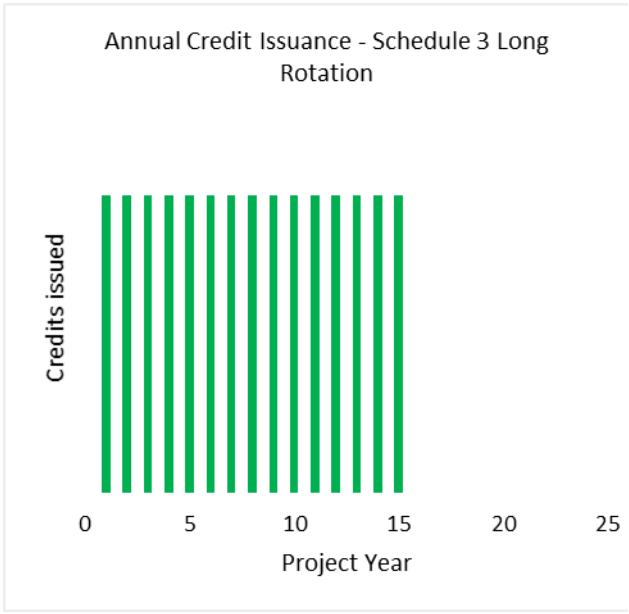


Figure 18: Annual credit issuances for the Schedule 3 project represented in Figure 16. An even apportionment of credits is received for the first 15 years of the project, after which crediting ceases.

Schedule 4 crediting

Baseline

- The baseline carbon for Schedule 4 is assumed to be a single harvest event, followed by conversion to a non-forested land use. As such, the baseline carbon stock is entirely comprised of carbon stored in the debris and harvested wood product pools, less any emissions from fuel used for the harvest event.
  - The baseline carbon is required to be modelled because the carbon stored in the harvested wood products from a single harvest event are material, particularly for long rotation plantations due to the extended growth age and the greater proportion of harvested wood products being used for construction.
- At registration, you are required to model the baseline scenario, and calculate the carbon that would have remained in the debris and harvested wood products at the end of the crediting period (year 25).

Project scenario

- The project scenario involves transitioning the plantation to a permanent planting. This can be done by:
  - Retaining the extant plantation forest
  - Clearfelling the forest and replanting, or
  - Clearing an area of the forest and replanting in its place.
- At registration, you are required to model your intended management actions for the crediting period and calculate the total carbon that will be present in the project at year 25.
- You are entitled to credits for abatement that arises as a result of the change in management activity brought about by the project – including any abatement arising from retaining trees that would have

otherwise been harvested. Thus, the total credits that you will receive for a project can be calculated with the equation:

$$Credit\ entitlement = \begin{matrix} Carbon\ stored\ at\ year\ 25 \\ of\ project\ scenario \end{matrix} - \begin{matrix} Carbon\ stored\ at\ year\ 25 \\ of\ baseline\ scenario \end{matrix}$$

- This credit entitlement is then split into equal apportionments over the first 15 years of the crediting period. This removes crediting discrepancies between projects that commence with standing forest and those that commence with fallow land. The crediting period itself remains as 25 years and you will need to continue to report for this period regardless of whether you are still receiving credits.
- Schedule 4 does not require participants to calculate the long-term average carbon stocks. Instead, Schedule 4 projects calculate the long-term average project scenario carbon stocks – the carbon stocks present in the forest at the end of the crediting period. This is because Schedule 4 does not permit ongoing harvest activities, and as such there is no need to account for emissions from harvesting. Because of this, Schedule 4 projects account for carbon present in the forest at the end of the crediting period, as this represents the cumulative net sequestration that will have occurred as a result of the project.

Figure 19 below displays an illustrative abatement profile for a Schedule 4 project. Note that this is an illustrative example only, and does not represent the many ways you can structure your project under Schedule 4. Figure 19 displays the annual credit issuances to this same project.

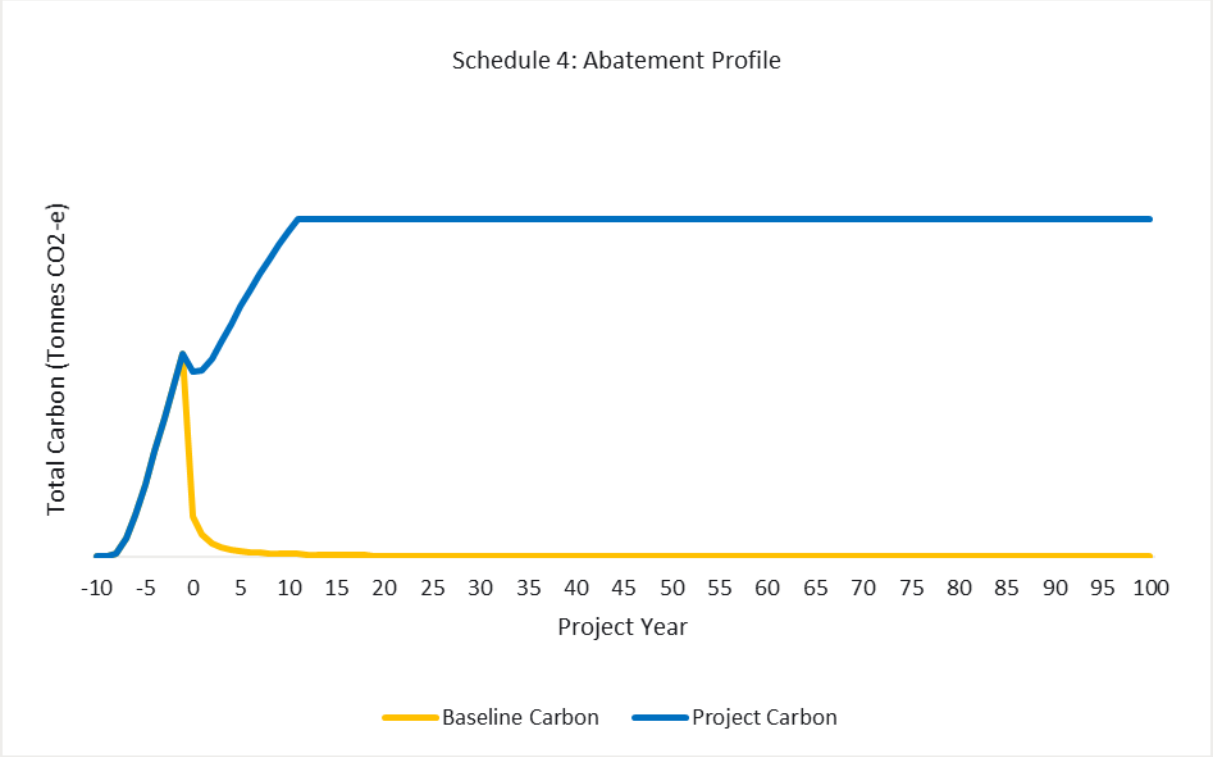


Figure 19: Carbon stored by the project scenario and baseline scenario for a Schedule 4 project. The baseline scenario is a single clearfell harvest at age 13 of a Eucalyptus globulus plantation without replanting. The project scenario involves a single thinning event on 20% of the trees at project registration (with resulting emissions shown in the drop in abatement in year 1). Note the modelled abatement reaches a cap at the upper age of confidence in FullCAM, and no further abatement is modelled to occur beyond this, as specified in the FullCAM guidelines. The maximum age calibration ensures conservative crediting outcomes by ensuring plantation forests are not modelled at ages for which there is little or no calibration data in FullCAM.

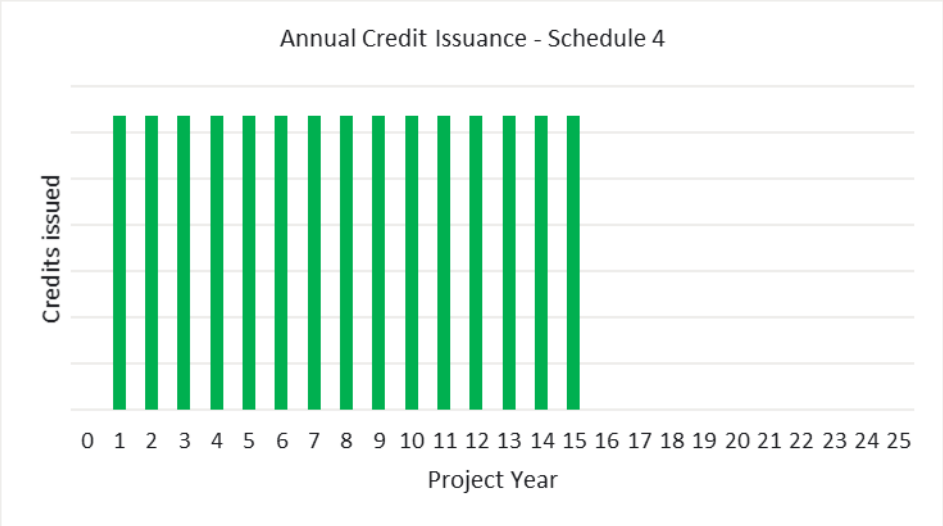


Figure 20. An even apportionment of credits is received for the first 15 years of the project, after which crediting ceases.

Auditing your project

Your project needs to be audited to align with our legislative requirements. The number of audits required over the 25-year crediting period will depend on the project size and the forward abatement estimate. Most plantation forestry projects will require 3 audits, including one with the first report. Each audit report is submitted when you apply for ACCUs. We will provide you with an audit schedule when your project is registered, which will tell you what reports need to include audits. For example: "*Audit 2: First project report submitted after 25/07/2024*".

Engaging auditors

We recommend you engage an auditor early when developing your project, as this will help you work out audit costs. You can find a list of registered auditors[35] on our website.

Notification requirements

You need to tell us about important changes to your project. For example, if the person running the project changes, you need to inform us. For more information, see Compliance[36].

Making changes to your project

You can make changes to your project to adjust for changing circumstances. You may want to add promising new areas of land or change the person responsible for running the project. To make changes (variations) to your project, you will need to complete a Project Variation form, available from the Clean Energy Regulator Client Portal[37].

Getting started

Ready to start a plantation forestry project?

- Visit our website for links to the plantation forestry method, the FullCAM Guidelines, Forest Management Plan Guidance, Financial Assessment Guidance and other useful resources, or contact us on 1300 553 542.
- Check for eligible and suitable land, see if it is viable to conduct any of the four activities and begin planning project registration.
- Carbon service providers (also known as project developers, aggregators, consultants, or agents) specialise in supporting or running carbon projects, usually for an agreed percentage of earnings. They may be able to help establish, model and report on your project. You can contact a carbon service provider using the Carbon Market Institute's Australian Carbon Market Directory[38].

Disclaimer

This document provides general guidance on using the 2022 plantation forestry method. It does not replace or supersede any legal requirements, address all applicable legal requirements, or recommend any investment. Figures are indicative and are not necessarily applicable to individual circumstances. Emissions

[35] http://www.cleanenergyregulator.gov.au/Infohub/Audits/register-of-auditors
[36] http://www.cleanenergyregulator.gov.au/About/Compliance-and-Enforcement/compliance-and-enforcement-approach
[37] http://www.cleanenergyregulator.gov.au/OSR/CP
[38] https://marketplace.carbonmarketinstitute.org/

Reduction Fund plantations projects involve ongoing legal obligations and returns can vary. You are encouraged to carefully consider if a project is right for you and seek independent professional advice relating to your unique circumstances.

Appendix 1: National Plantation Inventory regions

FIGURE 21: NATIONAL PLANTATION INVENTORY REGIONS