

## TRIG FINAL REPORT-CARBON AND BIODIVERSITY MARKETS 3 OF 3

Trials Review, Information and Genetics Project

Forestry Australia

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## 1. TRIG project introduction

#### 1.1 Background

The Trials Review, Information and Genetics (TRIG) project was designed in consultation with Farm Forest Growers Victoria, with funding provided by the Federal Government, and delivered via the Victorian Government's Department of Jobs, Precincts and Regions (DJPR). Forestry Australia, in its project oversight role, engaged PF Olsen to project manage and deliver the TRIG Project.

#### 1.2 Purpose

The purpose of the TRIG Project is to support the integration of tree plantings into farms in Victoria through four key activities:

- 1. Provide a comprehensive update to the farm forestry trial database information and identify priority sites to target for ongoing treatment and data collection.
- 2. Identify model plantings of various species/provenances that have performed well in representative environments. Where appropriate, and in conjunction with the landowners, plan and manage approved stand management activities (such as thinning).
- 3. Enhance the management of existing seed orchards and explore establishment of new seed production areas (SPAs) and identify the need for the establishment of new seed orchards and SPAs to supply improved seed.
- 4. Collate, clean and disseminate relevant updated datasets, reports and advisory information via a publicly accessible web platform hosted by the Victorian government and Forestry Australia and other promotional activities.

## 2. Sub report introduction

This sub report has been separated out from the main report, for ease of reading. This section covers the carbon and biodiversity markets in Victoria and the implications for Farm Forestry and small growers.



## 3. Carbon markets

Tree plantations are recognised as having significant potential to sequester carbon and there are several options for claiming the carbon credits that plantations can generate. This section describes these options.

#### 3.1 Regulated and unregulated pathways

Regulated and unregulated pathways for conducting carbon projects are available to landholders. When deciding the which pathway to follow, project proponents may consider a range of factors including:

- Access to markets
- Supporting 'claims' for products or services
- Administrative burden (time and cost)
- Commercial viability (which is connected to scale of the project)
- Technical knowledge
- Permanence requirements and encumbrances on land.

Table 1 provides an overview of three pathways for undertaking carbon projects in Victoria. The three pathways are:

- 1. Emission Reduction Fund this is a highly regulated pathway that is administered by the Clean Energy Regulator. Within the ERF there are many carbon sequestration 'methods' that are recognised as legitimate by the Federal Government. The 'Plantation Methodology' is one of these methods.
- 2. Climate Active<sup>®</sup> is a voluntary reporting method that certifies businesses that can demonstrate that they are carbon neutral, i.e. the business has measured it's emissions, reduced them wherever possible and offset the remaining emissions. These businesses are audited by an independent assessor, and the business publicly reports on their claim. Climate Active released a draft Guideline for Accounting for Carbon Sequestration from Tree Plantings in September 2022. The information in Table 1 is based on that draft guideline.
- 3. Insetting is also a voluntary reporting method that refers to activities that take place on land within the operational control of a business that reduces net emissions by sequestering carbon. Rather than have external guidance, the business develops its own methods and demonstrates their claims through transparent reporting.



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Table 1- Comparison of regulated and unregulated carbon project pathways

	Regulated 'ERF' Plantation Methodology	'Climate Active'	Landholder Insetting
Commercial production	Yes	No (up to 10% harvest for own use)	Yes
Carbon Market options	Available markets – carbon Aust Govt ERF Auctions Safeguard Mechanism Credits Voluntary market carbon offset Support own product/emission reduction claims	Carbon not tradeable Only used to reduce emissions profile against the product or organisation emissions certified under the Climate Active® License Agreement	Carbon not tradable Used to support producer's claims regarding reducing and insetting on- farm emissions
Timber market	Harvesting regime in management plan	No commercial harvesting permitted	Harvesting permitted
Project baseline and newness	No vegetation meeting definition of a forest prior 7 years	No vegetation for up to 5 years prior to the 'commencement date'	Baseline is prior year
'Newness' requirement	Project has not commenced prior to applying for registration.	Project commenced after 1990	No requirement for newness as measuring net abatement
Reporting requirements	Nominated on application (up to 5 years) and determined by the Regulator	Annual	At landholder's discretion and according to the market they are seeking to access
Audited	Yes	Yes	At landholder's discretion



Neither the Climate Active® pathway nor the 'Landholder insetting' option generate tradeable carbon credits, but they do provide the business with an opportunity to demonstrate their carbon neutrality. This may open up new markets to these businesses. In the context of this project, we have focussed on the 'regulated' ERF Market as it provides the landowner with the option to recognise the value of the carbon sequestered.

#### 3.2 Australian Government – Emissions Reduction Fund Scheme

The Clean Energy Regulator (CER) is the Australian Government body responsible for accelerating carbon abatement in Australia. It administers the:

- National Greenhouse and Energy Reporting Scheme
- Renewable Energy Target
- Emissions Reduction Fund.

The Emissions Reduction Fund (ERF) is a scheme that incentivises organisations and individuals to adopt new technologies or change their practices to reduce their emissions. Regulatory instruments give the CER their powers to administer the ERF on behalf of the Australian Government:

The CER:

- develops ERF methods to measure and accredit carbon abatement
- registers projects
- issues Australian Carbon Credit Units (ACCUs)
- runs auctions for the purchase of ACCUs on behalf of the Australian Government
- manages carbon abatement contracts
- maintains a register of projects.
- maintains a register of credits issued to projects.



#### 3.3 Establishing Plantations for Carbon - State Planning requirements

#### 3.3.1 Victorian requirements – carbon

There are no specific requirements for registering ERF projects under Victorian Law. Landholders and project proponents can register interests in carbon property rights on title under the Climate Change Act 2017.

#### 3.3.2 Victorian Timber Planning requirements

Timber production is authorised in areas designated as farming zones. In these areas, timber production within plantations larger than 5 hectares must meet the requirements of the Victorian *Code of Practice for Timber Production 2014* (Code of Practice).

Local Government Regions may have discrete requirements in addition to the framework shown below. For example, within the East Gippsland Shire, plantations larger than 100 hectares require a planning permit whereas there are no other size restrictions specified in other Gippsland shires.

Is land within farming zone (VPP 35.07)?	No		Planning restrictions apply
Yes**		Bushfire Management Overlay	A permit is not required for a building or works associated with timber production provided the buildings or works are not within 150 metres of accommodation or land zoned for regidential or wurd conidential
Is land subject to a	Yes - what type of overlay is it?		purposes.
planning overlay?		Environmental Significance Overlay	Review application of the zone restrictions to timber production
No		Franker Manager A Quarker	Review planning requirements prior to construction roads for timber
The plantation must not     Any dwelling in sep     Any land zoned for	<b>be within 100 metres of:</b> arate ownership. residential, commercial or industrial	trosion Management Overlay	extraction
use. – Any site specified o permits a dwelling	n a permit which is in force which to be constructed.	For further details refer to https://	
The plantation must not whether on private or put the relevant electricity su	be within 20 metres of a powerline blic land, except with the consent of upply or distribution authority.	For further details refer to <u>https://www</u>	<u>.pianning.vic.gov.au/</u>
Timber production must Timber Production 2014 (amended 2021, Departm Planning, 2021).	<b>comply with the Code of Practice for</b> nent of Environment, Land, Water and		

An overview of the various planning requirements is shown in Figure 1.

Figure 1- Planning requirements for timber plantations greater than 5 hectares in size



### 3.4 Actual participation under the Plantation Method for carbon in Australia

Analysis of the ERF Register<sup>1</sup> Vegetation projects account for more than half (~69 million) of all (123 million) CER ACCU's issued under the Emission Reduction Fund scheme to date. Plantation projects (Figure 2) make up a small percentage of all vegetation projects.



Figure 2 - ERF Registered projects

#### 3.5 Current CER Plantation projects in Victoria

There are eight active projects registered under the Plantation Methodology with the CER in Victoria as of 29 January 2023. There are also two projects that list Victoria as one of the States in which the project is registered. Analysis of the ERF Project Register shows that three of the projects are registered under the Plantation Method and account for 0.9% of all ACCUs issued in Victoria to date (Figure 3).

<sup>&</sup>lt;sup>1</sup> Source – <u>ERF Project Register</u> ('last updated file 29/01/2023).



ALL		VEGETATION		PLANTATION		
METHODOLOGIES		METHODS		METHOD		
				<ul> <li>Projects registered ACCUs issued</li> <li># Projects issued ACCUs</li> <li># Project originators*</li> <li>4 of 10 projects - New F</li> <li>4 of 10 projects - Land</li> </ul>	10 87,381 3 6 Forests ari/We Act	
Projects	180	Projects	180	Projects	10	
ACCUs issued	9,584,275	ACCUs issued	9,584,275	ACCUs issued (0.9%)	87,381	

Figure 3 - ERF Project registered in Victoria

Victorian registered Plantation Method projects cover 10,288 hectares in total. The breakdown of the projects is shown in Table 2. No projects are registered under the 'Farm Forestry' method in Victoria and, as Table 2 shows, only 650 hectares (or ~7%) of all projects are new plantations.

Table 2-	Proakdown	of EDE	radiatarad	nlantation	pro	iaata in	Viotoria
TUDIE Z	DIEUKUOWII	OI LINI	registereu	plantation	pioj		VICTORIA

	# projects	Area (ha)	ACCUs issued
Schedule 1 – new plantations	4	650	nil
Schedule 2 – short to long	4	9,638	87,381
Schedule 3 – avoided conversion	-	nil	nil
Schedule 4 – transition to permanent	-	nil	nil

The Plantation Method was approved late in 2017 (and was updated in January 2022) to include Schedules 3 and 4. Projects have five years from the project registration date to produce a report. Some projects that do not have ACCUs issued against them may currently be in the process of independent review and reporting.



#### 3.6 Issues impeding registering carbon projects

The forest products industry has identified the following issues which impeded registering carbon projects under the Emissions Reduction Fund (ERF) in Victoria. Suggested reasons are outlined below.

#### 3.6.1 Administrative complexity requires scale

- Special 'technical knowledge' for registering and reporting against projects and administration of complex and burdensome rules. Current rules mean that reporting and audit requirements are similar whether the project is large or small which means only larger projects are likely to progress.
- 'Aggregating projects' models to service small land holders have not been popular to date. The potential to reduce costs through an aggregation model are somewhat limited because the initial effort to conduct due diligence, mapping and obtain legal rights are the same for each land holder. There are also administrative costs associated with maintaining a project that involves a number of land holders, particularly when land is added or removed from a project (Keenan, et al., 2020).

#### 3.6.2 Competing use of land

- Current land prices are very high and competing agricultural land uses are high making it more challenging for forestry crops to compete with alternative land uses, especially in less productive areas or areas closer to major cities.
- The perception that plantations are a 'threat to agriculture' (note 650 hectares to create 'new plantations' are currently registered under the Plantation Method).

#### 3.6.3 Risk for 'long crops'

- Disruption of the carbon market due to political interference and unexpected announcements means that 'long crop' projects are perceived as higher risk.
- The commitment for managing the plantation over the length of the permanence period. (All Victorian projects have a 25-year permanence period).
- Lack of transparency of the market values of timber (and to a lesser extent carbon) which provide confidence that there will be a market for tree crops on harvest.
- Large upfront capital investment for establishment with lack of certainty that carbon will bring positive cashflows faster.
- Long commitments and the land holder caries the risks that include fire, price stability in market and political stability in the scheme.



#### 3.6.4 'Easier' forms of abatement first

• Project originators have focused on projects that deliver 'instant credits' (gas flaring, avoided deforestation, savannah burning), rather than longer term vegetation projects.

#### 3.6.5 Timber industry slow to respond to the market

- Lack of 'whole of industry' approach and the 'revegetation' for carbon debate has focused on environmental plantings.
- Plantation method was not approved until late 2017.
- The obstruction of the 'water rule', (which was introduced into the regulations in 2015) meant that most of Gippsland would have to pass additional hurdles to show no impacts by projects on catchments stifled project development. The regulations to allow Gippsland projects to proceed without needing to meet this additional hurdle were updated in 2021.
- Lack of recognition of the co-benefits (including water quality, biodiversity, employment, renewable materials, agricultural land productivity) with government and investors that can be achieved without impacting agricultural production.
- Lack of strategic partners (e.g. construction industry, CFMEU, farmers) to push the case this is now changing.

#### 3.7 Opportunities to leverage plantation timber for carbon

The Australian<sup>2</sup> and State Governments<sup>3</sup> are pushing the merits of 'farm forestry' to expand the plantation estate. As shown above, threshold issues such as the transactional costs and administrative burden in registering, reporting and particularly auditing means that projects need to be undertaken at scale to be commercially viable. The paradox is that farmers (as a rash generalisation) have not undertaken projects at scale.

<sup>2</sup> Commonwealth - Plantations and Farm Forestry-

https://www.agriculture.gov.au/agriculture-land/forestry/australias-forests/plantationfarm-forestry

<sup>&</sup>lt;sup>3</sup> Gippsland farm forestry- <u>https://www.vicforests.com.au/vicforest-forest-</u> <u>management/farm-forestry</u>



# 3.8 Overcoming the scale (project area) barrier to leveraging carbon to expand the plantation estate.

We have considered three pathways for overcoming the barriers of commercial viability for smaller projects. A brief benefit analysis is provided for each pathway. The pathways are:

- 1. Project aggregation
- 2. Integrated Farm Methodology (in development)
- 3. Small project alternate assurance arrangements

#### 3.8.1 Project aggregation

Project aggregation means pooling projects from numerous smaller projects and registering them as a single project with the aim of creating efficiencies of scale in project costs. They may include:

Ordering stock

Reporting

• Engaging contractors

• Auditing costs

 Project monitoring and management • Registering with the project/liaising with the regulator

In practice, discussions with several 'aggregators' said that it is very challenging to create a commercially viable model. The barriers mentioned included:

- No significant savings on audit fees (one provider noted that the auditor charged more).
- Poor performance or withdrawal by a project member imposes a liability on the rest.
- Joint 'permanence' period on a project means it is likely that members of the aggregated project will withdraw with little opportunity to add more members without impacting the permanence period of the project.



#### 3.8.2 Integrated Farm Methodology

The Integrated Farm Methodology (IFM) was drafted by the CER and consultation on the draft method received. The IFM allows for different methods (for example soil and farm forestry) to be 'stacked' under the same project. The Plantation method is not currently included in the IFM method.

The Method is currently 'on hold' as the Government has accepted the recommendations of the Chubb review, that included:

- Changing responsibility for method development from the CER to the Department of Climate Change, Energy, Environment and Water (DCCEEW). This change is in progress.
- Establishing the CAIC (Carbon Abatement Integrity Committee) to assess and make recommendations for the approval of methods. Creation and recruitment to the CAIC demands a legislative change. This is unlikely to occur before the Safeguard Mechanism legislative updates are passed.

The delay provides an opportunity for the Plantation Method to be included in the IFM (or at least a pathway for its inclusion to be developed).

#### 3.8.3 Small project – alternate assurance arrangements

All CER registered projects are subject to integrity measures which include audit requirements however, the original scheme design did not have 'fit for purpose' provisions. In response, the Australian Government proposed that the administrative costs of carbon projects were reduced after recommendations from the King review. However, these changes are only applicable to environmental plantings that are less than 200ha.

There is an opportunity for the Forestry Industry to advocate for similar changes to small farm forestry projects registered under the plantation method - given the ability to monitor progress and status of projects using remote sensing technologies. Small plantation projects are generally considered to be of a comparable or lower risk then stand-alone environmental plantings. Yet are still subject to the larger administrative burdens. The industry could advocate for these changes whilst maintaining an appropriate level of assurance that is fit for purpose and does not reduce scheme integrity.



## 4. Biodiversity markets

Biodiversity markets are most commonly related to developments that will cause environmental damage. In these circumstances, a developer will seek to purchase an equivalent offset to the proposed development. In most cases the offset is natural vegetation that is under a conservation covenant to guarantee that the offset is in perpetuity.

The Victorian Government have coined the term 'EcoMarkets'<sup>4</sup> to describe a range of marketbased systems that help to reduce impacts on the environment. Examples of EcoMarkets in Victoria are:

- BushTender focussed on existing areas of native vegetation and provides landholders with payments to make improvements to these areas.
- EcoTender similar to BushTender but broadens the reach to include financial incentives for improving rivers and estuaries.
- BushBroker a platform for linking landowners who have developed native vegetation credits with developers who need to purchase credits to offset their development.

In terms of the establishment of tree plantations for commercial production and many other values, it is unclear if such tree plantations could participate in these EcoMarkets.

At the Federal Government level, a new market is under development called the Nature Repair Market<sup>5</sup>. The aim is similar to the Victorian initiatives; provide a method for companies and businesses to reward landowners to make environmental improvements to their land. This new market is going through a consultation phase in 2023 with the aim of having the market operating by mid-2024.

One of the key requirements to any claim of biodiversity improvement is to be able to demonstrate the change that has come from the activity. To demonstrate change, a baseline situation must be measured and recorded. Tree plantations are a definite improvement to biodiversity when compared to grasslands, and we expect that markets will reward such improvements in the future. It will be imperative to actively measure and record these improvements over the 'baseline'.

<sup>&</sup>lt;sup>4</sup> <u>https://www.environment.vic.gov.au/innovative-market-approaches/ecomarkets</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.dcceew.gov.au/environment/environmental-markets/biodiversity-market</u>



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## PF**OLSEN** Appendix A - ERF Registered vegetation projects

Number of ACCUs issued against all the various ERF registered Vegetation methods. ACCUs issued against the Plantation Forestry method projects are shown in red.

