



# Growing Landscape Carbon

Online platform prototype for integrating  
trees in rural landscapes

## **CMI Consultation Report**

November 2019

prepared for

The University of Melbourne





## Executive Summary

The Carbon Market Institute (CMI), was engaged as a key project partner on the 'Growing Landscape Carbon' (GLC) project, led by the University of Melbourne. As well as being involved on the Project Control Group in developing the general strategy and direction of the project and prototype development, CMI was charged with undertaking a stakeholder consultation process with investors of trees – identified as forestry industries and carbon project developers as part of the wider project stakeholder mapping and communications strategy.

CMI undertook a series of one-on-one interviews with carbon project developers and forest industry representatives interested in carbon abatement potential of trees in the landscape in Victoria.

### Key Findings:

At present, less volatile and established commercial investments hold greater appeal than small-scale, on-farm landscape carbon projects. This is primarily due to issues of economy of scale and economic returns, the dominance of a few carbon project developers and timber investment companies and the manner in which schemes such as the ERF are weighted to 'favour' large-scale projects. Stakeholders interviewed generally agreed that with the right combination of policy signals, ERF modifications and market signals, 'trees on farms' will become a viable and thriving opportunity. Significant systemic issues to be resolved include reducing transaction costs for projects and reviewing ERF eligibility criteria, methodologies and regulatory requirements.

Parallel to a process of addressing barriers to entry to environmental markets, market readiness is clearly necessary and this is where stakeholders interviewed during the consultation saw the true value of the 'trees on farm' platform. Stakeholders were pleased with the inclusion of detailed information on the benefits of trees on farms and the outlining of income and co-benefit opportunities on the website. The sections 'Why grow trees on farms?' and case studies were thus identified as the most critical in terms of building capacity, sharing knowledge and therefore preparing the market. Harnessing specific opportunities of relevance to small-scale landscape projects that provide differentiation with larger projects was identified as key to unlocking their potential. These may include the many co-benefits delivered alongside a project and targeting impact investment markets through alignment with global-scale initiatives, particularly the UN Sustainable Development Goals. Thus a thorough examination of demand signals and building a business case for small-scale projects was seen as necessary and a useful inclusion in the section on earning income from carbon.

The connectivity function of the platform was perceived differently by various stakeholders interviewed. Timber companies and conservation project developers rated the connectivity value highest, carbon project developers generally agreed that if the market is working correctly, the need for such a connectivity platform is lessened as landholders tend to reach out to carbon project developers directly. Intermediaries – organisations acting between landholders and investors – were seen as a crucial link that could be further augmented on the platform. Whilst there are a number of intermediary contacts listed on the site, a decision-making tree including intermediaries such as local Landcare network could be useful. A thorough mapping exercise would also open up investment pathway options and potential finance and aggregation models.



Overarching themes emerging from the consultation process can be distilled into a few key findings/recommendations:

- 01** A connectivity platform such as ‘Trees on Farms’ could be useful in developing market readiness in Victoria, whilst significant systemic barriers as well as policy settings are addressed before a full launch of the platform.
- 02** Identify and examine the role of intermediaries (acting between landholders and investors) in growing landscape carbon – and include in the platform.
- 03** Identify and provide pathways to unlock investment in private Australian landscape projects – blended carbon finance and aggregation models for landscape carbon projects.
- 04** Develop the business case for small-scale landscape carbon projects – the co-benefit story.



## Growing Landscape Carbon (GLC) Project Overview

**Aim:** The GLC project proposed to develop an online platform to facilitate investment in tree growing for various economic and environmental benefits, harnessing a range of policy incentives, including those under the Emissions Reduction Fund (ERF), with the overarching goal of increasing carbon abatement through the integration of trees in rural landscapes in Victoria.

**Background:** The Victorian Government Department of Environment, Land, Water and Planning (DELWP) awarded the Climate Change Innovation grant in 2017 to fund the 'Growing Landscape Carbon' project as proposed by the lead organisation, the University of Melbourne (UoM). The project partners are:

- **Lead:** UoM (School of Ecosystem & Forest Science);
- Carbon Market Institute (CMI);
- Greening Australia;
- Corangamite Catchment Management Authority;
- DELWP
- Department of Jobs, Precincts & Regions (DJPR);
- Midway Ltd

The GLC project fits into a wider project framework being undertaken by the UoM called the Next Generation Forest Plantation Investment Project and the creation of a Forest Investment Index. The platform prototype has been developed by the UoM's E Research team.

Upon completion, the prototype online platform aims to demonstrate how Victoria can achieve excellence in integrating carbon into the landscape resulting in the achievement of multiple benefits including emissions reductions, economic growth and regional development. As a tool, it has been designed to essentially 'matchmake' potential stakeholders within the supply and demand side of timber. Individual landholders can obtain an overview of the potential of their land to grow trees for either timber, carbon and/or biodiversity. Those who are interested in pursuing a landscape project on their land can visibly flag their interest to institutional/commercial scale investors or project developers via the platform.

The Project Control Group has identified that different types of stakeholder groups (Catchment Management Authorities' (CMAs), timber industry, carbon investors, landholders) will have different requirements for the platform. Each stakeholder category would likely enter the platform with very different needs, and therefore it is important to not bias the platform towards one specific sector of stakeholders. Therefore, to ensure the platform is fit for purpose, CMI has been asked to obtain feedback on the tool from investor stakeholders, in particular carbon project developers and forest industry representatives interested in carbon potential.

### Prototype Tool:

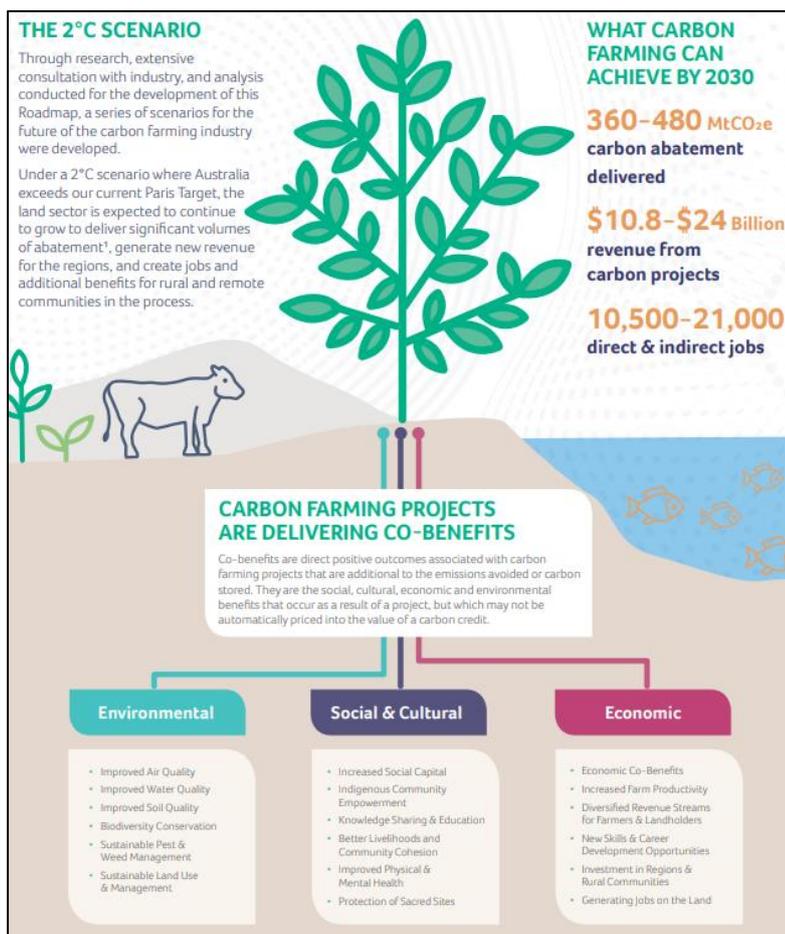
Features of the **platform** (<https://growcarbon.science.unimelb.edu.au/#tabmain>) include:

- Navigation by address search, search by standard parcel identifier
- Login as an owner or as a system administrator using third-party authentication (Google)
- Display of properties (grouping of land parcels) previously inserted by the user as point clusters (at lower scales) or polygons (at high scales)
- Creation of properties by interactively selecting land parcels and filling the form - display of property data
- Update of previously created properties by interactive selection of land parcel polygons
- Deletion of properties using a button on the property form
- Display of suitability index of individual land parcels



## About CMI: Carbon markets and the relationship with Growing Landscape Carbon

CMI is a peak industry body at the centre of climate change policy and business in Australia. We believe a market-based approach to emissions reductions provides an effective, efficient framework to meet domestic targets and challenges at lowest cost. We share knowledge and facilitate connections between the private sector, policy makers and thought leaders to drive the evolution of carbon markets towards a significant and positive impact on climate change.



**Carbon Farming:** CMI has worked with the Federal Government to assist the notable achievements of the Carbon Farming Initiative and Emission Reduction Fund (ERF) in establishing the world’s largest and most robust domestic abatement offset scheme. This has made significant achievements in the land sector and ERF investment has already led to, and will continue to lead to significant regional employment, social, indigenous and environmental benefits.

CMI’s [2017 Carbon Farming Industry Roadmap](#) shows that the carbon farming industry can continue to grow to provide over 20,000 jobs and up to \$24 billion of investment by 2030, mostly in regional Australia. The national roadmap outlines the growth of the domestic carbon farming industry and demonstrates how Australia’s carbon farming industry is well positioned to make a significant contribution to our national emissions reduction challenge.

## Emissions Reduction Opportunities for Victoria:

Victoria’s land sector was identified recently by the Victorian Government Independent Expert Panel Report on [Interim Emissions Reduction Targets for Victoria](#) as the second highest abatement opportunity, after the electricity sector, with “significant potential to increase the carbon sink from forest management on public land, plantations and on-farm planting”. Whilst the Report highlights the potential for the land sector to reduce its emissions, and forestry sequestration opportunities, CMI would like to see a strong emphasis on the potential of the carbon farming industry to be a vibrant sector in the Victorian economy, providing a strong source of jobs and revenue for the range of market participants, whilst making a significant contribution to Victoria’s net zero emissions trajectory through to 2050.



Victoria is currently under-represented in terms of contracted abatement under the ERF, with only 67 projects registered under the ERF out of a total of 780 projects nationally<sup>1</sup>. The majority of these 780 projects are land sector projects and there is enormous potential for the Victorian land sector to become involved in carbon farming.

The forest and wood products industry in Victoria is a dynamic sector of the economy using wood to create materials for construction and buildings, furniture, pulp and paper, fuel as well as environmental markets: carbon credits and biodiversity benefits. Plantations and farm forestry present an opportunity to increase Australia's long-term wood supply while contributing significant social, economic and environmental benefits to regional Australia. Forestry activities can be coupled with carbon farming through ERF methodologies, delivering new and diversified income streams. For example, carbon income can be an important additional income stream for farmers, providing added opportunities to re-invest back into agricultural enterprises as well as potentially improving soil health, salinity and run-off reduction and providing shelter for livestock.

## Demand Signals

### Carbon

The primary market for Australia's domestic offsets, involves the purchase of Australian Carbon Credit Units (ACCUs), through the ERF through the Climate Solutions Fund overseen by the Commonwealth Government. The use of public funding to purchase abatement under the ERF is joined by a small but growing secondary market for ACCUs, as well as compliance demand from entities covered by the Federal Government's Safeguard Mechanism.

There are considerable market drivers creating opportunities for carbon market participants including:

- compliance measures for liable entities and a supply-constrained market,
- a fast-growing voluntary market (businesses/ industries going carbon neutral or providing carbon neutral goods and services),
- State government and municipal net-zero initiatives,
- international carbon market linkage and trading (currently under negotiation through the rules of the Paris Agreement) with the potential for Australia to support international demand for offsets,
- as well as initiatives to reduce emissions in international aviation Carbon Offsetting Scheme for International Aviation (CORSIA) and shipping (IMO).

### Biodiversity

Biodiversity offsets are 'market-based instruments' that are increasingly promoted and adopted by governments and companies worldwide as a policy instrument to compensate for biodiversity losses from infrastructure development projects. Australian Biodiversity Unit (ABU) are issued from a number of State-based schemes and are contingent to project planning approvals in most states.

A new driver in the realm of environmental markets is the idea of credit stacking, or coupling of a number of credits. Credit stacking could potentially provide a landowner an opportunity to generate money from the protection and management of biodiversity (ABU) and from generating landscape carbon (ACCU), as well as the sale of timber. An example of a new product that responds to this emerging market demand is EcoAustralia from South Pole. This combines a high-quality international emission reduction project certified by the Gold Standard with a state government-accredited biodiversity protection unit. There is increasing demand from carbon credit purchaser (liable entities, municipalities, statutory authorities and corporations) to purchase high-quality carbon credits, delivering co-benefits – whether they be environmental, social & cultural and economic. The significant driver for this is aligning credits with an organisation's core values, or Sustainable Development Goals.

---

<sup>1</sup> Clean Energy Regulator, Emissions Reduction Fund cumulative projects across Australia – May 2019.



## CMI Stakeholder Consultation & Key Findings

As a critical component to the GLC project’s stakeholder mapping and communications strategy, CMI undertook a series of one-on-one interviews with a select group of supply-side stakeholders (or investors in trees), namely carbon project developers and forest industry representatives.

The aim of the interviews was to provide different perspectives that can be used to help inform:

- a) How carbon and environmental markets can be leveraged to deliver an increase of tree plantings (and related carbon) on farms in Victoria, and identify barriers and possible solutions to carbon abatement projects in Victoria.
- b) The role that the supply side of the market can play in catalysing opportunities and realising the economic potential of increased tree plantings;
- c) Identify features on the online tool developed by this project that could be improved, from a supply-side perspective.

Following consultation with the project lead, target stakeholders were identified by CMI and the interview engagement list included:

| Company                      | Description  |
|------------------------------|--|
| Greencollar                  | Australia’s largest environmental markets investor, natural resource manager and conservation-for-profit organisation. They work with farmers and other land managers to diversify income streams and integrate sustainable opportunities into existing operations |
| Climate Friendly             | Carbon project developer with one fifth of ERF-registered projects, or more than 100 projects nationwide. They partner with farmers, foresters and traditional custodians to develop projects.   |
| South Pole                   | Global company with over 700 projects in renewables, forestry, agriculture, industry aligned with the UN SDGs. They help develop carbon credits and deliver to organisations looking to go carbon neutral.   |
| WeAct                        | Carbon project developer with a diverse portfolio of carbon offset projects. They work with Australian plantation forestry and mine owners to develop projects under the ERF, as well as developing significant international projects.                            |
| CO2 Australia                | Environmental services company revegetating native bushland and planting dedicated forest carbon sinks in the development and delivery of carbon projects as well as biodiversity offsets. Run the 20 Million Trees project.                                       |
| Tasman Environmental Markets | Provider of environmental solutions and carbon market services with a tailored carbon offset portfolio to assist clients to reduce their carbon footprint and go carbon neutral.   |
| Carbon conscious (Alterra)   | Manage agroforestry based carbon sequestration projects in Australia and New Zealand - 18,000 hectares across 30 properties in the south-west agricultural regions of Western Australia  |
| Select Carbon                | Environmental services company that specialises in developing and aggregating carbon farming projects throughout Australia.  |
| NZ Carbon Farming            | Big forestry players in NZ (largest suppliers of credits to oil and energy companies), and interested in the WA market. Portfolio of forests and farms.  |



|             |   |
|-------------|---|
| Midway Ltd  | Plant, grow and harvest wood fibre – partner with local landowners and communities to grow sustainable woodfibre  |
| New Forests | A sustainable real assets investment manager. Runs ‘Forest Carbon Partners’ in US with 19 carbon forest offset projects in California. Hold a number of ACCU projects in their portfolio. |

The original planned approach to the stakeholder consultation proposed holding a targeted, facilitated roundtable. This approach was modified, taking into account the competitive nature of the majority of these stakeholders and their reticence to disclose commercial-in-confidence information about clients and projects in front of their competitors. In this vein, this report has respected the anonymity of the stakeholders and has not attributed information to any individual or organisation.

## 1. Key Findings

### 01 **A connectivity platform such as ‘Trees on Farms’ could be useful in developing market readiness in Victoria, whilst significant systemic barriers as well as policy settings are addressed before a full launch of the platform.**

The majority of stakeholders interviewed during the consultation process pointed to significant systemic issues with environmental credit markets that require resolution in order to achieve the goal of increasing landscape carbon – particularly on farms in Victoria. Feedback received identified that timber investment is probably the most feasible investment stream given the issues involved with the ERF and other credit markets, as outlined below. Stakeholders expressed reservations about launching a connectivity platform such as ‘Trees on Landscape’ before the necessary resolution of systemic problems, concerned that landholders may be given the wrong signal and may be disappointed by receiving negative responses from investors. However, it was generally agreed that market readiness is key to unlocking supply once systemic/ policy issues are overcome and that this platform could play a role in developing this market readiness.

#### Systemic Issues Identified:

##### ERF Methodologies

ERF methods are developed by the Department of Environment & Energy, assessed and reviewed by the Emissions Reduction Assurance Committee, and approved by the Minister for Environment and Energy. Stakeholders advised that there are a limited number of methods that are cost effective for farmers to implement and that eligibility criteria for many methods are overly specific and that some minor modifications could potentially overcome barriers and significantly increase the uptake.

Stakeholders consulted suggested a number of key actions with regards to methodology modifications that could unblock supply by enhancing the existing carbon farming framework to better align with the reality of how land is managed and be better suited to the specificities of the Victorian agricultural environment. Some of these suggested modifications include:

1. Reducing transaction costs to minimise commercial barriers
2. Reviewing and potentially modifying eligibility criteria for methodologies and ERF regulatory requirements
3. Unlocking the potential for micro-players to participate in the ERF



## Reducing transaction costs to minimise commercial barriers

Feedback from the carbon farming industry and landholders has consistently indicated that transaction costs of running carbon projects are a significant barrier to financial viability of a project, and worse, prohibitive for many landholders. This was reiterated by carbon project developers. The principle factors attributed to high costs are the project audits required for an ERF project and the data modelling and measurement requirements. Audit costs were seen to be the 'king hit', or tipping point for project viability, particularly small-scale projects. Many methods may not stand alone in viability on a small landholding, but for example, a small landholder who may want to combine a plantation and soil carbon project will be hit with double audit fees highlighting the need for multi-method, process-based audits.

Regarding transaction fees to undertake a land-based carbon project, a number of stakeholders interviewed relayed that transaction costs are often fixed, no matter the size of a project. Measuring and verifying carbon sequestration is likely to cost more than the potential value of any offsets generated in most small-scale project cases. Modelling by one of the stakeholders interviewed shows an estimated average cost of development of a carbon project in Victoria of \$80-\$135 per tonne of carbon produced. Coupled with this problematic is that current ACCU prices (around \$14/tCO<sub>2</sub>-e/ \$17 on the spot market) are insufficient for investors to bankroll projects or engage in the market. The ERF's purchasing principle is that the Clean Energy Regulator has an emphasis on least cost abatement. Not only does this favour large-scale projects, and particular methodologies, but does not allow for inclusion of consideration of the numerous additional benefits that a project might generate.

Significant work is underway, being led by the Clean Energy Regulator (CER) "Increasing supply for the Climate Solutions Fund", and partnered by CMI, on examining ways to reduce transaction costs, particularly the audit component. For example, the Regulator may set a threshold of ACCUs below which participants can use a simplified audit checklist and are examining streamlining audits to cover a portfolio of projects under a single method with the same scheme participants. These modifications could potentially open up opportunities for smaller projects, unlocking wide-spread participation.

The other significant cost barrier identified relates to measuring, modelling and verifying carbon data. Measured methods incur very high costs for each proponent, a factor that can increase cost prohibition. The CER-led 'streamlining' process is also examining alternative solutions to these problems relating to reporting on abatement, including potentially prototyping a new registry and digital application tools.

## Reviewing and potentially modifying eligibility criteria for methodologies and ERF regulatory requirements

Scheme complexity was identified as the number one barrier to landholder uptake of projects. The ERF is a rather complex beast and the requirements, many set in legislation, are beyond the remit of a landholder and can create a significant barrier. Carbon abatement projects under the ERF are therefore best managed by carbon project developers, however, they are only likely to engage in a project of a certain minimum size due to cost constraints and return on investment requirements.

Examples of methodology eligibility barriers include:

- Plantation forestry methodology (rainfall requirements, rotation issue, eg. cornered out of market due to rotation criteria).
- Farm forestry (rainfall requirement, permanence issues)

CMI has been consulting closely with the Department of Energy & Environment on increasing participation in the ERF, examining existing methods and improvements/ changes that could increase participation and uptake.

We are currently putting together some time-bound, member-based Taskforces to work closely with the Government to consider ways in which available methods can be improved and stacked to access additional potential carbon pools whilst considering streamlining of relevant processes. One of the possibilities being explored by one Taskforce is to expand the native forest regeneration method which could replace the current



Human-induced Regeneration and Native Forest from Managed Regrowth methods and cover the full spectrum of forest regeneration.

ERF regulatory requirements were also mentioned by consultation interviewees as creating barriers to landscape projects incorporating trees on farms. These may include:

- **Additionality requirement** - offset integrity standards are set out in the legislation and designed to ensure that ACCUs issued under the ERF are for genuine emissions reductions that are additional to business as usual. Additionality concerns arise with regards to some forestry and managed regrowth projects – they must be greenfields or have rested over a designated period. Likewise, many farmers, especially farmers involved in Landcare or regenerative farming practices, have the potential to be excluded from earning offsets due to additionality issues.
- **Regulatory additionality requirement** - The ERF's regulatory additionality requirement aims to ensure that emissions reduction activities required under state, territory or Australian government regulation are not eligible under the ERF. In Victoria, the *Climate Change Act 2017* enshrines net zero into legislation and thus triggers the additionality principles with regards to statutory authorities. This effectively means that water authorities in Victoria are ineligible for ERF crediting.
- **Permanence requirement** - Sequestration projects store carbon in soils and vegetation and represent the vast majority of contracted abatement under the ERF, and the permanence obligation requires scheme participants to maintain the carbon stored by ERF projects over the long term. Locking into a long permanence period can be a significant barrier to landholders, placing such risk on an individual farmer that few are likely to get involved. At project registration, scheme participants nominate a permanence period of either 25 or 100 years for sequestration projects. Projects that nominate a 25-year permanence period are generally subject to a 20 per cent 'discount' on the number of ACCUs issued by the CER. Permanence covenants have been highlighted as problematic in the case of a landholder wishing to sell their land.

The Government is currently re-examining the ERF and particularly its potential to deliver further abatement. The Minister for Energy and Emissions Reduction, convened an expert panel to undertake targeted consultation with industry and other stakeholders about the potential to incentivise low-cost carbon abatement, with a focus on Australia's industrial, manufacturing, agricultural and transport sectors and increased energy efficiency. CMI was invited to provide [feedback to the Expert Panel Examining Opportunities for Further Abatement](#) discussion paper, pertaining to matters outlined within and potential options that may help unlock abatement in these areas.

It would be hard to address the issue of problems within the ERF without mentioning overarching policy setting failings. A brief overview of a few critical issues is outlined below:

- **Land use competition:** the Federal and State Governments must work to streamline the policy and regulatory environment, addressing complications from competing food, fibre and environmental markets. Currently, for example, a carbon project proposal on farmland must first be assessed by the Minister for Agriculture for its potential to have an adverse impact on agricultural production in the region.
- **Demand signals:** Policy uncertainty at the federal level is preventing the large-scale investment necessary for Australia to meet its 2030 emissions reduction target. A market mechanism that adequately covers large emitters is necessary to provide an economic signal to stimulate investment in land sector abatement at scale.
- **Compliance market signals:** The Safeguard Mechanism, established in the *National Greenhouse and Energy Reporting Act 2007*, is designed to ensure emissions reductions purchased by the Government are not offset by significant increases above business as usual levels elsewhere in the economy. With baselines, or regulatory limits, currently being reviewed, there are very few facilities currently



exceeding their baselines and thus required to purchase ACCUs to offset their emissions above the baseline.

## Unlocking the potential for micro-players to participate in the ERF

The opportunity to open up additional revenue streams for landholders through environmental markets, or timber on land was highlighted in the consultation process as something that has not yet been fully realised. Many of the issues mentioned above, regarding reducing transaction and audit costs and modifying criteria for methodologies need to be overcome to unlock the potential for small-scale entry into the market. At present, the vast majority of projects under the ERF are undertaken by carbon project developers on substantial tracts of land. Additionally, carbon project developers mainly specialise in delivering projects in specific sectors using a relatively small number of ERF methods, not always applicable to individual landholdings.

As part of its consultation process, CMI sought stakeholder views on how more vegetation abatement could be achieved within the constraints of the Victorian context of small land holdings. Whilst new aggregation models have been frequently cited, and intermediaries identified as key players in negotiating entry to aggregation, the idea of micro-projects was clearly favoured. Aggregation implies that activities that use the same method across multiple sites are pooled into a single project. This disallows multiple abatement opportunities and assumes uniformity across landholdings.

The ERF methodology for farm forestry (see Annex 3) recognises that agroforestry can play a role to significantly increase the storage of carbon in agricultural landscapes. Unfortunately, the uptake of this method has been underwhelming with only one registered project in the ERF project registry. It was noted by one interviewee that micro-carbon methodologies exist in other international schemes, such as Verra's Verified Carbon Standard and that there is considerable potential in developing a whole-of-farm methodology to allow all pools of landscape carbon on a farm to be credited. Another related promising potential is through coupling markets, thus stapling a carbon and/or biodiversity component on to forestry projects or emerging markets around valuing natural capital.

Closer alignment between on-the-ground projects and global-scale initiatives, particularly the UN Sustainable Development Goals (SDGs), may prove beneficial to landholders attracting investors. The SDGs not only have the benefit of scale, reputation and influence, but also aligning with corporate language and investor metrics such as impact.

## 02

### **Identify and examine the role of intermediaries (acting between landholders and investors) in growing landscape carbon – and include in the platform.**

Many of the organisations consulted in this process highlighted the critical role of intermediaries in the types of projects that will result in more trees on farms. Intermediaries are organisations or individuals that act to connect landholders with project developers and investors. Importantly, intermediaries are able to 'speak the language', or communicate across different stakeholder groups, crossing government, philanthropy, and the private sector.

Under the initial Carbon Farming Initiative (CFI), a Carbon Farming Futures program – Extension and Outreach had provision for supporting Extension Officers. These extension officers were employed to assist farmers and land managers obtain information on emissions management, to integrate this with business and land management practices, and to participate in the ERF. A network of 30 independent agricultural advisers was formed across south eastern Australia with the aim of engaging with at least 600 farmers.



With the demise of the CFI program, the role of providing technical information and support for land managers to participate in the ERF, but also in biodiversity and conservation projects has fallen to other organisations. Many of these are locally based, in rural or regional areas, such as Catchment Management Authorities, Landcare groups, NRM Groups, Trust for Nature, Greening Australia etc. The critical element underpinning the success of intermediaries is that they are perceived as having a trusted relationship with landholders, understanding individual farm business circumstances and being able to support them with associated decision making and connecting them to appropriate ongoing stakeholders. This connectivity role is crucial to the link with the 'Trees on Farms' connectivity website.

Structuring carbon, biodiversity, forestry or conservation projects can be complicated. Intermediaries can not only provide technical assistance in identifying the best type of project structure but significantly, in formulating aggregation solutions in connecting a number of landholders or landholdings in the same area.

A leading example of the value of an intermediary would in the case of acting as a key player between landholders and corporates looking to engaging in the voluntary carbon market in an effort to achieve carbon neutrality. Participation in voluntary environmental credit markets is primarily driven by entities that intrinsically value sustainability, or wish to demonstrate their commitment to Corporate Social Responsibility to investors, staff or customers/clients. Rather than selling carbon credits to the Government under the ERF, which generally entails a lowest-cost abatement option, higher value projects that go beyond carbon are often attractive to the private market who will pay a premium for these credits. In the context of Victorian 'trees on farms' projects, this may correspond with benefits from conservation actions, biodiversity protection, water quality management. For such a project, an intermediary could coordinate and structure a deal, appoint contractors and oversee performance.

A recent Victorian project – [The Catchment Carbon Offsets Trial](#) – is an exciting initiative demonstrating the role of intermediaries with a case study trial project collaboration managed by a CMA, bringing together water corporations, DELWP and private landholders in delivering emissions reductions, climate resilience and improved catchment management outcomes.

The premise of the 'Trees on Farm' website is to connect landholders with investors to grow timber, carbon or biodiversity. It would be worth considering adding intermediaries into this platform as they are often the key element in connecting landholders to organisations with funds to invest in trees. Using intermediaries also addresses landholder technical illiteracy or time constraints, identified as barriers through the landholder consultation sessions.

## 03

### Identify and provide pathways to unlock investment in private Australian landscape projects - blended carbon finance and aggregation models for landscape carbon projects.

Strategic opportunities for investment in land sector projects need to be mapped and understood in Victoria, taking into account the specificities of the Victorian agricultural landscape. The various markets for trees on farms have not been properly outlined and there are varying opportunities for leveraging environmental markets as a means of accessing finance. There is a role for state governments to directly fund positive land-use change through landscape carbon projects, and the purchase of various environmental credits.

Stakeholders consulted during this project emphasised that investors need to investigate how different environmental market metrics can be quantified and layered in a single project to generate additional financial returns. Likewise, the exact nature of the opportunities for landholders depends on the particulars of a farm operation and a full consideration of aims and objectives of an investor must correspond with these opportunities.



Nearly all stakeholders consulted talked about the difficulties in Victoria that create specific barriers to engaging in landscape carbon projects, as illustrated by the small number of registered projects in the state. Specifically, these include the small size of landholdings and the complicated land ownership arrangements in Victoria with lots of leasehold land and often multiple titles on one landholding. Aggregation models can provide a solution for smallholder farms, achieving economies of scale as well as reducing individual risk. For a carbon project, or indeed forestry, aggregation can render a project viable by 'bundling' multiple farms into a single project. Carbon project aggregators use these bundled allotments to bid at an auction for a single Carbon Abatement Contract. Timber companies often use aggregation in sourcing hardwood and softwood from farm sources. Intermediaries, as outlined above, were mentioned by a few interviewees as having a potential crucial role in identifying aggregation partners and possibly negotiating an amenable aggregation arrangement. It was thought that the 'trees on farms' platform could have a tick box whereby landholders could express if they were interested in participating in an aggregated project. Blended aggregation models were evoked by an interviewee who suggested that timber companies can aggregate and get a project to a size for carbon project developers – as carbon is an easy add-on.

## 04 **Develop the business case for small-scale landscape carbon projects – the co-benefit story.**

Almost 60% of land in Victoria is managed by farmers. However, farmers and landholders are generally unaware of the benefits of landscape carbon projects or farm forestry opportunities, and how projects align with their traditional agricultural practices. There is a perception that contracts 'lock up' land for long periods and that carbon farming or agroforestry is an exclusive use of land rather than something that can work alongside a traditional agricultural enterprise. Stakeholders consulted emphasised that for small-scale landscape projects, the overwhelming business case, or advantage of undertaking a project to increase trees on farms was the additional benefits, or co-benefits of a project. In many smaller projects where an ACCU-generating carbon project would be deemed not viable, stakeholders said it was the additional benefits that could drive a project to fruition.

A business case for an ERF project usually centres around the revenue that can come from carbon farming (through the sale of ACCUs that may be earned in the course of a project) or timber income for a forestry project. However, it was stated throughout the interview process that projects on less than 100 hectares would not be financially viable for the likes of a carbon project developer. Even non-profit environmental organisations generating carbon offsets deemed these size projects as precarious. However, given the significant general environmental management and environmental benefits that would likely accrue from planting trees on farms, it was felt these could be the tipping point in any consideration to proceed with a project. One stakeholder suggested that farmers could likely finance small-scale plantings themselves and be rewarded with sufficient co-benefit returns so as to render the project worthwhile.

Co-benefits depend on the nature of the farming enterprise and on the type of carbon farming methodology applied. They may include; enhanced water quality in catchments; protection for stock (through trees providing shade and windbreaks); improved livestock production efficiency; improving biodiversity, for example by providing habitat for birds and other wildlife; alleviation of dryland salinity through watertable effects, improved soil quality, improved fertiliser use efficiency, provision of a noise buffer for the farm, improved amenity and aesthetics of the local environment. A key challenge is obtaining estimates to convert co-benefits to imputed dollar values so that they can be included in a landholder's economic decision-making. Whilst some co-benefits may deliver a payment through valuation in an environmental market (biodiversity, firewood), most will not, but they must be taken into consideration in the business case for a project.



Stakeholders consulted also suggested that a business case for a landscape carbon project on a farm would likely involve using less productive land so as to minimise the opportunity cost. Competing land uses was identified as a barrier to carbon farming, forestry and conservation projects on farms, particularly where a project would use land that has valuable alternative uses. For example, land devoted to plantations usually cannot be used for alternative enterprises and should be justly considered in weighing up a forestry sequestration project.



## Annex 1 – Interview responses and findings

### Stakeholder comments and interview insights on the ‘trees on farm’ tool (non-attributed).

Below is a list of comments noted during the stakeholder consultation process. These are additional to comments received that have been included in recommendations above. They are listed in no particular order:

#### General

- All of the carbon project developers interviewed already receive calls from landholders directly.
- The market is polarised and once small landholders are able to fully participate, there will be a ripple effect across the economy.
- The Verified Carbon Standard allows for micro-scale carbon projects and these models should be explored under the ERF.
- Policy settings can encourage people to put more trees in the ground. There is a perceived lack of government will.
- Potential buyers are interested in locally-generated units, but will not pay a premium for them.
- ACCUs are successful on marginal land.

#### ‘Trees on Farm’ prototype tool

- Theoretically a great idea – however, the willingness of individual landowners is not really the problem. Putting investors in touch with landholders is a pretty easy thing to solve. Big issue is problems with the ERF, creating significant barriers.
- A tool such as this could assist the ‘unorganised’ sector in becoming organised.
- Almost all plantation forestry is managed by pension trusts. TIMOs (Timber Investment Management Organizations) are the predominant buyers of forest assets (forestry considered low risk), they don’t develop any greenfields projects and would not be interested in reaching out to small landholders, nor in such a tool.
- Concerns expressed that this is ‘just another platform’ – and that it won’t be used.
- A prefeasibility process was identified by one organisation as being useful as they expressed concern about ‘wasting landholders time’ in the likely event that a project on their land were unviable or, at least, the tool should establish some indicators as to whether the land size is viable for a carbon project.
- Much will depend on how the tool is marketed... even if there is hype initially and lots of registrations, it’s important this doesn’t get perceived as a “dead end” because investors aren’t taking many opportunities up.
- Will the tool communicate to the landowner whether the site is better used for carbon or biodiversity projects? Each are quite a different beast, so it should probably lead them one way or another to avoid trying to tackle both at once. The investor parties in these fields are quite different too so they might not get a fair informed response if they speak to someone about the 2 options.
- Ensure that feedback is provided through the tool regarding the “successful” matches! If a property got taken up by an investor, it should be flagged on the map.
- Tool unlikely to solve problems – talk with timber companies.
- Don’t want 100s of farmers to apply when the answer will be ‘no’.
- Don’t need indexes.
- Can’t imagine using the platform – would need an agribusiness consulting advisor, intermediary.
- Farm forestry – need high value agricultural land to make it work.
- Levels of project complexity mean that not much can be done with such a tool other than providing connectivity.
- Stressed the importance of a relationship, not a platform. Can train NRMs, land councils, banks.
- Would applaud such a platform.
- Will only capture tech-savvy farmers (result just a database)
- Could help field loads of inquiries – tiny tracks – ‘champion landholders’.



## **Annex 2 – interview questions**

### Carbon credit opportunities

- What are the main issues/ barriers to growing trees on farms – landscape carbon?
- Any insights/ ideas on how to overcome these barriers?
- Are the economic incentives/ market signals strong enough to incite farmers to undertake these projects? If not? What is required?

### Prototype testing

- Would you see this type of platform as useful in accessing interested landowners as currently described?
- What improvements or additional data would you require from such a platform?
- Do you feel this will assist in getting more trees on farms? Forging partnerships for tree planting?

### Future opportunities

- As a 'local projects' focussed project, benefitting local landholders, how do you think carbon markets can be leveraged to increase the uptake?
- Do you think that farmers are well versed in the benefits that come from landscape projects on their land? Likewise co-benefits?
- What would you identify as a key catalyst to developing a pipeline of Victorian farm forestry abatement projects?



## Annex 3 – Overview of an example ERF methodology – Farm Forestry

Farm Forestry involves the integration of trees with other agricultural activities, on farmland that has previously been used for cropping and grazing. These trees are established and maintained either as permanent plantings or managed to produce harvested forest products that include sawn timber, round timbers (fence posts), reconstituted wood products (particle board and paper), sandalwood products and eucalyptus oils.

Farm Forestry is now an approved carbon sequestration methodology under the ERF and theoretically farmers can generate ACCUs using this *Carbon Credits (Carbon Farming Initiative—Measurement Based Methods for New Farm Forestry Plantations) Method 2015*.

There is benefit in combining carbon and harvest revenue streams, particularly that carbon revenues may provide early returns before first timber harvest, potentially paying for establishment of the first rotation. Replanting after harvest will be required, but some revenue from the sale of harvest products may cover that.

### Opportunities:

- Over the 25-year permanence period required for a reforestation project in the ERF, a farm forestry project can deliver carbon revenue in the early stage of a project, then returns from sale of products once harvest commences, which can help diversify income sources and create sustained cash flow;
- Co-benefits, including increased farm productivity, improved water quality, salinity mitigation, shade and shelter for stock, increased biodiversity, erosion control, wildlife corridors, potential for value adding with timber for posts, poles, and even firewood
- All plantings initiated since July 2010 could be grown for carbon credits as well as used for other forest products.

### Risks:

- The permanency requirement (i.e. the requirement to maintain carbon stores for 25 years) is a long-term consideration.
- Proximity to mills and other processing centres is important because transport costs can be prohibitive.
- Price volatility could affect returns — especially for carbon credits.
- Amendments to the ERF and ERF methods.

### Eligibility:

- Following the amendment of the *Carbon Credits (Carbon Farming Initiative) Rule 2015* (CFI Rule) on 16 August 2017, any proposed project must first be assessed by the Minister for Agriculture for its potential to have an adverse impact on agricultural production in the region.
- For at least five years before project commencement, the area must have included land used for grazing or cropping, or land that was fallow between grazing or cropping. Areas such as roads, water courses and large rock outcrops are not included as part of a project area.
- In a permanent planting project, commercial harvesting of the trees is not permitted. A permanent planting must have been established: on or after 1 July 2007, or before 1 July 2007, if evidence to show that the primary purpose of the planting was to generate carbon offsets.
- In a harvest project, commercial harvesting of project trees is permitted. A harvest plantation must have been established: on or after 1 July 2010, if it is a new farm forestry project
- There are also rainfall criteria that seem to provide a significant barrier to farmers, being:
- If rainfall is more than 400 mm per year, plantations can occupy an area no more than 100 hectares, or 30 per cent of a farm (whichever is the smaller)



**for more information please contact**

Janet Hallows

Manager – Climate Change Programs & Engagement

[Janet.hallows@carbonmarketinstitute.org](mailto:Janet.hallows@carbonmarketinstitute.org)

+61 (0) 466 236 700