ASX Release
Powerhouse Ventures Limited ("PVL" or the "Company")
Suite 201, 117-119 McLachlan Street, Fortitude Valley QLD 4006
(ASX Code: "PVL")
ABN: 64 612 076 169

Release Date: 19 December 2024

NATURAL CAPITAL PORTOLIO COMPANY REVAIA SIGNS BINDING HEADS OF AGREEMENT FOR MERGER

- **Revaia Pty Ltd (our new Carbon Co active investment: ASX announcement 9 July 2024) has agreed terms for an 100% all-scrip acquisition by RegenCo Group Ltd (https://regenco.earth/) valuing Revaia at A$24m equity value. On completion all Revaia shareholders (including PVL), will collectively own 32% (on a fully diluted basis) of RegenCo Group Ltd.**
- **The merger will enhance the diversity, integrity, and duration profile of the carbon portfolio to deliver a combined annual production (post ramp up) of approximately 450,000 net Australian Carbon Credit Units (ACCUs). We believe this will make RegenCo Group Ltd the pre-eminent independent Carbon Project Developer in Australia.**
- **In addition to standard legal and financial due diligence steps, the conditions precedent to completion include Revaia Pty Ltd (our co-sponsored entity), concluding an equity financing to have minimum net cash balance of $5m pre-completion. Binding commitments have now been received to satisfy this condition. As part of the fund raise, PVL will top up its initial $500,000 investment (ASX Announcement 9 July 2024) with an additional $250,000.**
- **Subject to completion and audit of our valuation marking, we provide guidance that our holding value for this position will be in excess of $3m (against a $750,000 total capital outlay).**

Powerhouse Ventures Limited (PVL) is pleased to advise shareholders that its active investment in a new natural capital platform (ASX Announcement 9 July 2024) has entered into a binding, conditional merger proposal with a leading Carbon Developer, RegenCo Group Ltd. [1]

The merged enterprise, to be operated under the RegenCo Group Ltd structure, will have a significant scale to bolster its market positioning with off takers, strategic investors, and to grow both organically and via partnerships and further acquisitions. The combined portfolio will extend across multiple states, creating a national footprint with a diversified geographic spread to mitigate risk from regional natural challenges (i.e. drought, fire). The anticipated production post-merger will be approximately 450k net ACCUs pa based on the current baseline businesses.

At the projected full run rate this should deliver circa $20m pa revenue. In addition to significant upside potential to the underlying carbon price (refer below), Regenco will have additional levers to growth via organic portfolio (sales synergies and new project signings), Project M&A, and ACCU yield uplift via methodology refinement through the regulator.

PVL has agreed to make an additional $250,000 capital investment in support of the $5m Series A equity raise condition. Settlement of the equity financing is due to complete in mid-December with the merger transaction due to complete, subject to all conditions precedent being satisfied or waived at the end of December.

PVL will continue to have representation on the Board post-merger. The merged board and management teams will be in a great position to maximise enterprise value by combining operational and technical strength and delivery track record with financial markets, trading and regulatory expertise.

[1] A key condition has just been met to unlock the pathway to completion. Under the proposal negotiations, our co-sponsored entity, Revaia Pty Ltd, is required to have a cash balance of $5.0 million. Revaia has therefore been conducting a Series A Equity Financing to met this condition, with PVL acting as co-lead alongside Gaia Natural Capital. Binding Commitments for this fund raising have now been received and PVL is therefore confident the merger deal with Regenco will now proceed.

Diversified Project Portfolio

Our View on Australia's Carbon Economy:

In addition to decarbonisation and electrification technologies (in which PVL has made investments in certain areas), a significant proportion of Australia's plans to achieve net zero emissions by 2050 will be through the use of carbon offset credits. Australia has a strong, high-integrity carbon regulatory regime, which has been the subject of several reviews and is currently undergoing final regulatory refinement.

Under the regime, projects which either reliably and measurably avoid CO2 emissions or sequester them from the atmosphere will be afforded a form of underwritten carbon credits called "ACCUs" or "Australian Carbon Credit Units.

An ACCU represents one tonne of carbon dioxide or equivalent greenhouse gas (tCO2-e). An ACCU is a financial instrument that is tradable like any other commodity. The buyers can then either retire the credits or keep the credits with a view to selling them in the future.

These credits will play an increasingly important role for Australia, especially in offsetting our "hard to abate" emissions; currently "hard to abate" emissions represent ~20% of AU overall emissions and we anticipate that this percentage should grow with Australia's onshoring efforts for local manufacturing base and critical minerals processing industries, with the cost of implementing decarbonisation technologies in

Australia, and with projected growth in AI data centres representing a significant source of new electricity demand. The government has spent the last decade "kick starting" the carbon market by providing >95% of demand and underwriting carbon floor price. We anticipate that the legislated Safeguard Mechanism will lead to sustainable increases in compliance demand from next calendar year and onwards and this will overtake government and voluntary demand.

Further, Article 6 of the recent COP29 negotiations, will develop cross border markets for ACCUs. We have strong conviction that recently issued ACCU's will represent the gold standard of scientific integrity and their current discount to global (eg. 70% discount to EU) will be traded out.

The accompanying appendix provides more details on the carbon market, approved methodologies and how RegenCo is engaged at the forefront of research and technology.

James Kruger
Executive Chairman

ENDS

Authorised by the Board of Powerhouse Ventures Limited

About Powerhouse Ventures Limited:

Powerhouse is a high conviction, speciality investment house with an expanding range of funds management products, advisory and capital syndication services, and investor relations support. We focus on asset classes that are in short term market dislocation and under-appreciated and / or represent the next frontier of growth opportunity. We have high conviction on listed small caps, Australian carbon projects, Materials Science, Next Generation AI.

powerHouse

REGENCo VALUE THAT GROWS

GAIA NATURAL CAPITAL

Total addressable market - Australia

Australia's degraded rangelands		Potential carbon sequestration from regeneration		Total estimated carbon sequestration potential		Assumed ACCU price (A$ / tonne)		Value of addressable market for RegenCo		Material, near term growth opportunities
350 million hectares	x	0.35 to 0.70 tonnes of CO_2 p.a per ha	=	120-250 Mt of CO_2 p.a.	x	$30 per tonne of CO_2	=	$3.6-7.5 billion p.a.	+	46% increase through **whole of landscape** carbon approach Other natural capital opportunities

Source: The Garnaut Review 2011: Australia in the Global Response to Climate Change. Cambridge: Cambridge University Press; An Analysis of greenhouse gas mitigation and carbon biosequestration opportunities from rural land use. St Lucia, QLD: CSIRO; 2009; Estimation of CO2 sequestration potential by afforestation in the arid rangelands of Western Australia based on long-term empirical data, Ecological Engineering, Volume 133, 2019 Carbon farming for resilient rangelands: people, paddocks and policy; The Rangeland Journal 42, 293-307, 2020

Note: 1. Assumes carbon credits can be earned for the full range of carbon sequestration on the property and all carbon stocks in rangelands can be accredited by the ERF as per the ACCU standard

Australia has a strong, high-integrity regulatory regime

	A	B	C
1 Sources of demand for ACCUs	**ACCU Scheme** A government pool of funds to purchase ACCUs, formerly the Emissions Reduction Fund (ERF) *Government provides stability and underpins ACCU demand*	**Compliance demand** The Safeguard Mechanism covers large facilities in Australia and sets a baseline rate of emissions *Safeguard Mechanism mandates corporate demand for ACCUs*	**Voluntary demand** Corporates are increasingly making net zero emissions pledges, which require voluntary uptake of credits *Corporates and individuals fuel additional voluntary demand*
2 Key drivers of ACCU supply	**Registration of new projects** ACCU supply is underpinned by registered and / or active projects, however, supply is increased with more projects being registered	**Landholder supply of ACCUs** Landholders are able to supply ACCUs to the market through one of the 15+ methodologies approved across agriculture, vegetation and savanna fire management	**Industrial supply of ACCUs / SMCs** Typical source of industrial supply includes carbon capture and storage (CCS), waste-to-energy, energy efficiency, oil & gas fugitives and other methods
Key regulatory parties in the Australian carbon market	**Clean Energy Regulator (CER)** Responsible for key administrative tasks under the ACCU scheme, including registering projects; running auctions, managing carbon abatement contracts (CACs) and issuing ACCUs	**Department of Climate Change, Energy, the Environment and Water (DCCEEW)** Responsible for the development of new method development – *formerly done by the CER, but now moved to the DCCEEW*	**Emissions Reduction Assurance Committee (ERAC)** Assesses the compliance of methods against the Offsets Integrity Standards to ensure continued integrity of the ACCU scheme

Source: Company information, Clean Energy Regulator powerHouse

REGENCo VALUE THAT GROWS GAIA NATURAL CAPITAL

The 2023 Chubb Review confirmed the scheme integrity

What was the purpose of the review?

- The review was to ensure that ACCUs and the carbon crediting framework maintain a strong and credible reputation, supported by participants, purchasers and the broader community
- The panel focused on examining:
  - Whether governance of the scheme was appropriate
  - Whether the methods by which ACCUs are generated meet integrity standards
  - Whether the broader impact of activities incentivised by the ACCU Scheme are appropriate to manage impacts on agriculture, biodiversity, participation of First Nations people and biodiversity

REGENCo VALUE THAT GROWS

"RegenCo welcomes the review and we are looking forward to participating in it. This is a positive development as it will allow the market to:

- *Build robustness and transparency*
- *Increase the community and investor confidence into the carbon market*
- *Look for opportunities to open and streamline supply*
- *Focus on direct measurement and evidence-based improvements to the scheme (something RegenCo has always been pushing for)"*

Recommendations of the Chubb Review

The Chubb Review found that the ACCU scheme is sound, and put forward a number of recommended changes to clarify governance, improve transparency, facilitate further positive impacts and enhance confidence in the integrity of the scheme

Clarify governance
- Re-establish the Emissions Reduction Assurance Committee to be responsible for method integrity, separating the responsibility from the Clean Energy Regulator (CER)
- Emissions Reduction Fund currently has multiple roles, resulting in potential conflicts of interest

Improve transparency
- More transparent data and information sharing would enable communities and market stakeholders to assess, understand and manage potential projects more effectively

Facilitate positive outcomes and co-benefits
- The Carbon Credits (Carbon Farming Initiative) Act should be amended to remove the option to conditionally register ACCU projects on Native Title Land, prior to obtaining consent
- Continue to support remote communities, including First Nations people, to benefit from the ACCU Scheme

Enhance confidence in integrity
- Offsets integrity standards should be clearly defined and supplemented with ACCU Scheme principles to support consistent application
- HIR methods are sound, but it should be ensured that HIR projects conform to this method
- No new avoided deforestation projects under the current method, which requires old clearing permits, with a new methodology to be developed

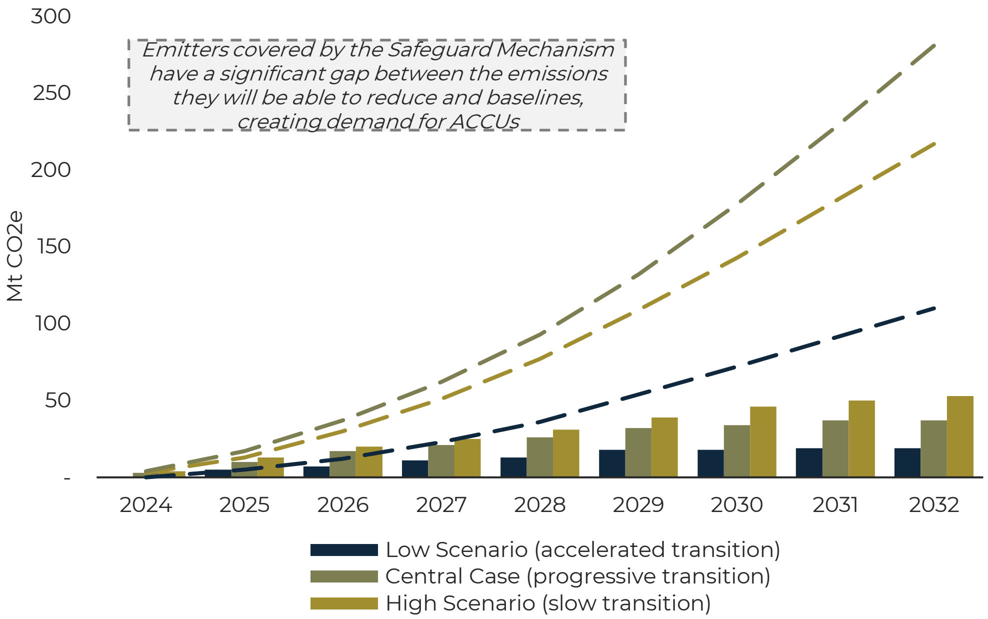
The Safeguard Mechanism mandates compliance

What is the Safeguard Mechanism?

- The Safeguard Mechanism aims to mandate Australia's largest emitters to be on a path for net zero by 2050
  - Applies to facilities that emit more than 100,000 tonnes of CO_2e in a year
  - Legislates targets, known as baselines, on the net emissions of these facilities
  - Currently covers ~215 facilities which account for ~28% of Australia's greenhouse gases
- The reforms apply a reduction to the baseline rate each year that is consistent with Australia reducing emissions 43% below 2005 levels by 2030 and being net zero by 2050
  - Baseline rate reduction is 4.9% p.a. to 2030
  - Post 2030, reductions will be set in 5 year blocks, consistent with Australia's commitments to international agreements

Annual compliance demand required to meet baselines

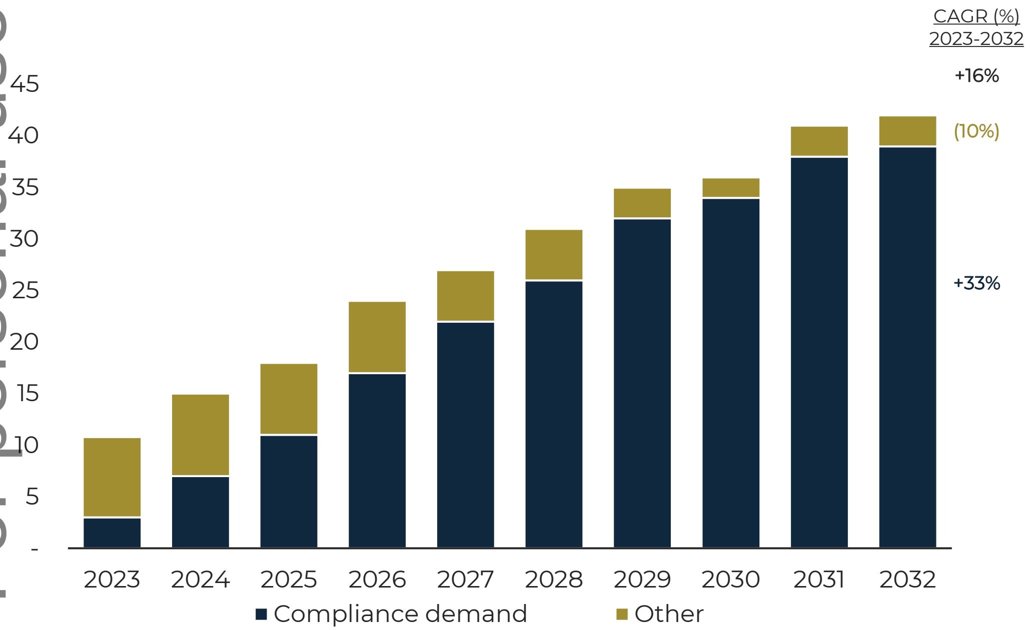
Reptuex – covered emissions to baselines (Mt CO_2e)



Compliance is the largest ACCU demand driver

Compliance demand will soon become the largest pool of demand

Reptuex central case – forecast demand for ACCUs by type of demand – Mt CO_2e



Key factors

- Prior to on-site emissions reduction actions, Reptuex estimates that facilities will face a GHG emissions abatement task of around 7Mt in 2023-24 to meet the legislated emissions reduction target, with direct emissions reduction forecast to be ~4Mt under the Reputex central case
- In later years, direct abatement is predicted to increase, however, the distance to baselines will outpace emitters ability to reduce emissions, leading to ACCU demand
- A key driver of this forecast growth in demand is the forecast for emissions growth – for example, new LNG projects continuing to come online
- Voluntary demand by businesses not subject to the Safeguard Mechanism is expected to increase Corporates will have a large need for offsets after accounting for their direct abatement, however, this is likely to be met by offsets which are under a number of non-ACCU standards, with ACCUs traditionally representing around 5-10% of voluntary credits

ACCU voluntary demand is driven by private sector

The private sector has committed itself to net zero, leading to a strong demand tailwind for offsets

Brambles dexus tyro MACQUARIE lendlease

Net zero by 2025 or before

AURIZON BLACKMORES BHP FMG Fortescue ORICA

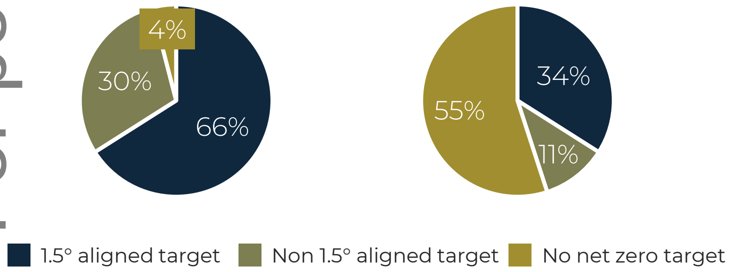
QANTAS RioTinto seek Santos Worley

Plus many more

- Voluntary demand covers businesses not liable to the Safeguard Mechanism that adopt emissions reduction pledges
- For those seeking certification under the Commonwealth Climate Active Carbon Neutral Standard, a wide range of units can be used to meet voluntary commitments including ACCUs and international units including, Certified Emissions Reductions (CERs) under the Clean Development Mechanism, Verified Emissions Reductions (VERs) under the Gold Standard Framework and Verified Carbon Units (VCUs) under the Verra program
- ACCUs are a premium product, owing to their high integrity and high quality
- ACCUs have historically been ~5-10% of voluntary offsets in Australia, with the balance of the ~90-95% coming from international credits

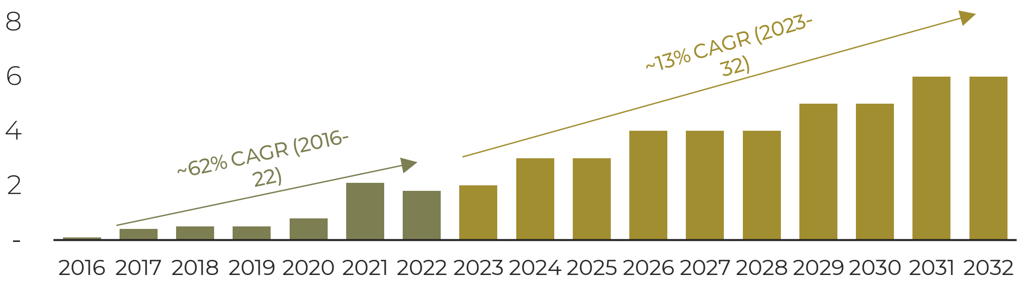
ASX200 Scope 1 and 2 net zero commitments

By % of emissions covered *By % of companies*



Voluntary demand for ACCUs

Reputex Central Case – Mt CO_2e



Source: Reputex, ClimateworksCentre

RegenCo's role in carbon project delivery

- RegenCo's business model focuses on partnering with landowners to design and implement carbon farming projects in order to earn carbon credits which can be traded and sold in carbon markets.
- Under RegenCo's business model, the land management agreement signed between RegenCo and landowners, transfers the carbon rights to RegenCo prior to the registration of the project with the Clean Energy Regulator ("CER")
- Carbon Revenue is shared between the landholder and RegenCo

Sign up landowners on land management projects which will generate carbon credits

Develop **project plan and register project** with the CER

Work with landowners to **execute on land management** plan

Develop project report for **audit and reporting to CER**

Sale of credits generated from project to credit offtakers or ERF

RegenCo's differentiated business model

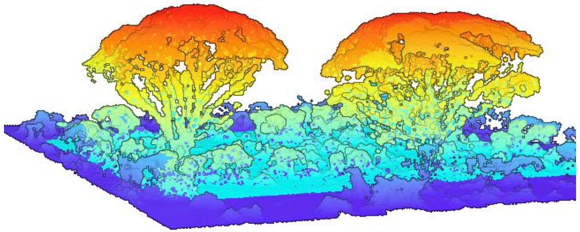
1. RegenCo acts as **project proponent** and bears the risk and responsibilities with the CER allowing the landholder to focus on managing their property
2. RegenCo's **contracting arrangement** allows for more flexibility allowing for exit at 10, 15 and 20 year marks
3. RegenCo offers ACCU **sales and marketing approaches** to match landholder's enterprise needs & risk appetite, managing pricing & risks across RegenCo's portfolio

Technology increases integrity of ACCU estimates

RegenCo is lifting the integrity of HIR projects as the only developer to utilise LiDAR across entire projects

HIR project

LIDAR scan



LIDAR capture of existing tree and canopy cover within a Carbon Estimation Area (CEA) at a recently sampled site in Western Australia

Digital twin

- ✓ RegenCo is uniquely positioned to develop a portfolio of projects that utilise high resolution imagery & machine learning to provide enhanced monitoring, reporting and verification, providing confidence to buyers of credits from RegenCo projects
- ✓ RegenCo is developing a **digital twin** of each of its HIR projects to enable accurate assessment of eligible areas, change detection and species identification and potentially reduce reliance on on-ground survey. These models will assist with planning for fire management and property infrastructure investment
- ✓ Data & images are collected via LiDAR and RGB scanners fitted to fixed wing aircraft and processed by the RegenCo technical team

RegenCo research and collaboration partners

CSIRO
THE UNIVERSITY of ADELAIDE
aerometrex
AUSTRALIAN INSTITUTE FOR MACHINE LEARNING
AGRONOMEYE

The IFLM (Integrated Farm & Land Method) method

Goals of the methodology

Boost supply
Current supply of nature based ACCUs is restricted to a single method per project. Measuring carbon stock change across the entire landscape will boost supply

Address stacking issues
Applies stacking rules to the existing suite of silo-ed agriculture and vegetation methods

Proponent led
Proponents are empowered to develop their own modelling and measuring techniques, consistent with Chubb review recommendations

Mechanics of the IFLM

Standardisation and streamlining
- Instead of allocating a single carbon pool repeatedly to individual activities/methods, the IFLM method will standardise and streamline project registration and recognise sequestration generated across the whole farm, increasing the total eligible abatement potential of the land

Maximising abatement potential
- The IFM methodology proposes harmonising the existing suite of silo-ed vegetation and agricultural methods along with incorporating additional eligible credit producing pathways into a single integrated method, reducing administration and enabling land managers to maximise the abatement potential of their land

Phase 1 rollout

- Soil sequestration
- Regeneration of regrowth
- Fire management
- Environmental plantings

Phase 2 rollout

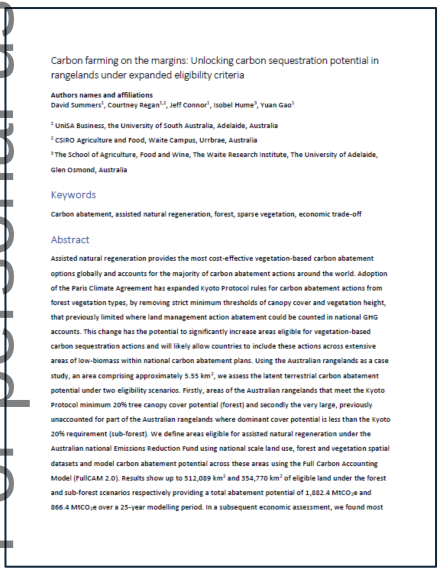
- Avoided clearing / deforestation[1]
- Plantation forestry
- Reducing methane
- Livestock emissions
- Other

Source: RepuTex Energy, Clean Energy Regulator
Note:
1. Current avoided clearing and avoided deforestation are being retired, however, IFM is likely to bring new methodologies as part of its Phase 2 rollout

RegenCo is at the forefront of IFLM research

RegenCo's peer-reviewed academic research suggests potentially **significant ACCU production uplift** in the Rangelands where the company mainly operates, **greater than the indicative IFLM uplift by competitors** on the east coast of Australia

Key findings from the research led by RegenCo's Dr David Summers


Carbon farming on the margins: Unlocking carbon sequestration potential in rangelands under expanded eligibility criteria

Authors names and affiliations
David Summers[1], Courtney Regan[1,2], Jeff Connor[1], Isobel Hume[3], Yuan Gao[1]

[1] UniSA Business, the University of South Australia, Adelaide, Australia
[2] CSIRO Agriculture and Food, Waite Campus, Urrbrae, Australia
[3] The School of Agriculture, Food and Wine, The Waite Research Institute, The University of Adelaide, Glen Osmond, Australia

Keywords

Carbon abatement, assisted natural regeneration, forest, sparse vegetation, economic trade-off

Abstract

Assisted natural regeneration provides the most cost-effective vegetation-based carbon abatement options globally and accounts for the majority of carbon abatement actions around the world. Adoption of the Paris Climate Agreement has expanded Kyoto Protocol rules for carbon abatement actions from forest vegetation types, by removing strict minimum thresholds of canopy cover and vegetation height, that previously limited where land management action abatement could be counted in national GHG accounts. This change has the potential to significantly increase areas eligible for vegetation-based carbon sequestration actions and will likely allow countries to include these actions across extensive areas of low-biomass within national carbon abatement plans. Using the Australian rangelands as a case study, an area comprising approximately 5.55 km^2, we assess the latent terrestrial carbon abatement potential under two eligibility scenarios. Firstly, areas of the Australian rangelands that meet the Kyoto Protocol minimum 20% tree canopy cover potential (forest) and secondly the very large, previously unaccounted for part of the Australian rangelands where dominant cover potential is less than the Kyoto 20% requirement (sub-forest). We define areas eligible for assisted natural regeneration under the Australian national Emissions Reduction Fund using national scale land use, forest and vegetation spatial datasets and model carbon abatement potential across these areas using the Full Carbon Accounting Model (FullCAM 2.0). Results show up to 512,089 km^2 and 354,770 km^2 of eligible land under the forest and sub-forest scenarios respectively providing a total abatement potential of 1,882.4 $MtCO_2e$ and 866.4 $MtCO_2e$ over a 25-year modelling period. In a subsequent economic assessment, we found most

- ❖ The very large, previously unaccounted for part of the Australian rangelands where dominant cover potential is less than the Kyoto 20% requirement (sub-forest) can potentially be eligible for ACCU generation
- ❖ Results show for every 1 tCO2 in forest, there is 0.46tco2 in sub-forest. This implies the potential multiplier from HIR to IFLM could be **~1.4x**
- ❖ Most of this latent abatement potential was economically viable at current low carbon prices (between AUD 17 tCO2e-1 and AUD 32 tCO2e-1) available within the Australian government and secondary markets

Why RegenCo could benefit more ILFM uplift versus competitors

- ✓ Under the proposed IFLM regime, much greater portion of the Rangelands where RegenCo operates could be eligible for ACCU production (i.e. more sub-forests in the Rangelands than those on the east coast)
- ✓ RegenCo has industry leading LIDAR technology implemented across projects, which is much more advanced and accrurate than the FullCAM used by competitors
- ✓ There will be a LIDAR protocol under IFLM which RegenCo is assisting – Dr Tim Moore is the chair of the IFLM technical working group

Indicative IFLM timeline

January–April 2024
- Ongoing consideration of stakeholder feedback and further research into complex issues raised by stakeholders
- Exposure draft of proposed IFLM method finalised by DCCEEW for consideration by ERAC

From May 2024
- ERAC consultation on exposure draft of proposed IFLM method

June–July 2024
- ERAC considers feedback on the exposure draft, assesses the draft method against the Offsets Integrity Standards and provides any other advice requested by the Minister
- ERAC advises the Minister about the proposed IFLM method

August 2024
- The Minister considers whether to make the proposed IFLM method, taking into consideration ERAC's advice

Source: "Carbon farming on the margins: Unlocking carbon sequestration potential in rangelands under expanded eligibility criteria', Summers et al, 2024