Carbon Market Institute with NRM Regions Australia

Carbon for Nature Report

Leveraging carbon farming investment to deliver additional benefits for nature



February 2024

Why carbon for nature?

Climate change and biodiversity loss represent an immediate and existential threat to people and ecosystems across the world. Climate change and its related impacts are accelerating, and there is an inextricably linked global biodiversity crisis, exacerbated by the changing climate. These effects are being strongly felt in Australia, where we are experiencing compounding impacts from extreme heat waves, more frequent and severe floods, and longer, more intense bushfires. The 2020 Samuel Review found Australia's environment is in decline, and not resilient to future threats, including climate change impacts. ¹ Around half of Australia's gross domestic product (GDP) is also moderately or highly dependent on nature, and at risk from the changing climate. ² We urgently need to find practical, deliverable solutions for these wicked problems.

Carbon farming is already part of the solution to our climate and biodiversity challenges. Through storing carbon in terrestrial and aquatic vegetation or soils, or reducing its release through activities like early burning to reduce wildfires, there are opportunities to both reduce atmospheric CO² levels and preserve, protect and restore biodiversity. These nature benefits are achieved through vegetation management and restoration projects that increase the area, landscape connectivity, or quality of available habitat.

However, government policies to date have favoured projects that support lower-cost emissions abatement, rather than higher cost, high biodiversity projects. Planning and investing

What is carbon for nature?

'Carbon for nature' means explicitly planning, and enabling carbon farming projects that improve outcomes for nature, where those outcomes are prioritised alongside carbon abatement.

in optimised carbon farming projects designed specifically to deliver nature outcomes can help to address the twin climate and biodiversity crises.

Research scope

NRM Regions Australia partnered with the Carbon Market Institute (CMI) to explore and identify opportunities to maximise the impact of investment in Australian Carbon Credit Units (ACCUs) for nature-positive outcomes in Australia. We believe carbon farming can deliver much greater, and more widespread benefits for ecosystems across the country – if we understand the drivers, blockers, and enablers. This summary of the work provides:

- 1. An overview of the key themes from the research;
- Emerging considerations for government and others to boost investment and outcomes from carbon for nature projects.

The report was informed through desktop research, input by relevant experts, and interviews with informed stakeholders.

The carbon for nature research is intended to start a discussion – not be a definitive work. We will continue this work to further build professional discourse and understanding.





Research findings

The Australian and global context of carbon for nature projects

- Climate change and biodiversity loss are closely linked, and their associated impacts are accelerating.
- Developing carbon farming projects specifically to achieve additional, measurable nature outcomes at a landscape scale has the potential to concurrently address climate and nature restoration objectives and meet targets.
- Projects developed under methods in ACCU Scheme, particularly those that involve vegetation management, are already directly or indirectly supporting various outcomes for nature including reforestation, supporting forest regeneration and improving soil health - and can do much more.
- The Carbon Farming Initiative Act 2011 (CFI Act) explicitly references environmental restoration as a subsidiary objective, including through its direction for consideration of regional NRM plans in project development.
- Emissions reduction commitments and legislation drive investment in emissions reduction initiatives, but there are few such incentives for private sector investment in nature.
- Alignment between the ACCU Scheme and the new Nature Repair Market may enable stacking of verifiable biodiversity outcomes with carbon farming projects, as ACCUs and Biodiversity Certificates can be generated concurrently.
- Obtaining free, prior and informed consent of appropriate
 First Nations peoples and organisations before registration of any ACCU projects is a key precursor to development of any carbon for nature projects.

Are we delivering carbon for nature?

- Bespoke carbon for nature programs are emerging, where achievement of co-benefits, including those for nature, are an integral component of the carbon project. These projects offer important insights into both the potential of carbon for nature, and what project proponents need to consider and include to optimise nature outcomes.
- Carbon farming projects that are delivered under certain methods, including the human-induced regeneration (HIR), environmental plantings, and savanna burning methods, may contribute to increases in the extent and connectivity of habitat within some ecosystems without particular consideration of biodiversity – these could be optimised.
- Carbon farming projects have not typically included formal assessments of baseline biodiversity, benchmarked habitat conditions, or been monitored to verify improvements in ecosystem health. However, a growing number of standards and frameworks to inform and verify nature outcomes from carbon farming projects are available – some are being used to verify outcomes from projects now.
- Unless specifically planned for, supported, and invested in, it is unlikely that ACCU projects will increase the quality of

- native habitat to the extent necessary to contribute to restoration of our degraded ecosystems.
- Some current ACCU methods may negatively impact nature outcomes, if ACCU generation is maximised at the expense of biodiversity.
- Some ecosystems and geographic areas are unlikely to support carbon for nature projects. This is due to either their inability to reliably and permanently sequester carbon to an extent that is commercially viable (e.g. native grasslands), or because the value of land for agriculture and other potential purposes in some areas may make carbon farming uneconomical compared to other uses.
- Additional investment in nature is needed beyond what can be provided through carbon investment.

Key barriers to carbon for nature projects

- Higher establishment, maintenance and monitoring costs, as well as potential decreases in ACCU generation, mean carbon for nature projects are more expensive to develop and maintain and not always commercially viable.
- There is currently limited transparency around the extent to which carbon farming projects are planning and monitoring nature outcomes, or verifying co-benefit claims, although a number of interview participants were undertaking these activities.
- There is no empirical evidence that carbon farming projects are consistent with regional NRM plans. Views from report interviewees varied on the role of regional NRM plans ranged from informing better biodiversity outcomes to supporting land use planning.
- Buyers are paying a premium for ACCUs that can deliver both implied and verified environmental or social benefits.
 However, the quantum of demand and long-term outlook for such investment is unclear.
- Emissions reduction policy does not support outcomes for nature, but alignment with Nature Positive Plan priorities could enable investment in carbon for nature projects.
- There are no clear regulatory or business drivers for investment in carbon for nature projects. To succeed, businesses will need to decide such projects are a good investment.
- The potential of carbon for nature projects is unlikely to be realised under current policy settings and given known commercial considerations.

Key considerations to leverage carbon for nature

Better enabling conditions and investment to bridge the gap between a standard ACCU project and a naturefocused project are needed to maximise participation in, and contributions from, carbon for nature projects.

The following key considerations can enable and fund more nature outcomes from carbon farming.

Considerations for the Australian Government – enabling conditions for carbon for nature

- Support development of a national biodiversity cobenefit verification standard and framework to enable monitoring and verification of high integrity biodiversity outcomes from carbon for nature projects using a range of methods, including those under the Nature Repair Market.
- Implement a national register to improve transparency and information available on carbon farming co-benefits to provide evidence of the benefits and market value of projects for both potential participants seeking to understand the opportunities, and for investors seeking assurance of outcomes from investments.
- 3. Improve ACCU methods through new priority and review processes to recognise, enhance and protect nature by identifying and including additional activities to generate, verify, and value biodiversity outcomes and ensure there are sufficient safeguards to protect nature from potential negative impacts of carbon farming projects as per the CFI Act requirement.
- Legislate for and invest in regional NRM
 organisations' role to scale up nature benefits from
 carbon and other projects and realise the landscape-scale
 and community benefits that can be achieved through
 better alignment of carbon farming projects with regional
 NRM planning.
- 5. Resource First Nations participation, leadership and economic opportunities Implement ACCU Review recommendations, including for FPIC requirements and ensure alignment with emerging Nature Repair Market obligations. Resource all organisations, especially, but not limited to, appropriate native title bodies, to ensure best practice guidance and implementation, elevation of Healthy Country Plans, and inclusion of Indigenous Ecological Knowledge in planning and method development.

Invest in First Nations knowledge regarding appropriate fire regimes for biodiversity and cultural heritage and seek opportunities to align carbon farming and nature repair

- methods to these, helping ensure approved methods don't undermine cultural practices or biodiversity outcomes.
- 6. Develop a carbon market strategy that articulates the role of carbon crediting in supporting decarbonisation and setting goals for reversing deforestation, ecological restoration and carbon removal. This will ensure better nature outcomes, greater investor certainty and support social license for carbon for nature projects.

Considerations for the Australian Government – investing in nature positive outcomes

- 7. Create an Australian Government Nature-Positive Fund for investments through the Nature Repair Market to establish early market demand for nature restoration projects, including those stacked with carbon projects, to ensure supply and establish confidence. Future Commonwealth investments under the Powering the Region Fund should be released from least cost mandate to prioritise nature and carbon removals deployment outcomes.
- Review of enhanced Safeguard Mechanism should consider purchase of ACCUs with co-benefits and ways that can be further supported to provide a stronger or guaranteed market for carbon for nature projects.
- Deliver expanded and improved Agriculture
 Biodiversity Stewardship and Carbon Farming
 Outreach programs with on-ground support from
 regional NRM organisations to encourage landholder
 participation and demonstrate alignment of the ACCU and
 Nature Repair Market schemes.

Considerations for the carbon industry

- 10. Integrate nature-related risks and opportunities into the Australian Carbon Farming Industry Roadmap and update the Australian Carbon Industry Code of Conduct (ACI Code) to minimise potential environmental harm and encourage further achievement of co-benefits in recognition of the significant opportunity that development of high integrity, verified nature outcomes offer to add value to carbon farming projects.
- 11. Undertake ACCU method exploration to support cobenefit identification and integration to define and develop a consistent, standardised list or classification index of primary co-benefits possible under each landbased ACCU method to support decision-making and price discovery of co-benefit asset classes and investment in carbon for nature.





Key considerations to leverage carbon for nature

Considerations for regional NRM organisations

- 12. Update regional NRM plans (where necessary) with carbon sequestration potential information to guide carbon for nature projects to increase the utility of all regional NRM plans to be used to identify opportunities to align carbon sequestration potential with opportunities to maximise nature outcomes.
- 13. Seek funding for updated climate-smart modelling to be incorporated into all regional NRM plans to ensure this information is up to date and fit for purpose in ensuring carbon for nature projects are being planned to maximise both project and landscape resilience, and to minimise risk.
- 14. Analyse how regional NRM plans and planning resources are informing carbon project planning to better understand the utility of the plans for industry users in carbon for nature projects and to identify actions and opportunities to improve the contribution of regional NRM plans. This would encourage more widespread strategic use of NRM plans and a landscape-scale approach in carbon farming projects.

Considerations for business

- 15. Integrate systemic organisational planning towards a net zero and nature positive economy in recognition of the intrinsic link between our economy and nature and the efficiencies available when addressing climate change and nature loss concurrently.
- 16. **Prioritise carbon for nature in ACCU compliance purchasing** to provide market signals that encourage additional investment in carbon for nature projects.
- 17. Engage in voluntary carbon for nature purchases to leverage existing ACCU purchases for voluntary climate commitments to invest and report on nature in line with relevant frameworks (e.g. ESG, TNFD) to help mainstream carbon for nature investments.

Considerations for researchers and academics

- Explore carbon for nature schemes to enable informed policy and program delivery to enable landholder participation in carbon for nature projects.
- 19. **Explore non-biodiversity co-benefits arising from carbon farming projects.** Better understanding of other ACCU co-benefits, how they may be valued by investors, and their relationship to nature outcomes, may make a

more compelling case for participation in carbon for nature projects, and deliver better overall outcomes from carbon farming investment.

Considerations for the agricultural sector

20. **Invest in on-farm natural capital measurement methods and tools** to promote landholder participation in carbon for nature projects and enable uptake.

Next steps

Carbon farming investment is contributing to nature outcomes – but could do much more under the right conditions. We will undertake the following actions to further this work.

- Continue the conversation: The perspectives and information contained in this report are valuable, however more detailed understanding and ongoing conversations are needed to deliver the reports key considerations. CMI and NRM Regions Australia will be continuing these conversations and testing the considerations with different stakeholder groups at the Carbon Farming Industry Forum and through the NRM network.
- Revise the Carbon Farming Industry Roadmap: In 2025 CMI will revise and update the carbon industry roadmap to ensure it promotes and includes pathways to enable carbon for nature projects.
- **Better utilise NRM plans:** As noted in the report, there is little transparency in how project proponents consider and align their projects to regional NRM plans, and mixed views on the utility of the plans to inform carbon farming. Additional research on this is being planned.
- Indigenous-led carbon for nature: While many efforts were made to interview Indigenous carbon farming participants in the report, there is more work to do. In our view, an additional, Indigenous-led project exploring the issues, priorities, barriers and benefits for Australia's First Nations of carbon for nature and other environmental market projects would be valuable to better understand and promote their interests, perspectives and knowledge on this topic. We commit to exploring this idea further with First Nations partners, and supporting an Indigenous-led carbon for nature project as appropriate.

Carbon for Nature Contacts

Rachel Clarke, NRM Regions Australia rachelc@nrmregionsaustralia.com.au

Janet Hallows, Carbon Market Institute janet.hallows@carbonmarketinstitute.org

² Ernst & Young Australia (2023), <u>Creating a Nature-Positive Advantage</u>, 2023, p. 11.





¹ Samuel, G. (2020), *Independent Review of the EPBC Act – Final Report,* Department of Agriculture, Water and the Environment, p. viii.