Carbon farming for healthy forests

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2024 FORESTRY AUSTRALIA SYMPOSIUM

Chubb review into ACCU integrity

"The Panel concludes that the ACCU scheme arrangements are essentially sound"

- Independent Review Of Australian Carbon Credit Units, December 2022

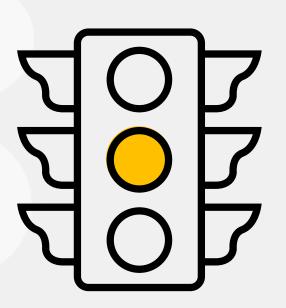




Is Australia's carbon farming scheme incentivizing sustainable forest management?



Forest biodiversity



• Pros:

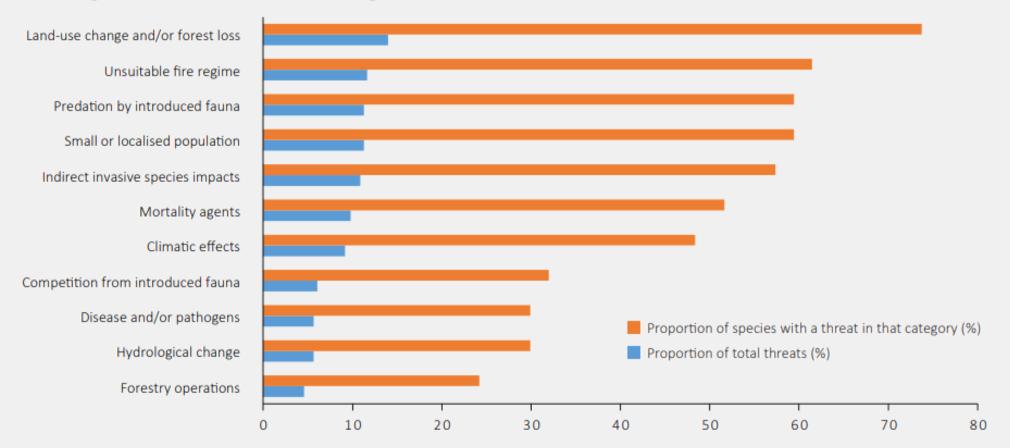
- Carbon farming directly addresses many of the key threats to biodiversity

- Further work needed:
 - Harmonization of carbon farming & emerging nature repair markets
 - Few specific requirements to manage for biodiversity (except environmental plantings methods)



Forest biodiversity

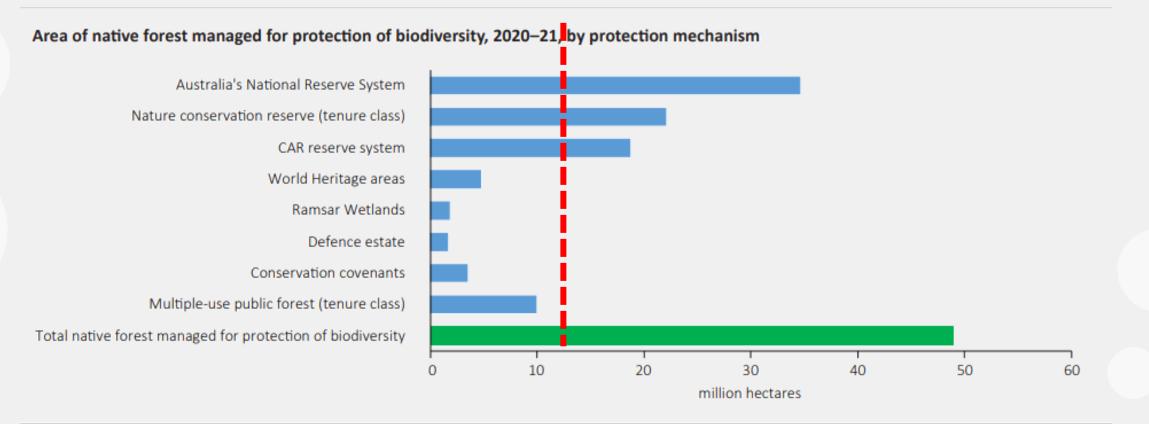
Threat ratings for extant threatened forest-dwelling vertebrate fauna as at 2021



• Source: DAFF State of the Forests Report, 2023

Forest biodiversity

Land under Climate Friendly's portfolio management

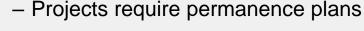


• Source: State of the Forests Report, 2023



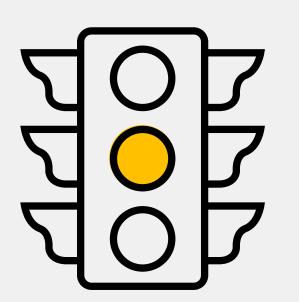
Forest condition & function

Pros:



- Management of pests & weeds is an eligible management change in some methods
- Schedule 3 & 4 of Plantation Forestry method require a Forest Management Plan to be signed off by a Registered Forestry Professional (RFP)
- Further work needed:
 - Many vegetation categories across Australia are not eligible
 - Procedures for active forest management activities are unclear / not allowed in many methodologies
 - Improved fire management is not an eligible management change across much of Australia
 - Projects cannot claim sequestration from both trees and soil on the same land
 - Hydrological management not currently an eligible management change for forests

Forests managed for wood production

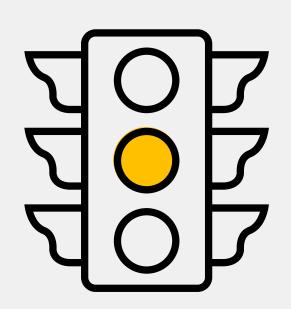


- Pros:
 - Helped maintain existing plantations and establish new plantations
 - 155 projects currently registered under plantation forestry method

- Further work needed:
- No carbon farming method for native forests managed for wood production
- Timber harvesting not permitted in most vegetation methods



Cultural & social values

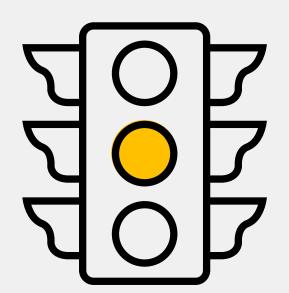


- Pros:
 - Contributes to reconciliation action on many rural properties, especially those with native title
 - Builds drought resilience and improves mental health of participants during a drought

- Further work needed:
 - Implementation of Chubb recommendations on Free, Prior & Informed Consent (FPIC)
 - Costs and timeframes for FPIC processes
 - First generation carbon farming methods had 'one-size-fits-all'
 - Social license issues



Take home messages



- Australia's carbon farming framework has made a significant contribution towards sustainable forest management during its ~10 years of operation
- Next generation carbon farming:
 - Modular, tailored methods
 - Harmonization with emerging nature repair market
 - Expanded eligibility across Australian ecosystems
 - Active forest management (thinning, fire)
 - Clarify Free, Prior & Informed Consent processes







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NEXT GENERATION CARBON FARMING

Integrated Farm & Land Management method

A framework to enable recognition of:

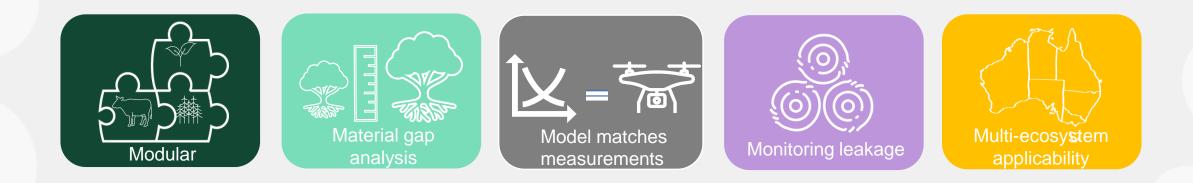
- The full range of carbon management activities that are typically implemented on a farm ('stacking'); and
- The full range carbon pools affected by those management changes; and
- The full breadth of vegetation categories that are impacted by those management changes; and
- Greater range of measurement & modelling options.

Likely & potential activities in the method

Phase 1	Phase 2 (proponent-led)
Soil carbon sequestration activities	Avoided clearing
Environmental plantings	Plantation forestry
Spontaneous regeneration	Reduced emissions from livestock
Fire management	



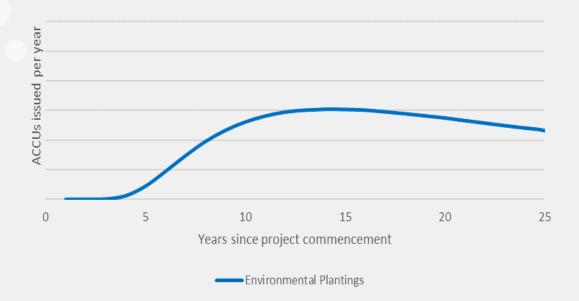
Five major innovations of IFLM



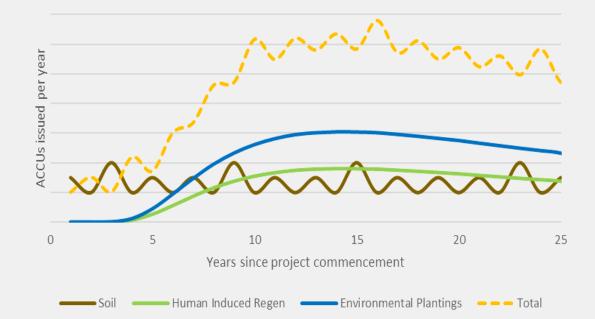


Key reform 1: Modular

Without stacking (status quo)



With stacking



Typically only one carbon method registered on a property.

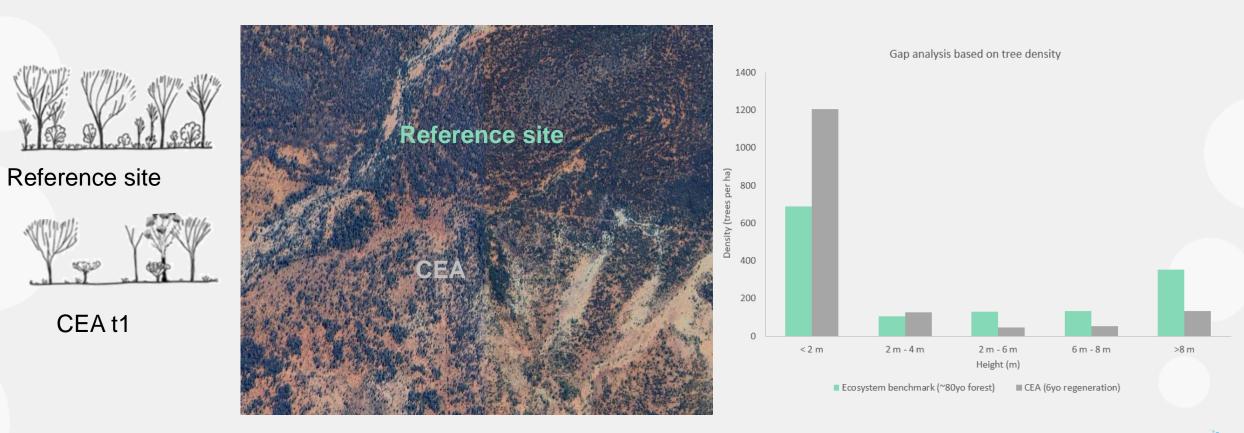
Project may not cover ERF compliance costs and/or deliver sufficient return on investment.

Multiple carbon management activities including in the carbon project.

Project covers ERF compliance costs and delivers sufficient return on investment.



Key reform 2: Material gap analysis





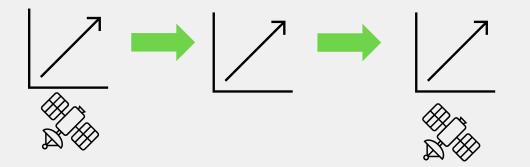
Key reform 3: Model matches measurements

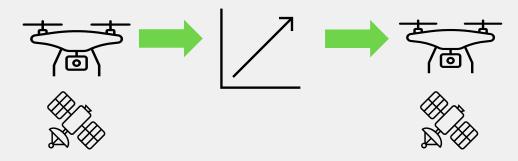
Status quo

- FullCAM used to calculate abatement
- Measurement of tree biomass not required

Integrated Land and Farm Method

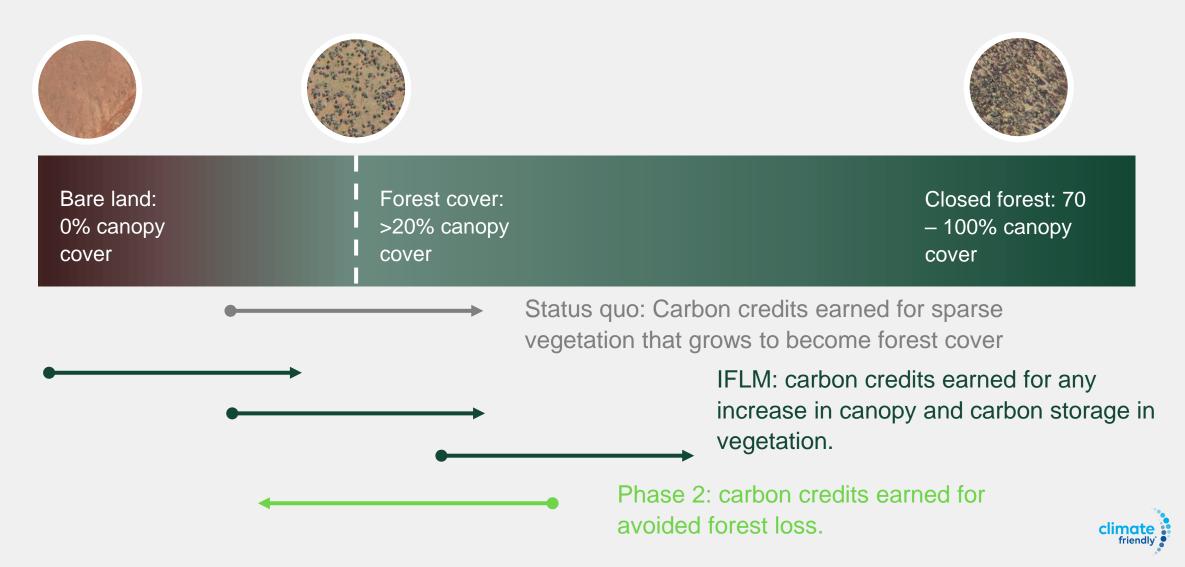
- FullCAM or other model used to calculate abatement
- Measurement of tree biomass required
- Model must be validated with high accuracy measurements







Key reform 5: Multi-ecosystem applicability



Thank you

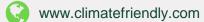
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