

North East NSW Forestry Hub

Recognising the carbon value in native regrowth forests

Request for Quotation

1. Introduction

The Australian Government is committed to getting more trees in the ground, invest in value adding so more timber products are made here at home, and train the timber industry workforce in a way that recognises the unique needs of the sector.

Australia's current timber shortage is adding considerable cost of living pressures and driving up the cost of construction projects across the country.

To help deliver upon its forest industries commitments the Australian Government has established eleven Regional Forestry Hubs across Australia. Each Hub is responsible for undertaking a strategic assessment of the factors impacting on their region's forest growing and processing sectors and for identifying key themes for investigation in consultation with both industry, community, and government stakeholders.

The proposal detailed in this RFQ has been developed by the North East NSW Forestry Hub (Hub) with direct support from the regional Forestry Hubs in South East NSW, South & Central Queensland, Northern Queensland, and Tasmania.

2. Operating context

Following a series of unprecedented natural disaster events, managing forests for climate change has become a research assessment priority.

Australia's forest industries consider they are part of the solution to climate change. To play their part, greater recognition and understanding of the opportunities around the management and protection of forests for carbon as well as timber is needed.

Since 1990 Australia has been internationally accountable for the carbon capture and storage that occurs in forests in accordance with the registry systems of the Kyoto Protocol.

As part of the process for tracking carbon stores, Australia monitors the change in forest area. Since 1990 the net annual change in forest area has gone from negative to positive (in 2009) then slightly negative from 2016-2019, refer black line in Figure 1.

Looking just at post 1990 regrowth (secondary forest) losses, over the 5-year period from 2015 to 2019, on average 359,000 hectares was re-cleared each year.



-1,000 1990

Reclearing

1995

Primary clearing

2000

Identified regrowth

Figure 1 - Annual areas of primary clearing, re-clearing, identified regrowth and resultant net change of forest in Australia, 1990–2019 (source: Australia State of the Environment 2021)

The effect of primary and secondary forest area gains and losses when converted to tonnes of carbon dioxide equivalent is shown in Figure 2.

2005

— Net change

2010

2015

Figure 2 – Annual carbon dioxide emissions (blue) from forest clearing and carbon dioxide sequestration (green) from forest gains, 1990-2022 (data source: Department of Climate Change, Energy, the Environment and Water)



Opportunities to encourage the retention and re-establishment of post 1990 native regrowth (secondary forest) to capture and store more carbon have been recognised by the Australian government under its Emissions Reduction Scheme (ERF). To date however no ERF methods have catered for a forest management regime that includes forestry activity.

3. The Project

This proposal seeks to engage a suitably qualified forest research and development provider to investigate the state of Australia's private native regrowth forests and how different forest management options can affect their carbon capture and storage. The project will give particular attention to the merits of a forestry management option.

4. RFQ Information Table

Deadline for lodgement of RFQ:	5pm, 14 October 2022
Address for lodgement of RFQ:	manager@nenswforestryhub.com.au
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5. Project deliverables milestones and payment

	Project Deliverable	Milestone Date	Total Service Fee payable
1	Finalisation of reporting requirements	Contract commencement	N/A
2	Draft stage 1 report covering items 1. to 6. in Table 1 submitted to the Manager of the North East NSW Hub	1 December 2022	N/A
3	Final stage 1 report covering items 1. to 6. in Table 1 incorporating feedback from the North East NSW Hub	20 December 2022	30%

4	Draft report covering all items in Table 1 submitted to the Manager of the North East NSW Hub	1 March 2023	N/A
5	Final report covering all items in Table 1 incorporating feedback from the North East NSW Hub	31 March 2023	50%
6	Publication of project findings in a peer reviewed paper in a scientific journal.	1 December 2023	20%

6. Selection Criteria

Essential

- An experienced investigative research entity include a brief overview of your organisation and business operations
- An ability to produce high quality strategic and technical reports if available include examples of publicly available reports prepared for alternate clients
- A project team with:
 - $\circ~$ An ability to work cooperatively and collaboratively with the North East Forestry Hub
 - o advanced GIS spatial analysis skills
 - experience in the use of large datasets
 - o experience in the remote assessment of native forests
 - a sound understanding of carbon sequestration and accounting in Australian forests
 - o a good understanding of native forest silviculture and silvo-pastoral systems
 - a good understanding of active and adaptive native forest management practice

Desirable

- A project team with:
 - Experience and skills in the assessment of private native forests for timber and other values
 - Knowledge and experience with existing native vegetation methods under the Commonwealth's Emission Reduction Fund
 - GIS modelling skills

- LiDAR and API analysis skills
- Native forest timber inventory experience
- Knowledge of carbon accounting in wood products
- A record of publication in peer reviewed scientific journals
- Contact details of two previous clients for which you have produced similar reports, including company position, telephone, and email address, that the Hub can contact as referees.

Total cost and cost structure

Detail the total cost that will be charged, exclusive and inclusive of GST, for producing the deliverables in accordance with the milestones.

Legal matters

Detail any legal conditions that your organisation may seek to apply to the release and use of the final report including but not limited to, intellectual property rights, disclaimers, and disclosure restrictions.

Subcontractors

The Hub seeks to enter a contract with a single legal entity but is receptive to that entity engaging nominated third party subcontractors to undertake some of the work.

7. Project Scope

The proposal will consider private native regrowth forest (post 1990) across Australia with a focus on five discrete regions¹:

- North East New South Wales
- South East New South Wales
- South and Central Queensland
- Northern Queensland
- Tasmania

8. Report Content

Preliminary assessment has identified the need for a report that addresses the requirements in Table 1. Refinement of the report content may occur following discussion with the successful applicant.

¹ For regional boundaries see <u>https://www.agriculture.gov.au/agriculture-land/forestry/regional-forestry-hubs</u>

Table 1 – Guide to report content

Report Content	Description
1. Overview	• Overview of the extent and physical attributes of native regrowth forest in Australia on private land. Include examples by State/region.
2. International context	• LULUCF accounting rules and UNFCCC policy as it applies to native forests in Australia including difference between secondary post 1990 regrowth and primary forest and accounting treatment of bushfires
3. National context	 GHG emission reduction targets accounting treatment of native regrowth forest The national carbon accounting system (NCAS) – coverage, strengths, and limitations The current contribution of post 1990 regrowth to national GHG emission reduction targets by State. A description of the existing Emission Reduction Fund native vegetation methods, the approved projects in regrowth forest and their GHG contribution
4. State based vegetation clearing laws	• What clearing/forestry activity is and isn't permitted on private land in NSW, QLD and Tasmania with and without consent
5. The Resource	• A detailed descriptive analysis of the private native regrowth resource by State/Hub Region, including, age profile, species mix, silvicultural attributes, growth rates, forestry potential and gaps and limitations in data/knowledge. Where practicable draw upon existing datasets (incl. LiDAR and timber inventory).
6. Trends in changes to the Resource	 Analysis of State Land Cover and Tree Study (SLATS) data for private land by State and Hub Region Analysis of clearing data relating to private native regrowth – by State/Hub Region
7. Carbon accounting under different management options	 Analysis of available growth data to quantify carbon capture under the following forest management options Business as Usual - Do nothing Conversion - Fully/partially convert to grazing Forestry - Thin and manage for timber and grazing Conservation - reserve (informal or formal) For the Forestry option discuss any likely limitations/uncertainties with compliance with ERF accounting requirements
8. Effect of wildfire under different management options	 Provide context by detailing GHG emissions from 2019-20 bushfires Discuss risk and consequence of bushfires under the following management options in different States and regions:

Report Content	Description
	 Business as Usual - Do nothing Conversion - Fully/partially covert to grazing Forestry - Thin and manage for timber and grazing Conservation - reserve (informal or formal)
9. Landholder survey results	Where available draw upon results of regional landholder attitude surveys to different forest management options
10. Findings	 The scope to increase/decrease the carbon sequestration contribution of private native regrowth to national GHG emission reduction targets by incorporating forestry activity. Detail findings for the nation as well as by State and Hub region Options for modification of an existing ERF method or development of a new method or do nothing
11. Recommendations	Recommendations arising from the investigation including the need for further research data

9. Complimentary Landholder Survey

It is proposed to commission surveys of private native forests landholder attitudes toward the management of their native forest regrowth. Discrete surveys may be commissioned in the following regions:

- North East New South Wales
- South East New South Wales
- South and Central Queensland,
- Northern Queensland
- Tasmania

Survey results will be made available to the successful proponent of this project to incorporate into their analysis and findings.