

The NSW Climate Change Research Strategy www.dpi.nsw.gov.au/ccrs

## ACCESSING CARBON MARKETS Understanding carbon farming opportunities

Carbon markets offer primary producers the opportunity to diversify their enterprise and increase the contribution from agriculture to New South Wales net-zero emissions target. However, it is important that carbon farming does not come at the cost of sustainable agricultural production.

Many landholders in western New South Wales are already participating in carbon farming through the Australian Government's Emissions Reduction Fund.

(ERF). By changing land use from grazing to maintaining or encouraging native vegetation growth for carbon sequestration purposes, landholders have been able to diversify their business. Carbon farming is providing a new income stream that may benefit not only landholders but also the wider community.

While carbon farming can present opportunities for landholders, it is important to understand how changes in land-use may impact livestock production, landscape and community resilience in the long term, to ensure that agricultural production remains sustainable. These impacts could include:

- increased woody vegetation and irreversible establishment of invasive native scrub
- reduced vegetation diversity associated with long-term impacts on biodiversity
- long-term economic and social impacts at both farm and regional scales that are as yet unknown.

There is also uncertainty about:

- the carbon abatement potential of re-established native vegetation
- the influence of climate change on both vegetation and soil carbon accumulation in the region.



## Maximising carbon farming outcomes

International policy is likely to increase opportunities for the carbon economy into the future. If New South Wales landholders are to benefit from these opportunities, it is important to better understand the impacts and uncertainties around carbon farming and land-use change.

We are investigating existing ERF abatement activities, agricultural production, resource condition and resilience at farm and regional scales, to provide a clearer picture of these impacts.

We're also taking a closer look at the added benefits to the environment and agricultural production that could come from carbon farming. These include reduced rates of soil erosion, increased biodiversity benefit as well as the integration of carbon farming with existing agricultural land-use. If these added benefits can be measured, there is potential to increase income from carbon farming areas by accessing environmental services markets.

This research will enable NSW landholders to make better decisions about their involvement in carbon farming activities. It will also identify potential tradeoffs between traditional pastoral land use and carbon farming.

For more information contact Dr Cathy Waters at cathy.waters@dpi.nsw.gov.au.

The carbon farming platform is one of the tools being developed in the Accessing Carbon Markets project of the NSW Primary Industries Climate Change Research Strategy. This project will help primary producers to diversify their income sources and build resilience and productivity while delivering environmental benefits.

## Carbon farming decision support tool

Our research results will contribute to the development of an online carbon farming decision support tool that will link primary producers to opportunities in the carbon market.

The requirements of alternative carbon farming methods will be demystified and show where in New South Wales carbon farming may be a viable option. Real-life

stories from carbon farmers will be included which will help landholders to make more informed choices about entering into carbon farming.





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