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Agriculture Stewardship package

Carbon + Biodiversity Pilot



Australia's agriculture industry depends on a biodiverse and well-managed natural resource base.

The \$34 million Agriculture Stewardship package aims to incentivise adoption of improved on-farm land management practices and develop a mechanism where farmers are rewarded for their efforts in delivering biodiversity and sustainability services that benefit their farms and the broader community.

TECHNICAL CASE STUDY

Environmental Planting Project near Grenfell, New South Wales

Patrick and Jane own a (hypothetical) 2,700-hectare property outside Grenfell, in the Central West region of New South Wales. They operate a mixed farming operation on the property, mainly producing sheep and wheat. To diversify their income and provide additional shelter for livestock, they apply to participate in the C+B Pilot for a 40 hectare tree planting project.

Patrick and Jane and their advisers estimate that the tree plantings are likely to sequester approximately 225 tonnes of carbon dioxide (tCO₂) per hectare, or 9,000 tCO₂ in total, over 25 years.

Under the ERF, a 5% risk of reversal buffer discount is applied when calculating the number of carbon credits that environmental planting projects receive. Participants must choose between a 25-year or 100-year 'permanence period' – the period over which the plantings must be protected and maintained. If participants opt for a 25-year permanence period, a 20% permanence period discount is applied when calculating their carbon credits entitlements, on top of the 5% risk of reversal buffer discount. Projects with 100-year permanence periods are not required to apply a permanence period discount. Patrick and Jane decide the best option for them is a 25-year permanence period.

Accounting for the total number of ACCUs the project could receive and when they are likely to be issued, the possible future price of ACCUs, and a preferred discount rate, Patrick and Jane and their advisers calculate that the present value of the ACCUs from the project is likely to be in the around \$2,000 per hectare, or \$80,000 for the whole project. The average price paid for contracts from the auction held by the Clean Energy Regulator in September 2020 was \$15.74 per ACCU.



To participate in the C+B Pilot, the plantings must be established and managed in accordance with the ERF environmental plantings method and the C+B planting protocol. After consulting their local Natural Resource Management Group, Central West Local Land Services, Patrick and Jane decide the best way to establish the plantings consistent with these requirements is via mechanical tubestock planting. They also decide that 2 km of fencing will be required to protect the plantings from livestock, kangaroos, rabbits and other feral herbivores. Before planting, Patrick and Jane plan to treat the weeds on the site with 2 rounds of boom spraying and one round of spot spraying. Considering these project details, they calculate that the likely establishment costs around \$3,500 per hectare, or \$140,000 in total.

In planning the project, Patrick and Jane also consider recurrent weed and pest management costs across the 40 hectares of plantings, and the reporting and auditing costs associated with the C+B Pilot and the ERF. Under the ERF, all tree planting projects are required to undergo 3 third-party audits, the first of which is due at the end of the first reporting period. These third-party audits are paid for by the project participant.

The C+B Pilot has no equivalent third-party auditing requirements but participants must submit periodic reports on the environmental and financial performance of projects.

Using the planting area and cost data they submit, the department provide Patrick and Jane with a biodiversity payment offer of \$2,500 per hectare, or a total of \$100,000.

If Patrick and Jane enter a C+B agreement and exercise the option to initiate the project, they could receive \$50,000 upfront (after the project is registered under the ERF) to support the plantings. They will then receive the remaining \$25,000 in the following 2-3 years, contingent on verification that the plantings have been established in accordance with the C+B planting protocol and the satisfaction of other program requirements.

Be Informed

For more information, visit our website at agriculture.gov.au/agriculturestewardship. Enquiries about the program can be directed to agstewardship@awe.gov.au or the department's contact number at **1800 900 090**.

