



Emissions Reduction Fund: Opportunities for the Australian cotton industry to participate in the ERF

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The Emission Reduction Fund: What is it? Why participate?

The Emission Reduction Fund (ERF) is the centrepiece of the Australian Government's climate change policy designed to help meet the nation's target of reducing emissions to five percent below 2000 levels.

Originally the Carbon Farming Initiative (CFI, which commenced in 2011), the scheme was broadened into the ERF in December 2014. The ERF provides incentives for a wide range of organisations and individuals to adopt new practices and technologies to reduce their emissions, and be paid for it.

Eligible activities in the scheme earn Australian Carbon Credit Units (ACCUs), which have financial value. One ACCU is earned for each tonne of carbon dioxide equivalent (CO₂e) stored (ie. sequestered) or avoided (ie. mitigated) by a registered project.

ERF projects must use an approved method, which outlines the eligible activities and requirements for a project to earn ACCUs.

Examples of ERF activities include revegetation and land management, soil carbon sequestration, forestry, improved energy efficiency, cleaning up pollution in power stations, cleaning up waste coal mine gas, and cleaning up landfill.

Once a project is registered under an approved method with the Clean Energy Regulator, the project proponent can bid in an ERF reverse auction where the Government purchases the lowest cost abatement (emission reductions). If successful, the project proponent enters into a Carbon Abatement Contract, which details the number of ACCUs that will be generated over an agreed timeframe.

The first auction was held in April 2015, the average price for 47 million tonnes of CO₂e contracted abatement was

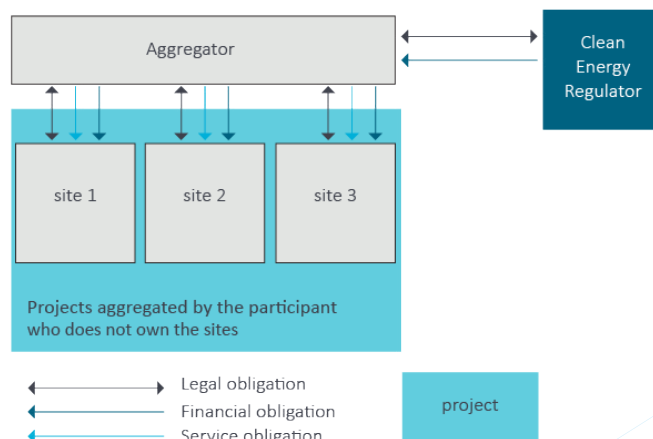
\$13.95/t. The second auction was held in November 2015, the average price for 45 million tonnes of CO₂e contracted abatement was \$12.25/t. Subsequent auctions will be held approximately every six months.

Key things to know about setting up a project

One key project eligibility to ensure the project will genuinely result in emission abatement is **additionality**. Abatement must be additional to what would have otherwise occurred in the absence of the scheme. Activities must not be required by law or be common practice. This encourages participants to make measurable changes to their business that will result in true emission abatement.

The **crediting period** is the length of time a project is able to claim ACCUs. This varies depending on the type of project and ranges between seven and 25 years. ERF abatement projects can claim ACCU's for a maximum crediting period of seven years, whilst sequestration projects may claim ACCU's for 25 years.

The minimum bid size for a project is **abatement of 2000t of CO₂e per annum**. To achieve economies of scale (or even minimum bid size) an aggregator can join multiple entities together for a registered ERF project.





The role of a registered aggregator may include:

- Project management, administration and reporting.
- Marketing ACCU's and distributing dividends.
- Taking equity positions.

One of the biggest challenges and barriers to participation for farmers is the significant administrative cost and effort involved in participating in the ERF. Rules, the reliance on data and the need for specialist auditing and verification equates to project costs which have not, in recent times, been adequately offset by the price received for carbon credits.

Costs associated with auditing and reporting vary depending on the nature of the project (ie. scale or type). The reporting period of a project may be as frequently as every six months, with a maximum of every two years for emission projects and five years for sequestration projects. Each participant is required to comply with reporting, incurring costs that may result in a negative economic return to the project. The Clean Energy Regulator is working with auditors to try and reduce these costs and current project proponents have reported a reduction in auditing costs as methods and systems become more familiar to both users and auditors.

A higher carbon price would also change the cost benefit of undertaking projects for the better, and make ERF participation appealing for more land owners.

List of methods

The following list of methods may be applicable to the Australian cotton industry. Given the current minimum bid size for a project is abatement of 2000t of CO₂e per annum, and the costs of project verification and auditing, the methods are currently more suitable for very large farms or aggregations of farms:

- Fertiliser Use Efficiency in Irrigated Cotton
- Industrial Electricity and Fuel Efficiency
- Reforestation and Afforestation
- Native Vegetation Regrowth Methods
 - Avoided Land Clearing
 - Native Forest from Managed Regrowth
 - Human-induced Regeneration
- Soil Carbon Sequestration Methods
 - Sequestering Soil Carbon in Grazing Systems
 - Model-based Soil Carbon

Where can I go for more information?

Cotton industry contact:

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Cotton industry publications and tools:

All available via the CottonInfo carbon farming webpage:

www.cottoninfo.com.au/carbon-farming

- Fact sheets on all of the available ERF methodologies
- CottonInfo case study - Investigating carbon farming in the Macquarie
- CottonInfo paper for the 17th Australian Cotton Conference: Carbon neutral cotton farms
- CottonInfo paper for the 17th Australian Cotton Conference: Nitrogen fertiliser use efficiency across the regions
- Australian Cotton Production Manual
- Carbon Footprint Calculator: estimates annual farm-based emissions.
- FarmGAS Calculator Scenario Tool: a tool from the Australian Farm Institute to investigate how different farm practices might alter the greenhouse gas emissions estimates

General information/publications:

- Department of the Environment Emissions Reduction Fund: www.environment.gov.au/climate-change/emissions-reduction-fund
- Kondinin Group (2015). The business case for carbon farming: Improving your farm's sustainability. Workshop manual. Perth, Kondinin Group: <http://carbonfarminginitiative.farmingahead.com.au/p/resources.html>
- Emissions Reduction Fund: Benefits for farmers: http://cmicms.cylinder.com.au/files/PDF/ERF_Fact_sheet_-_Benefits_for_farmers_-_DoE.pdf
- Department of Agriculture (2013). Carbon Farming Initiative case study - environmental plantings of native tree species: http://www.agriculture.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0006/2370264/13.6-NSW.pdf
- Welsh, J., J. W. Powell and F. J. Scott (2015). "Optimising nitrogen fertiliser in high yielding irrigated cotton: A benefit-cost analysis (under review)." Australian Farm Business Management Journal 12: www.agrifood.info/AFBM/2015/Welsh_et_al.pdf