



Australian Government



An overview of the Carbon Farming Initiative

Information for farmers and land managers interested in earning and selling carbon credits - creating extra income - by storing carbon or reducing greenhouse gas emissions on the land.

www.cleanenergyfuture.gov.au

Why carbon farming?

As farmers well know, carbon in the soil is a good thing because it makes the land more productive. But rising levels of carbon dioxide and other greenhouse gases in the atmosphere are a problem because they cause climate change.

A warmer, more unstable climate poses a serious risk to Australian agriculture and food production.

The agricultural sector contributes about 18 per cent of these emissions and its potential to provide a lasting solution to the problem is significant.

The Carbon Farming Initiative is part the Australian Government's plan to reduce carbon dioxide and other harmful greenhouse gases in the atmosphere and to transition Australia to a Clean Energy Future by:

- putting a price on carbon to provide an incentive for big emitters to cut pollution
- promoting innovation and investment in less-polluting types of energy
- encouraging energy efficiency
- creating opportunities in the land sector to cut greenhouse gas emissions.

What does the carbon price mean for farmers?

The introduction of a price on carbon in July 2012 requires our biggest polluters to pay for the impact of their greenhouse gas emissions on the environment and the people it supports.

Farmers are exempt from paying a carbon price on emissions from livestock, soils or fertiliser use and they don't pay extra for essentials like fuel for their off-road or light on-road vehicles.

Recognising that there may be a modest impact from costs passed on from those who do have to pay a carbon price, the Government is using more than half the money raised from the carbon price to assist households.

Nine in 10 households are receiving a combination of tax cuts and payments to help with the costs of the carbon price. On average, households will see cost increases of \$9.90 per week, while the average assistance is \$10.10 per week.

Additional support for farmers

The Government is working hard to smooth the way for Australia to transition to a Clean Energy Future and to minimise the impact on vulnerable sectors or communities. The land sector will be well-supported through a reinvestment of carbon revenue in:

- an ongoing Carbon Farming Futures program (\$429 million over the first six years) for research, development and extension, low-cost carbon measurement tools and action on the ground, including support for conservation tillage equipment
- an ongoing Biodiversity Fund (\$946 million over the first six years) to support projects that establish, restore, protect or manage biodiverse carbon stores
- the \$250 million Carbon Farming Initiative Non-Kyoto Carbon Fund to purchase CFI credits (see details below)
- a Regional Natural Resource Management Planning for Climate Change Fund (\$44 million over five years)
- an ongoing \$22 million Indigenous Carbon Farming Fund to help Indigenous communities establish or participate in CFI projects
- a \$4.2 million Carbon Farming Skills program to establish a new qualification in carbon farming and an accreditation scheme for carbon service providers.

Opportunities in carbon farming

Farmers and land managers are exempt from paying a carbon price on their agricultural emissions, but they're not excluded from carbon market opportunities.

The Carbon Farming Initiative (CFI) is a voluntary carbon offsets scheme that provides economic rewards to farmers and landholders who take steps to reduce greenhouse gas emissions. Farmers and landholders can choose whether or not to be involved. Under the CFI, they may be able to earn carbon credits from activities such as:

- reducing livestock emissions
- increasing efficiency of fertiliser use
- enhancing carbon in agricultural soil
- storing carbon through revegetation and reforestation.



Carbon farming activities that reduce greenhouse gas emissions are referred to as abatement activities. They reduce emissions in one of two ways: by storing carbon in soil or plants (sequestration projects) or reducing emissions of carbon and other harmful greenhouse gases (emission reduction or avoidance projects). These activities reduce Australia's greenhouse gas emissions and will help Australia transition to a Clean Energy Future.

Importantly, farmers or landholders who help reduce Australia's greenhouse gas emissions through approved CFI activities receive a benefit – a tradeable carbon credit.

Case study 1: Let plants take all the credit

Farmers and landholders can now apply for projects under the Methodology Determination for environmental plantings, which sets out the ground rules for this type of activity under the Carbon Farming Initiative.

The benefits of planting native tree species on degraded paddocks, for example, go beyond carbon storage. Shelter belts of native species for lambing paddocks can boost lambing percentages by up to 15 per cent, while the right species mix can improve soils through nitrogen fixation and nutrient cycling, and provide habitat for wildlife.

There are many examples of how environmental plantings can help to reduce Australia's greenhouse gas emissions while increasing the productivity of the land. Two of these can be found on farmland on the outskirts of Canberra and in the Southern Highlands of NSW, where environmental planting projects sponsored by Greening Australia are helping to restore degraded paddocks.

At Bungendore in NSW, environmental plantings have cut lamb losses and provided productive, resilient perennial pastures. At Arthursleigh in the Southern Highlands, a successful sustainable farming system has been developed that includes biodiverse revegetation and the re-establishment of vegetation along waterways.

For further details and links to the environmental plantings Methodology Determination, please visit www.climatechange.gov.au/cfi. Project applications should be made to the Clean Energy Regulator at www.cleanenergyregulator.gov.au

Practical help is available to those interested in setting up a project. There is a tool to model carbon pools in forests (the Australian Government's Reforestation Modelling Tool) and a CFI mapping tool, to help land managers map their project and track progress over time. These are available free of charge at www.climatechange.gov.au/cfi.

Markets for carbon credits

Carbon credits can be sold in carbon markets, for example to businesses that have to pay a carbon price and have an incentive to reduce or offset their emissions. Carbon credits can also be sold to organisations that have adopted voluntary climate change targets or businesses that offer carbon neutral products to consumers.

Under Australia's carbon pricing mechanism, carbon has a fixed price of \$23 per tonne in 2012-13, moving to a flexible market price under a cap and trade scheme in 2015-16. The value of CFI credits will be set by the market from the start of the scheme and will depend on whether the credit is a Kyoto credit, which can be used under the carbon price mechanism. The value of CFI credits may also depend on whether the project delivers other social and environmental benefits.

Different credits for different activities

Carbon credits earned under the CFI are called *Australian Carbon Credit Units (ACCUs)*.

Some abatement activities count towards Australia's national target under the Kyoto Protocol. These include reforestation, avoided deforestation, reducing emissions from livestock and reducing emissions from waste deposited in landfills before July 2012. Credits earned from these activities are known as *Kyoto ACCUs*.

Some types of activities aren't counted towards Australia's Kyoto Protocol target but will still help Australia move to a Clean Energy Future. These activities include soil carbon management, feral animal management, improved forest management and non-forest revegetation. Credits from these activities will be able to be sold into the voluntary carbon market. In addition the Government has set aside a total of \$250 million over six years to purchase credits from these so-called non-Kyoto activities.



Carbon credits
can be sold in
carbon markets



Case study 2: Manure matters

Farmers that deal with a lot of livestock have to manage a lot of manure.

Under the CFI, this thankless task is an activity that can earn carbon credits. There is an approved set of instructions (a "methodology") for doing manure management projects in piggeries and measuring the resulting carbon reductions.

Piggeries that use effluent lagoons to manage manure can cover these and install low-cost gas capture and combustion equipment.

Gas from the lagoons can be used to heat boilers, heat farrowing sheds (for piglets) and also for generating electricity.

This reduces the greenhouse gas emissions that would otherwise be released from the effluent ponds.

Industry experts have estimated that the carbon value of this activity alone is worth \$2.50 to \$3.50 per carcass, without taking into account potential savings from generating electricity.

The peak industry group for commercial piggeries is actively supporting its members in taking up these opportunities under the CFI.

Eligible activities – the positive and negative lists

Carbon credits cannot be issued for business-as-usual activities. To be eligible, projects must deliver extra reductions in greenhouse gas emissions, which can offset new emissions from industrial sectors. This is known as "additionality" and is a requirement of all offset schemes. The CFI includes a list of eligible activities – called the "positive list" – that are not common practice and deliver additional abatement.

The CFI has been carefully designed to avoid adverse impacts on communities, food security, water and the environment, while working to unlock important greenhouse gas abatement opportunities across regional Australia.

The "negative list" sets out the types of activities that are not eligible under the CFI. They are excluded because they may have negative impacts on land access for agricultural production, the availability of water, conservation of biodiversity, employment and the local community. The lists can be viewed at www.climatechange.gov.au/cfi.

Abatement activities must deliver lasting benefits

Carbon credits can only be issued for activities that bring lasting environmental benefits. This could be achieved by preventing greenhouse gases from entering the atmosphere or permanently storing carbon in the soil or plants.

The CFI permanence rules underpin the market value of credits. These rules give buyers confidence that carbon credits represent genuine and lasting reductions in greenhouse gases. There is little or no demand in carbon markets for credits that do not represent permanent abatement.

The CFI permanence rules means that landholders should only consider forestry or soil carbon projects that improve productivity or have benefits for natural resource management. For example, landholders could consider plantings in unproductive or eroded areas or plantings that provide shelter for stock, create corridors for wildlife or improve water quality. The CFI permanence provisions discourage tree planting on land that has better or more profitable agricultural uses.

The permanence rules are flexible and recognise the realities of Australia's natural environment and climatic conditions. Project owners will not be penalised for losing carbon through no fault of their own – because of

bushfire, drought, pests or disease. In most cases, vegetation and other carbon stores will recover naturally after these events. If not, landowners must take reasonable action to re-establish carbon stores.

The permanence rules allow landholders to cancel their projects and remove carbon stores at any time by handing back the same number of credits that were issued for the project. Credits could be purchased at the prevailing market price or taken from another project, if a project owner has more than one.

The permanence rules do not prevent landholders from harvesting, so long as the trees are replanted and the reductions in carbon storage are accounted for under the estimation methodology.

Measuring the benefits of different activities

Abatement activities are all different. Estimation methodologies are rules that explain how to carry out an abatement project and measure the resulting reductions in greenhouse gas emissions. The Government is working with scientists, government agencies and industry bodies to develop methodologies for different activities. These methodologies are assessed by an independent, expert committee to ensure that they are based on sound science and have environmental integrity. The value of carbon credits depends on whether they are seen as credible in domestic and international carbon markets.

The Government is working hard to develop methodologies as quickly as possible. To date landholders can undertake projects using approved methodologies for the Destruction of Methane Generated from Manure in Piggeries, Capture and Combustion of Landfill Gas; Savanna Burning; and Environmental Plantings. For a current list of methodologies that are ready for use, and those under assessment please refer to www.climatechange.gov.au/cfi.

Many farmers and landholders have already started to apply for projects under the approved methodologies. A new independent regulator, the Clean Energy Regulator has been set up to administer the Carbon Farming Initiative. The Regulator offers help and guidance on how to apply for a project and manage it in accordance with an approved methodology.



Further information

For information about the CFI visit
www.climatechange.gov.au/cfi or call **1800 057 590**

Project applications should be made to the Clean Energy
Regulator at www.cleanenergyregulator.gov.au

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