



CFI Methodology: Savanna Burning

The Carbon Farming Initiative (CFI) allows farmers and other land managers to earn carbon credits by storing carbon or reducing greenhouse gas emissions on the land. Participants can earn carbon credits by setting up a project under an approved CFI methodology, which sets out the ground rules for the activity.

This fact sheet outlines the methodology for *Reduction of Greenhouse Gas Emissions through Early Dry Season Savanna Burning*.

Who could benefit from this methodology?

The methodology could benefit anyone who manages tropical savannas in the north of Australia. Indigenous land managers and ranger groups, pastoralists, State Governments and other land managers and land owners can use this methodology.

Project owners must have the legal right to undertake fire management in their proposed project area. This would be clear where project owners own the land, such as on freehold land. Where interests in the land are shared, agreements could be made between the different parties to make clear who has the right to carry out fire management.



Savanna fire management projects offer a unique employment for opportunity for Indigenous Australians on remote traditional country. This methodology has been developed in collaboration with Indigenous groups and the methodology is aligned with traditional burning practices.

The development of this methodology was made possible because of ongoing Australian Government commitment and support, including the investment of \$10 million to support Indigenous participation in carbon markets since 2007 under the Caring for Our Country initiative.

How does it work?

Savanna fires release methane and nitrous oxide into the air, which are strong greenhouse gases. Under this methodology, emissions from savanna fires can be reduced by:

- shifting burning from the late dry season (approximately October – November) towards the early dry season (approximately March – April), and
- reducing the area that is burnt each year.

In this way, emissions are reduced because the fires are less intense and burn less country each year.

The current fire regime across the tropical north of Australia is dominated by large late dry season wildfires. This is due to a long dry season which dries out the grass and vegetation. These hot, intense fires tend to burn most of the fuel available, including the canopies of trees, and can continue through the night. Fires in the early dry season are cooler because the fuel is not as dry and tend to go out at night in the dewy conditions.

Careful early dry season burning can reduce fuel loads and create burnt fire breaks in the landscape. Fire breaks alongside roads or water courses help to reduce the risk of hot fires spreading in the late dry season. Managed fires can be lit from aircraft, vehicles or on foot, depending on the country.

Under the methodology, project owners must first develop a vegetation map for their project area. This is important because different types of vegetation burn differently and generate different levels of emissions.

Project owners must then determine the fire history of their project area for the 10 years prior to project commencement. This requires the use of satellite fire maps and the methodology outlines how project owners can easily source these maps. Project owners must use the vegetation maps and fire maps to determine the historical average or baseline emissions from fire for their project. This involves the use of a Geographic Information System and will require some technical expertise.

Once the baseline has been determined, project owners can undertake new fire management in their project area. Project owners then use the vegetation maps, together with satellite fire maps, to determine emissions under the new fire management regime.

Emissions abatement is calculated as the difference between the baseline and project emissions. The carbon dioxide released by fire does not count towards the abatement as it is reabsorbed by the landscape in the next growing season.

Specific Requirements

Eligibility

This methodology can be used in high rainfall savanna areas in the tropical north of Australia. To be eligible, projects must meet the following requirements:

- manage fire in the early dry season within a project area larger than 1 km²
- be located in an area that receives an average of more than 1000 mm of annual rainfall
- contain a class of vegetation specified in the methodology (there are four types: eucalypt open forests, eucalypt woodlands, sandstone woodlands and sandstone heath).

Fires cannot be controlled by the introduction of cattle or by increasing fire outside the project area.

Monitoring and Reporting

A project must produce early and late dry season fire maps for every year in the baseline and reporting periods.

Record keeping is important and will be used to assess the abatement that has been achieved by the project.

Projects must be audited by a registered CFI auditor.

Further Information

The Methodology Determination is available on ComLaw at <http://www.comlaw.gov.au/Details/F2012L01499>.

Project applications to implement the Methodology Determination may be made to the Clean Energy Regulator at www.cleanenergyregulator.gov.au.

To find out about other opportunities under the Carbon Farming Initiative, visit www.climatechange.gov.au/cfi.

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