



# CFI Methodology: Destruction of Methane from Manure in Piggeries

The Carbon Farming Initiative (CFI) allows farmers and other land managers to generate extra income 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 rules for the activity.

This fact sheet outlines the methodology for the *Destruction of Methane Generated from Manure in Piggeries*.

## Who could benefit from this methodology?

This methodology could benefit piggery operators who use effluent lagoons to manage manure.

These lagoons are normally uncapped and release large amounts of biogas, including methane, to the atmosphere.

Methane is a potent greenhouse gas which contributes to climate change. A warmer, more unstable climate poses a serious risk to Australian agriculture and food production.



## How does it work?

There are three main elements to this methodology:

1. Covering effluent lagoons to prevent the release of methane into the atmosphere
2. Collecting the biogas from the covered lagoons
3. Combusting the biogas.

Through the combustion process, methane is converted to carbon dioxide, which is a much less potent greenhouse gas than methane.

Biogas can be used to heat boilers and farrowing sheds.

Biogas can also be used to generate renewable electricity. This electricity could be used on site or sold back into the electricity grid.

Depending on the size of the facility, farmers could also generate tradeable renewable energy certificates under the Renewable Energy Target.

## Specific Requirements

### Eligibility

For a project to be eligible under this methodology, the following requirements must be met:

- Manure must be treated in lagoons with a minimum depth of 2 metres.
- The construction, operation and maintenance of lagoons must meet the standards and protocols detailed in the *National Environmental Guidelines for Piggeries 2010*, (a copy of which is available at <http://www.australianpork.com.au/pages/page206.asp>).
- The inputs to lagoons must only consist of manure from the operation of piggery sheds. This may include undigested feed and any bedding which would, under normal operations, enter the effluent stream.

In addition, any flaring system used must use a frequently sparking flare (every 2 seconds) to ensure continuous destruction of methane or else include a control system that prevents gas flow through the flare when the flare is not operational.

### Monitoring, Reporting and Auditing

The following must be monitored at least once per week:

- Herd data
- Piggery feed usage data
- Diet analysis

Project owners must use the *PigBal* model to help them fulfil their monitoring and reporting obligations. This tool is available for free on the department's website: [www.climatechange.gov.au/cfi](http://www.climatechange.gov.au/cfi). (See relevant methodology under "Offset Methodologies").

Keeping project records is important as these will be used to calculate the abatement that has been achieved by the project.

Projects must be audited by a registered greenhouse and energy (NGERS) auditor. A list of registered auditors is available on the Clean Energy Regulator website: [www.cleanenergyregulator.gov.au](http://www.cleanenergyregulator.gov.au).

### Further Information

The Methodology Determination is available on ComLaw at [www.comlaw.gov.au/Details/F2012L01501](http://www.comlaw.gov.au/Details/F2012L01501).

Project applications to use this Methodology Determination may be made to the Clean Energy Regulator at [www.cleanenergyregulator.gov.au](http://www.cleanenergyregulator.gov.au).

To find out about other opportunities under the Carbon Farming Initiative, visit [www.climatechange.gov.au/cfi](http://www.climatechange.gov.au/cfi).

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