

EXPLANATORY STATEMENT

Issued by the Authority of the Parliamentary Secretary for Climate Change and
Energy Efficiency

Carbon Credits (Carbon Farming Initiative) Act 2011

*Carbon Credits (Carbon Farming Initiative) (Destruction of Methane Generated from Dairy
Manure in Covered Anaerobic Ponds) Methodology Determination 2012*

Background

The *Carbon Credits (Carbon Farming Initiative) Act 2011* (the Act) enables the crediting of greenhouse gas abatement in the land sector. Greenhouse gas abatement is achieved by either reducing or avoiding emissions or by removing carbon from the atmosphere and storing it in soil or trees.

Abatement activities are undertaken as offsets projects. The process involved in establishing an offsets project is set out in Part 3 of the Act. An offsets project must be covered by and undertaken in accordance with a methodology determination.

Subsection 106 (1) of the Act empowers the Minister, by legislative instrument, to make a methodology determination. The purpose of a methodology determination is to establish procedures for estimating abatement (emissions reductions and sequestration) and project rules for monitoring, record keeping and reporting on abatement.

A methodology determination must meet the offsets integrity standards set out in section 133 of the Act and the eligibility criteria set out in section 106 of the Act. The Minister cannot make a methodology determination unless the Domestic Offsets Integrity Committee (DOIC) has endorsed the proposal under section 112 of the Act and advised the Minister of the endorsement under section 113 of the Act. The DOIC is an independent expert panel established to evaluate and endorse methodology proposals.

Application of the Methodology Determination

The *Carbon Credits (Carbon Farming Initiative) (Destruction of Methane Generated from Dairy Manure in Covered Anaerobic Ponds) Methodology Determination 2012* (the Methodology Determination) sets out the detailed rules for implementing and monitoring a project under the Carbon Farming Initiative (CFI) to reduce the methane generated from manure in dairy production systems.

The abatement activity involves collecting emitted greenhouse gas by covering open effluent ponds. This will require the installation and operation of covers and gas capture and combustion equipment to existing uncovered effluent treatment ponds, or alternatively, the replacement of conventional ponds with covered pond systems. Dairy farmers will be able to use the captured emissions to produce heat and electricity, or destroy it through the use of flares.

Project proponents wanting to implement the Methodology Determination must make an application to the Clean Energy Regulator (the Regulator) and meet the eligibility requirements for an offsets project set out in subsection 27 (4) of the Act. These requirements include compliance with the rules set out in this Methodology Determination.

Offsets projects that are undertaken in accordance with the Methodology Determination and approved by the Regulator can generate Australian Carbon Credit Units (ACCUs) that can be sold to:

- Australian companies that pay the carbon price established under the *Clean Energy Act 2011*; and
- businesses in Australia wanting to offset their own carbon pollution.

Public Consultation

The methodology proposal was developed by the Department of Climate Change and Energy Efficiency (the Department) in collaboration with a technical working group made up of representatives from the dairy industry, the Australian Government and State and Territory governments.

The methodology proposal was published on the Department's website for public consultation from 13 June 2012 to 21 July 2012. Stakeholders and members of the public who asked to be listed on the mailing list maintained by the Department were notified of the public consultation period. As a result, five public submissions were received.

The DOIC considered public submissions during its assessment of the methodology proposal, in accordance with subsection 122 (5) of the Act, and endorsed the methodology proposal on 15 November 2012.

Determination Details

The Methodology Determination is a legislative instrument within the meaning of the *Legislative Instruments Act 2003*.

The Methodology Determination commences retrospectively, from 1 July 2010.

Subsection 12 (2) of the *Legislative Instruments Act 2003* provides that, for a legislative instrument to have effect before the date it is registered, it must not adversely affect the rights of any person or impose a liability on any person in respect of anything done or not done before the date of registration. The Methodology Determination does not offend against these requirements. Retrospective application confers a benefit in that it allows persons to apply for and generate ACCUs in circumstances where they would not normally be eligible to apply.

Details of the Methodology Determination are at [Attachment A](#).

A Statement of Compatibility prepared in accordance with the *Human Rights (Parliamentary Scrutiny) Act 2011* is at [Attachment B](#).

Details of the Methodology Determination

Part 1 Preliminary

1.1 Name of Determination

This section provides that the name of the Methodology Determination is the *Carbon Credits (Carbon Farming Initiative) (Destruction of Methane Generated from Dairy Manure in Covered Anaerobic Ponds) Methodology Determination 2012*.

1.2. Commencement

This section provides that the Methodology Determination commences retrospectively, from 1 July 2010. Retrospective commencement is authorised by subsection 122 (3) of the Act.

While the Methodology Determination may apply to projects that were established prior to 1 July 2010, ACCUs can only be issued in respect of abatement which occurs from 1 July 2010. Subsections 27 (15) and (16) of the Act prevent the crediting of abatement before this date.

1.3. Application

The effect of paragraph 106 (1) (a) of the Act is that a Methodology Determination must be expressed to apply to a specific kind of offsets project. This section of the Methodology Determination explains that the instrument applies to a project that involves the capture of biogas generated by the decomposition of manure in the circumstances set out in Part 2 of the Methodology Determination.

The use of anaerobic ponds is a standard method for treating liquid dairy manure. Methane (CH₄) is produced by the anaerobic decomposition of organic matter in the waste, and in the absence of any abatement, is emitted into the atmosphere.

The abatement activity requires the use of covers and gas capture and combustion equipment to existing uncovered treatment ponds or the replacement of conventional ponds with covered pond systems, which is used to capture methane that would otherwise have been emitted.

1.4 Definitions

This section defines a number of terms used in the Methodology Determination. Key definitions include:

- ‘anaerobic decomposition’, which means the biological process where organic matter is broken down by bacteria in the absence of oxygen. This process produces biogas.
- ‘biogas’, which means gas that is generated when bacteria degrade biological material in the absence of oxygen, in a process known as anaerobic decomposition. Biogas is a mixture of gases, primarily methane and carbon dioxide.
- ‘DGAS calculator’, which means the Dairy Greenhouse Gas Abatement Strategies Calculator, Advisor Version 1.4, which is produced by the Tasmanian Institute of Agricultural Research. This calculator is used to determine greenhouse gases emitted

from a dairy production system, and includes the Fecal Methane Worksheet, which is a spreadsheet located within the DGAS Calculator.

- 'DGAS Manual', which means the Dairy Greenhouse Gas Abatement Strategies Manual, Advisor Version 1.4, which is produced by the Tasmanian Institute of Agricultural Research to accompany the DGAS Calculator.

A link to the DGAS Calculator and accompanying manual is available at <http://www.climatechange.gov.au>.

- 'effluent', which means a mixture of water and excreta (manure and urine) resulting from cleaning impervious surfaces around the dairy shed, feed pad or any cow housing. Other materials that are part of the effluent stream include chemicals and residual milk from cleaning equipment, waste feed and bedding, as well as runoff from such areas.

'Effluent and Manure Management Database', which means the the Effluent and Manure Management Database for the Australian Dairy Industry, which is published by Dairy Australia, and available on the Department's website at www.climatechange.gov.au

- 'ponds', which means dams, into which liquid waste or slurry produced during cleaning of dairy milking parlours and/or feeding areas are deposited, stored and treated.
- 'NGER (Measurement) Determination', which means the National Greenhouse and Energy Reporting (Measurement) Determination 2008, made under subsection 10 (3) of the *National Greenhouse and Energy Reporting Act 2007*, as amended from time to time.
- 'NGER Regulations', which means the *National Greenhouse and Energy Reporting Regulations 2008*, as amended from time to time.
- 'volatile solids', which means the portion of the total solids driven off as volatile (combustible) gases when heated at 550 degrees Celsius (+/-50degrees) for at least one hour. Volatile solids represent the organic matter content which could potentially be converted to biogas.

Generally, where terms are not defined in the Methodology Determination, they have the meaning given by section 5 of the Act or in the Regulations. The Act and Regulations are available at <http://www.comlaw.gov.au>.

Part 2 Requirements that must be met for declaration as an eligible offsets project

2.1 Requirements that must be met for an offsets project to be an eligible offsets project

The effect of paragraph 106 (1) (b) of the Act is that a Methodology Determination must set out the requirements that must be met for the offsets project to be an eligible offsets project.

This section of the Methodology Determination explains that the project must consist of the following activities:

- a) using covered ponds to prevent the release of biogas (containing methane);
- b) collecting the biogas from the covered pond; and
- c) combusting the methane component in the biogas to convert it to carbon dioxide.

Ponds used in the project must comply with the standards for construction, operation and maintenance of ponds set out in the Effluent and Manure Management Database for the Australian Dairy Industry. The pond must also have a loading rate of 50 grams of volatile solids per cubic metre of active pond volume per day.

The Effluent and Manure Management Database outlines widely accepted principles for anaerobic pond design. A link to the Effluent and Manure Management Database is available at <http://www.climatechange.gov.au>.

This Methodology Determination applies to dairy production systems only, and covers effluent that originates in the dairy shed and is the usual part of the waste stream for each project. Effluent may include waste from milking operations or feeding operations, but does not include animal products or animal by-products such as abattoir waste.

Covers and gas capture and combustion equipment can be retrofitted to existing ponds within existing dairy production systems, or installed on new ponds within existing dairy production systems or new dairy production systems.

The abatement activity converts methane to carbon dioxide through a process of oxidation during the combustion process. The methane component of the biogas is combusted using one or a combination of the following:

- flares;
- an internal combustion engine; and/or
- a gas boiler.

The calculation of abatement based on methane captured and destroyed during combustion assumes that there is no increase in the amount of methane generated as a consequence of the abatement activity, relative to baseline conditions. To ensure that any potential increase in the amount of methane generated in the pond as a consequence of the abatement activity is not credited as abatement, the amount of methane captured under project conditions is capped at the amount of methane generated under baseline conditions. The amount of methane generated under baseline conditions is estimated using one of the tier methods described in Part 3.

Part 3 Calculating the carbon dioxide equivalent net abatement amount for an eligible offsets project for a reporting period

Division 3.1 Preliminary

3.1 General

The effect of paragraph 106 (1) (b) of the Act is that a Methodology Determination must set out rules for ascertaining the carbon dioxide equivalent net abatement amount for an offsets project. This section of the Methodology Determination sets out the requirements for ascertaining that abatement.

Paragraph 3.1 (2) (a) clarifies that all calculations are in respect of activities done or outcomes achieved during the reporting period for a project, and requires that the data used in calculations must comply with the data collection requirements set out in Division 3.3 of the Methodology Determination.

A number of the calculations require the use of a factor or parameter prescribed in the NGER (Measurement) Determination and the NGER Regulations, both of which are amended from time to time. Subsection 3.1 (3) provides that all calculations performed under Part 3 must use the factor or parameter which is prescribed in the relevant NGER (Measurement) Determination or NGER Regulations in force at the time that the report is required to be submitted. This is the case even if a different value was in effect for the factor or parameter earlier in the reporting period.

For the purpose of this paragraph the factors and values are listed in the following table:

| Factor or Parameter | Reference | Value of Factor or Parameter at 1 December 2012 |
|---|---|--|
| γ | The factor converting cubic metres of methane at standard conditions to tonnes of CO ₂ -e as prescribed in Part 5.2 of the NGER (Measurement) Determination. | $6.784 \times 10^{-4} \times 21$ |
| GWP_{CH₄}¹ | The global warming potential of methane as prescribed in the NGER Regulations 2008. | 21 |

¹ Global Warming Potential is an index that measures the heat absorbing ability and the decay rate of a well mixed greenhouse gas in the atmosphere over a time interval, relative to that of carbon dioxide.

| | | |
|------------------------------------|--|-------------------------------|
| EF_{N₂O} | The emission factor for nitrous oxide (N ₂ O) from landfill biogas that is captured for combustion as prescribed in Schedule 1 of Part 2 of the NGER (Measurement) Determination. | 0.03 kg CO ₂ -e/GJ |
|------------------------------------|--|-------------------------------|

3.2 Greenhouse gas assessment boundary

This section describes the greenhouse gases that need to be assessed in order to determine the total net change in greenhouse gas emissions resulting from a project abatement activity.

Emissions and sources that must be accounted for in the abatement calculations include:

- a) emissions from anaerobically treated waste in project ponds;
- b) fuel used in the process of gas capture and combustion (for example, engines may be used in the operation of flares, as well as in the operation of control and monitoring systems);
- c) emissions from gas capture and combustion via an internal combustion engine and electricity generation system;
- d) emissions from gas capture and combustion via a gas boiler used to heat water or generate steam; and
- e) emissions from gas capture and combustion via flaring.

Figure 1 illustrates the greenhouse gas sources included in the greenhouse gas assessment boundary.

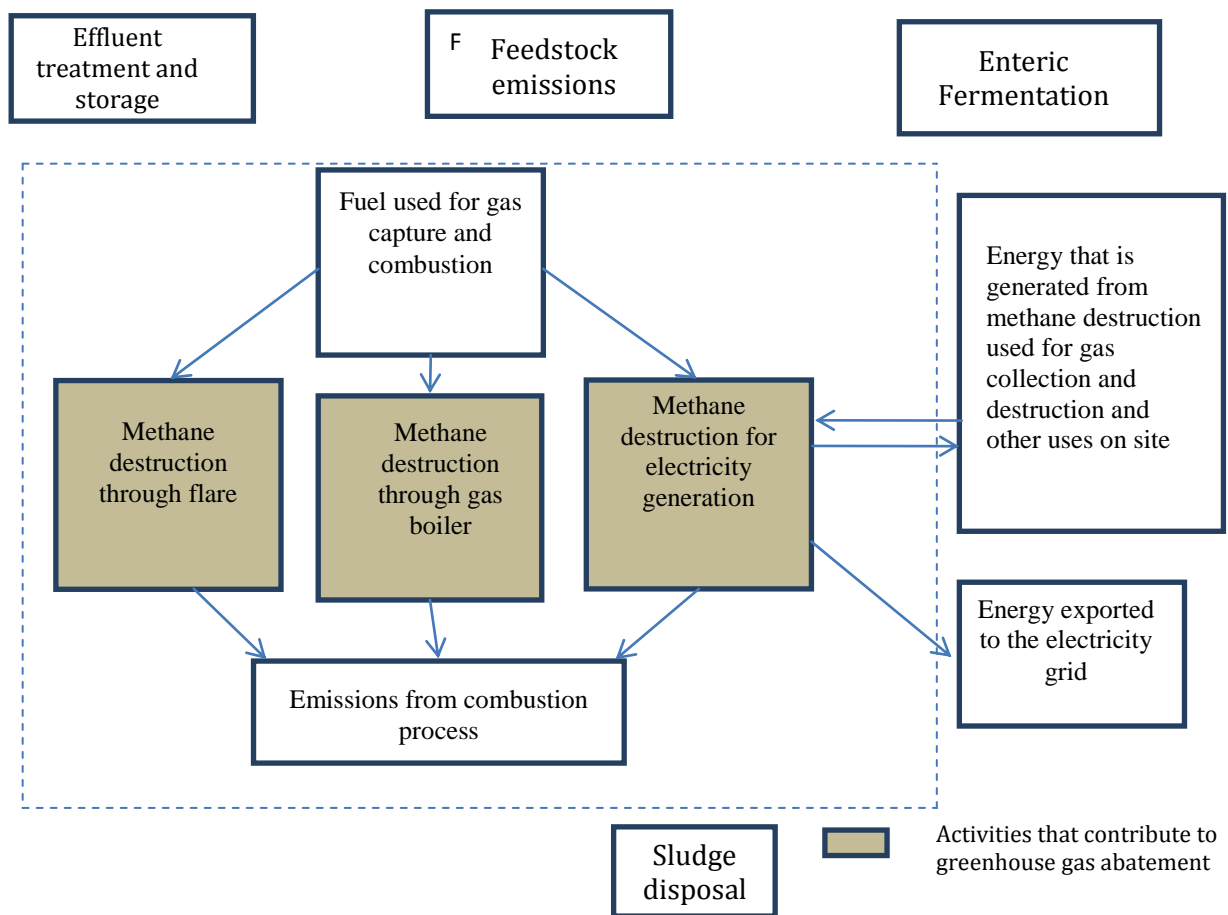


Figure 1: Greenhouse gas assessment boundary

Fugitive emissions are excluded from the greenhouse gas assessment boundary on the grounds that they are not material emissions.

Carbon dioxide emissions associated with the operation of anaerobic treatment ponds are also excluded on the basis that they are considered biogenic. This means that biological capture balances release over a sufficiently short time period so that release of the carbon dioxide can be considered to have no net impact on atmospheric greenhouse gas levels. This is consistent with the Intergovernmental Panel on Climate Change Guidelines for Greenhouse Gas Inventories, which is available at <http://www.ipcc-nggip.iges.or.jp>.

3.3 Calculating the baseline for the project

This section specifies the process for identifying a project baseline as required under paragraph 106 (4) (f) of the Act. The project baseline is the amount of methane that would have been generated and released into the atmosphere from the uncovered ponds included in the project for each year, in the absence of the abatement activity.

The amount of methane that would have been generated and released into the atmosphere from uncovered ponds is calculated based on the amount of volatile solids (VS) in the effluent stream deposited into the ponds in the project. The amount of VS must be calculated using one of three methods outlined in Subdivision 3.2.2 of the Methodology Determination.

Division 3.2 Calculations

Subdivision 3.2.1 Calculating baseline emissions (E_b)

3.4 Calculating the baseline methane emissions

This section sets out the calculation for determining the baseline.

The amount of VS determined using one of the tier methods must then be multiplied by two factors, 'Bo' and 'MCF', in order to calculate the amount of methane generated and released into the atmosphere from uncovered ponds. 'Bo' is the maximum methane producing capacity from volatile solids in dairy production system waste effluent. 'MCF' is the methane conversion factor which reflects that portion of 'Bo' that is achieved under temperature and treatment specifications.

Assumptions

The process for estimating the project baseline assumes that waste treatment and storage practices do not change as a result of the abatement activity. Thus, emissions from fuel use associated with wash-down of effluent and other waste in sheds into ponds, and the operation and maintenance of ponds, are not included in the project baseline.

The process for estimating the project baseline further assumes that the sludge disposal practices are not changed due to the abatement activity. De-sludging involves pumping the sediment from the pond and removing it for drying and in some circumstances processing it (for example, composting) prior to use. The quantity of sludge generated within the covered pond will not exceed the quantity generated in an uncovered pond and therefore the practice itself, and the amount of energy used for de-sludging, will not change as a result of the pond

being covered. For this reason, emissions from fuel use associated with waste disposal are not included in the project baseline.

Subdivision 3.2.2 Calculating volatile solids (VS)

This subdivision sets out the options for calculating the amount of VS entering ponds used in the project. Proponents of a project to which the Methodology Determination applies may elect to use one of the three options for calculating volatile solids.

3.5 Calculating VS using the tier one method

The first tier method is an empirical formula that uses cow milk production, cow liveweight, milking cow numbers and feed digestibility data to estimate VS. That estimate of total VS excretion must then be adjusted to account for any pre-treatment system (before entry of effluent into the pond) and the percentage of time animals spend in areas where effluent is generated and directed to the anaerobic pond system.

The time that milking cows spend in the area that effluent is collected (T_a) can either be measured in accordance with the procedure set out in section 3.14 of the Methodology Determination, or a standard factor 2.4 hours per day may be used.

If other animals (e.g. dry cows and heifers) produce manure effluent that enters the anaerobic pond, proponents may wish to use the tier 2 or tier 3 methods.

3.6 Calculating VS using the tier two method

The second tier method requires the calculation of the annual quantity of volatile solids entering the ponds used in the project in kilograms per year, using Equations 1.4 and 1.5 in accordance with the DGAS Calculator and the DGAS Manual.

Equations 1.4 and 1.5 incorporate some steps performed by the DGAS Calculator.

‘SF’ is the fraction of effluent that remains after removing a portion to spread on land, but before the remainder goes to either pre-treatment or directly into the pond. Where no effluent is removed to spread on land, SF is equal to 1.

Proponents of a project to which the Methodology Determination applies, must use DGAS Advisor version 1.4. A link to this is available at <http://www.dairyingfortomorrow.com> and also on the Department’s website at <http://www.climatechange.gov.au>.

3.7 Calculating VS using the tier three method

The third tier method involves the direct measurement of the amount of VS in the effluent stream for at least one full week in each season of the year. This means that at least four weeks of VS production data (one for each season) need to be obtained.

Subdivision 3.2.3 Calculating the carbon dioxide equivalent net abatement amount

Paragraph 106 (1) (c) of the Act provides that a methodology determination must specify a method for calculating the carbon dioxide equivalent (CO₂-e) net abatement amount for the project in relation to a reporting period.

The carbon dioxide equivalent net abatement amount for an eligible offsets project is set out at Equation 2.1 and is:

- the gross quantity of emissions avoided as a consequence of the project less the emissions from fuel used to operate gas capture and combustion equipment, expressed in tonnes of carbon dioxide equivalence.

The net abatement amount relies on various inputs. Those inputs are arrived at in accordance with the following steps:

1. Step one: calculate the quantity of volatile solids deposited into the project ponds in accordance with 1 of 3 possible methods set out in subdivision 3.3.2.
2. Step two: input the value of VS determined in accordance with step one, to Equation 1.2 in order to determine Q_b, the total volume of methane that would be released to the atmosphere from the operation of the ponds used in the project.
 - Q_b serves two purposes – first it is used to determine the baseline emissions. Second, it is a cap on the total volume of methane that may be destroyed by all relevant combustion device.
3. Step three: calculate the volume of methane destroyed by all relevant combustion devices in cubic metres in accordance with Equation 2.2 and 2.3; this is less than or equal to Q_b. The destroyed methane is the volume of methane sent to the relevant combustion device (calculated in accordance with Equation 2.4) multiplied by the methane destruction efficiency for that device. The volume of methane sent to the relevant combustion device is the volume of biogas sent to the combustion device multiplied by the proportion of biogas that is methane. The methane destruction efficiency is set out in section 3.10.
4. Step four: to arrive at the gross quantity of emissions avoided as a consequence of the project, determine the volume of nitrous oxide emissions released as a result of the methane destruction in accordance with Equation 2.5 and subtract this amount from the number calculated at step three.
5. Step five: determine the emissions from fuel used to operate gas capture and combustion equipment in accordance with equation 4.1. This equation requires the calculation to be repeated for each fuel type (i) and each greenhouse gas (j), which is then summed in accordance with Equation 4.3.
6. Step six: finally, the carbon dioxide equivalent net abatement amount for an eligible offsets project is the amount arrived at step four reduced by the amount arrived at step five.

3.8 Calculating net greenhouse gas abatement (A)

This section sets out the method for calculating abatement. This is calculated as the quantity of methane emissions avoided as a consequence of the project, minus emissions from fuel used to operate the gas capture and combustion equipment

The following equation demonstrates that estimating abatement from methane destroyed is representative of the difference between baseline and project emissions.

$$\begin{aligned}\text{Abatement} &= \text{Greenhouse gas emissions}_{\text{baseline}} - \text{Greenhouse gas emissions}_{\text{project}} \\ &= \text{methane generated} - \text{methane not destroyed (removed)} \\ &= \text{methane destroyed (removed)}\end{aligned}$$

The calculation of abatement based on methane captured and destroyed during combustion assumes that there is no increase in the amount of methane generated as a consequence of the abatement activity, relative to baseline conditions.

To ensure that any potential increase in the amount of methane generated in the pond that is combusted as a consequence of the abatement activity is not credited as abatement, the amount of methane captured under project conditions must be capped at the amount of methane generated under baseline conditions (see section 3.9 of the Methodology Determination).

Any increase in temperature in the covered ponds is unlikely to affect the decomposition of the waste effluent insofar as it would materially affect the carbon dioxide emissions from the sludge component relative to baseline conditions (uncovered ponds). Further, any change in the decomposition dynamics due to increased temperatures in covered ponds would likely result in a more stable sludge which produced lower CO₂ emissions.

The conversion factor from cubic metres of methane to tonnes CO₂-e relies on the conversion factor which is derived at standard conditions (1 atm, 15 °C) (Equation 2.1). The volume of biogas supplied to the combustion device may be measured at standard conditions or must be converted to standard conditions before calculation.

3.9 Capping the volume of methane (Q_b)

This section provides that the volume of methane sent to the combustion device h (Q_{CH₄,h}) must be capped at the value for baseline methane emissions (Q_b). In other words, the volume of methane sent to the combustion device must not be greater than the value for baseline methane emissions.

Q_{CH₄,h} and Q_b must be estimated over the same time period, being a minimum of one year.

3.10 Determining the methane destruction efficiency for a combustion device (DE_h)

This section allows for the application of a default destruction efficiency for open flares, enclosed flares, internal combustion engines and gas boilers. The prescribed default flare destruction efficiency value of 98 per cent is consistent with the values used by other offset schemes. The 98 per cent default value for combustion in an internal combustion engine is derived from research into methane destruction efficiency in internal combustion engines.

Subdivision 3.2.4 Calculating nitrous oxide emissions

3.11 Calculating nitrous oxide emissions (E_{N_2O})

This section provides instructions for measuring the nitrous oxide emissions released as a result of methane destruction.

Equation 2.5 requires input of the amount of capped volume of methane destroyed by combustion device h, as calculated earlier in Equation 2.3.

Subdivision 3.2.5 Calculating emissions combusted in an internal combustion engine

3.12 Quantity of emissions combusted in an internal combustion engine – optional verification methods

For dairy production systems that destroy methane using an internal combustion engine for electricity generation, the destruction efficiency of the internal combustion engine must be measured, and the volume of methane combusted ($Q_{com,h}$) must be calculated using Equation 2.3.

In addition, the volume of methane combusted (Q_{com}) can be verified by using the quantity of methane combusted by an internal combustion engine for electricity generation. This can be calculated based on the sent out generation of megawatt hours of electricity using Equations 3.1 and 3.2.

This is a verification exercise only and the calculated value for $A_{com,ice}$ should not be substituted for Q_{com} in Equation 2.2 or Equation 2.5.

To compare the output of Equation 2.3 with $A_{com,ice}$, project proponents will need to multiply the figure produced at 3.12 (2) (b) by $6.784 \times 10^{-4} \times GWP_{CH_4}$ to convert it to tonnes of CO₂-e.

Subdivision 3.2.6 Calculating emissions from fuel used to operate the gas extraction system in the project (Y_p)

3.13 Calculating emissions from fuel use (Y_p)

This section applies if fuel is used to operate the gas capture and combustion system used in the project to which this Methodology Determination applies.

Calculation of the total emissions from fuel use using Equation 4.1 requires emissions to be calculated for each fuel type and each greenhouse gas type.

Equation 4.3 is calculated as the sum of all emissions that have been calculated using Equation 4.2.

The calculations in this subdivision require the use of factors prescribed in the NGER (Measurement) Determination. Fuel is included, with worked examples, in the National Greenhouse Accounts Factors. These are available at <http://www.climatechange.gov.au/government/initiatives/national-greenhouse-accounts.aspx>

Division 3.3 Data Collection

3.14 Data collection procedures and measurement frequency

The effect of paragraph 106 (3) (c) of the Act is that a methodology determination may require the project proponent of an eligible offsets project to comply with specified record keeping requirements relating to the project. A project proponent for an eligible offsets project who fails to comply with a record-keeping requirement relating to the project will have contravened a civil penalty provision (section 193 of the Act).

The table in section 3.14 lists the data collection methods for deriving the parameters used to calculate greenhouse gas emissions and project abatement. It describes the unit of measurement, measurement procedure and measurement frequency for each parameter used in the calculations.

3.15 Measuring the quantity of biogas sent to combustion device h ($Q_{\text{biogas}, h}$)

This section of the Methodology Determination provides the details required for measuring the volume of biogas sent to a combustion device.

All measurements must be taken in accordance with the *National Measurement Act 1960*, which is available at <http://www.comlaw.gov.au>.

3.16 Measuring the proportion of volume of biogas that is methane (W_{CH_4})

This section includes requirements for the recording of data when measuring the portion of the volume of biogas that is methane.

Proponents of projects undertaken in accordance with the Methodology Determination may choose to use a default value, as prescribed in the NGER (Measurement) Determination, or measure the composition of biogas using an inline gas analyser. Alternatively, project proponents may have samples tested by a NATA accredited laboratory.

NATA is the authority responsible for the accreditation of laboratories, inspection bodies, calibration services, producers of certified reference materials and proficiency testing scheme providers throughout Australia.

Part 4 Monitoring and reporting

Division 4.1 Project monitoring

4.1 Application

The effect of paragraph 106 (3) (d) of the Act is that a Methodology Determination may require the project proponent of an eligible offsets project to comply with specified requirements to monitor a project.

A project proponent for an eligible offsets project who fails to monitor a project in accordance with any monitoring requirements in the Methodology Determination will have contravened a civil penalty provision (section 194 of the Act).

4.2 Quality assurance and quality control

This section sets out requirements relating to inspection and maintenance of monitoring and other technical equipment used in a project.

Division 4.2 Record keeping requirements

The effect of paragraph 106 (3) (c) of the Act is that a Methodology Determination may require the project proponent of an eligible offsets project to comply with specified record keeping requirements relating to a project.

4.3 Information for calculating the baseline

This section specifies the records that must be kept in relation to the baseline for the project. Different record keeping requirements apply, depending on which tier method is used in the project.

4.4 General information

This section specifies the records that must be kept in relation to the project.

4.5 Information about combustion devices

This section outlines the records that must be kept in relation to combustion devices.

4.6 Information about monitoring devices

This section outlines the records that must be kept in relation to monitoring devices used in the project.

4.7 Information about gas composition

This section outlines the records that must be kept in relation to gas composition.

4.8 Information about direct and indirect measurement

This section outlines the records that must be kept in relation to direct and indirect measurement.

Division 4.3 Offsets report requirements

The effect of paragraph 106 (3) (a) of the Act is that a methodology determination may require the project proponent of an eligible offsets project to comply with specified requirements to include information relating to the project in each offsets report about the project.

4.9 Information required in offsets reports

This section sets out this information that must be included in project offsets reports that are submitted to the Clean Energy Regulator.

Under the Act, a project proponent may choose when to report, provided that the period between reports is not shorter than 12 months or longer than 5 years.

Offsets reports are the primary mechanism used by the Regulator to, among other things:

- determine whether or not to issue ACCUs for an eligible project; and
- take action to vary or revoke a project.

Failure to provide an offsets report or taking action to avoid submitting an offsets report to the Regulator is an offence that may attract a civil penalty under section 76 of the Act.

Under the Act, the first reporting period for an eligible offsets project begins when the project is declared eligible by the Regulator or if agreed by the proponent, at another specified date no earlier than 1 July 2010. The project proponent is required to nominate an end date for the reporting period, and must submit an offsets report within three months of the nominated end date. Under the Act, each subsequent reporting period begins immediately after the previous reporting period.

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Carbon Credits (Carbon Farming Initiative) (Destruction of Methane Generated from Dairy Manure in Covered Anaerobic Ponds) Methodology Determination 2012

This Legislative Instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

The *Carbon Credits (Carbon Farming Initiative) (Destruction of Methane Generated from Dairy Manure in Covered Anaerobic Ponds) Methodology Determination 2012* (the Methodology Determination) sets out the detailed rules for implementing and monitoring projects under the Carbon Farming Initiative (CFI) to reduce the methane generated from manure in dairy production systems.

Project proponents who want to implement the Methodology Determination must make an application to the Clean Energy Regulator (the Regulator) and meet the eligibility requirements set out under the *Carbon Credits (Carbon Farming Initiative) Act 2011*. Offsets projects that are approved by the Regulator can generate Australian carbon credit units that can be sold to:

- Australian companies that pay the carbon price established under the Clean Energy legislation when implemented; and
- businesses in Australia and overseas wanting to offset their own carbon pollution.

Human rights implications

This Legislative Instrument does not engage any of the applicable rights or freedoms.

Conclusion

This Legislative Instrument is compatible with human rights as it does not raise any human rights issues.

Mark Dreyfus, Parliamentary Secretary for Climate Change and Energy Efficiency