Carbon Credits (Carbon Farming Initiative) Methodology (Coal Mine Waste Gas) Determination 2014

I, Greg Hunt, Minister for the Environment, make the following determination.

Dated 2014

Greg Hunt [DRAFT ONLY—NOT FOR SIGNATURE]
Minister for the Environment
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Part 1—Preliminary

1 Name of determination

This determination is the Carbon Credits (Carbon Farming Initiative) Methodology (Coal Mine Waste Gas) Determination 2014.

2 Commencement

This determination commences on the day after it is registered.

3 Authority

This determination is made under subsection 106(1) of the Carbon Credits (Carbon Farming Initiative) Act 2011.

4 Duration

This determination remains in force for the period that:

(a) begins when this determination commences; and

(b) ends on the day before this determination would otherwise be repealed under subsection 50(1) of the Legislative Instruments Act 2003.

5 Definitions

In this determination:

Act means the Carbon Credits (Carbon Farming Initiative) Act 2011.

carbon mine waste gas means a substance:

(a) that consists of:

(i) naturally occurring hydrocarbons; or

(ii) a naturally occurring mixture of hydrocarbons and non-hydrocarbons; and

(b) that:

(i) is drained from a coal mine that is covered by a lease (however described) that authorises coal mining; or

(ii) is drained from a closed mine that is, or was, covered by a lease (however described) that authorises, or authorised coal mining; or

(iii) is conveyed in a ventilation air shaft or duct to the surface of a coal mine that is covered by a lease (however described) that authorises coal mining; or

(iv) is conveyed in a ventilation air shaft or duct to the surface of a closed mine that is, or was, covered by a lease (however described) that authorises, or authorised coal mining.

coal mine waste gas project: see section 9.
coal seam methane means a substance that:
   (a) consists of:
       (i) naturally occurring hydrocarbons; or
       (ii) a naturally occurring mixture of hydrocarbons and non-hydrocarbons;
   and
   (b) consists mainly of methane; and
   (c) is drained from a coal seam; and
   (d) is not coal mine waste gas; and
   (e) has not been injected into a natural gas supply pipeline.

decommissioned underground coal mine means an underground coal mine where the following activities have not occurred for at least 12 months and are not expected to occur in the future:
   (a) coal production;
   (b) drainage of methane from the mine (including pre-draining activities);
   (c) active mine ventilation, including the operation of ventilation fans at the mine.

destroyed means combusted or oxidised.
destruction device means a flaring device or an electricity production device.
displacement electricity production project means a project that meets the requirements of section 15.
electricity production device means a methane destruction device that produces electricity.
existing electricity production device for a coal mine waste gas project means an electricity production device that existed, during all or part of the period between 24 April 2014 and the time of application for declaration of the project as an eligible offsets project, at a location where some of the methane component of coal mine waste gas from the mine has been destroyed.
existing flaring device for a coal mine waste gas project means a flaring device that existed, during all or part of the period between 24 April 2014 and the time of application for declaration of the project as an eligible offsets project, at a location where some of the methane component of coal mine waste gas from the mine has been destroyed.
existing regulatory obligation: see section 6.
expansion electricity production project means a project that meets the requirements of section 14.
expansion flaring project means a project that meets the requirements of section 12.
flaring means the destruction of fuel for a purpose other than producing energy.
flaring device means a methane destruction flaring device but does not include a methane destruction flaring device that is directly associated with the operation of an electricity production device.

historic abatement: see section 33.

integrated monitoring device: see section 8.

material abatement: see section 7.

monitoring requirements means the requirements set out in Division 3 of Part 5.

National Electricity Rules means the National Electricity Rules, as in force from time to time, made under the National Electricity Law set out in the Schedule to the National Electricity (South Australia) Act 1996 (SA).

network support and control ancillary services has the same meaning as in the National Electricity Rules.

new electricity production project means a project that meets the requirements of section 13.

new flaring project means a project that meets the requirements of section 11.

NGA Factors document means the document entitled “National Greenhouse Accounts Factors”, published by the Department and as in force from time to time.


NGER Regulations means the National Greenhouse and Energy Reporting Regulations 2008.

NGER report means a report provided under section 19 or 22G of the National Greenhouse and Energy Reporting Act 2007.

operating: a device is operating if it is destroying, or monitoring the destruction of, the methane component of coal mine waste gas in accordance with:
(a) the manufacturer’s specifications for the device; and
(b) the monitoring requirements.

recognised capacity for a device in a period, means:
(a) for a flaring device—the maximum volume of the methane component of coal mine waste gas capable of being destroyed by operating the device in the period estimated in accordance with the monitoring requirements; or
(b) for an electricity production device—the maximum amount of electricity capable of being produced from the destruction of the methane component of coal mine waste gas by operating the device in the period estimated in accordance with the monitoring requirements.
Part 1 Preliminary

Section 6

_underground coal mine_ means a mine that allows the extraction of coal by mining at depth, after entry by shaft, adit or drift, without the removal of overburden.

6 Meaning of existing regulatory obligation

A coal mine lease holder has an _existing regulatory obligation_ to destroy the methane component of coal mine waste gas drawn from an operating underground coal mine in relation to a coal mine waste gas project if at the time of application for the declaration of the project as an eligible offsets project:

(a) the destruction is required by a law of a State or Territory; or

(b) a law of a State or Territory prohibits the release of the gas from the mine without destruction.

7 Meaning of material abatement

If the historic abatement from the destruction of the methane component of coal mine waste gas from a mine worked out under section 33 is greater than 5,000 tonnes of CO$_2$-e, there has been _material abatement_ from the destruction of the methane component of coal mine waste gas from the mine.

8 Meaning of integrated monitoring device

(1) An _integrated monitoring device_ is a device that simultaneously monitors:

(a) the volume of methane from coal mine waste gas sent to a device for destruction; and

(b) a device that monitors whether the destruction device is operating.

(2) However, the manufacturer’s specifications for the device must equal or exceed the cumulative specifications of:

(a) a device that monitors the volume of methane from coal mine waste gas sent to a device for destruction; and

(b) a device that monitors whether the destruction device is operating.

Note: _Operating_ is defined in section 5.
Part 2—Coal mine waste gas projects

9 Coal mine waste gas projects

(1) For paragraph 106(1)(a) of the Act, this determination applies to an offsets project that:
   (a) destroys some or all of the methane component of coal mine waste gas drawn from an operating underground coal mine by installing and operating one or more of the following:
       (i) a flaring device;
       (ii) an electricity production device; and
   (b) does not involve the capture or use of coal seam methane; and
   (c) does not involve the capture or use of coal mine waste gas drawn from a decommissioned underground coal mine.

(2) A project covered by subsection (1) is a coal mine waste gas project.
Part 3—Project requirements

Division 1—General requirements

10 Operation of this Division

For paragraph 106(1)(b) of the Act, this Division sets out requirements that must be met for a coal mine waste gas project to be an eligible offsets project.

11 Requirements for a new flaring project

(1) For a project that installs and operates a flaring device to be declared an eligible offsets project there must have been no material abatement from the destruction of the methane component of coal mine waste gas from the mine at the time of application for the declaration of the project as an eligible offsets project.

(2) Subsection (1) is satisfied if:
   (a) for previous financial years the NGER reports relating to the mine show there has been no such material abatement; and
   (b) for the financial year in which the application is made—a declaration that no such material abatement has occurred.

12 Requirements for an expansion flaring project

For a project that installs and operates a flaring device to be declared an eligible offsets project:
   (a) some of the methane component of coal mine waste gas from the mine must have been destroyed; and
   (b) the proponent must have provided a statement as to:
      (i) the sum of the recognised capacity of all existing flaring devices and existing electricity production devices for the coal mine waste gas project at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project
      (ii) the recognised capacity of each existing device at that point.

13 Requirements for a new electricity production project

(1) For a project that installs and operates an electricity production device to be declared an eligible offsets project there must have been no material abatement from the destruction of the methane component of coal mine waste gas from the mine at the time of application for the declaration of the project as an eligible offsets project.

(2) Subsection (1) is satisfied if:
(a) for previous financial years the NGER reports relating to the mine show there has been no such destruction; and
(b) for the financial year in which the application is made—a declaration that no such material abatement has occurred.

14 Requirements for an expansion electricity production project

For a project that installs and operates an electricity production device that produces electricity to be declared an eligible offsets project:
(a) some of the methane component of coal mine waste gas from the mine must have been destroyed; and
(b) the proponent must have provided a statement as to:
   (i) the sum of the recognised capacity of all existing flaring devices and existing electricity production devices for the coal mine waste gas project at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project
   (ii) the recognised capacity of each existing device at that point.

15 Requirements for a displacement electricity production project

For a project that installs and operates an electricity production device to be declared an eligible offsets project:
(a) some of the methane component of coal mine waste gas from the mine must have been destroyed by one or more flaring devices; and
(b) if some of the methane component of coal mine waste gas from the mine has also been destroyed by one or more existing electricity production devices, the proponent must have provided a statement as to:
   (i) the sum of the recognised capacity of all existing electricity production devices for the coal mine waste gas project at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project
   (ii) the recognised capacity of each existing device at that point.
Section 16

Division 2—Additionality requirements

16 Requirements in lieu of regulatory additionality requirement

For subparagraph 27(4A)(b)(ii) of the Act, a requirement in lieu of the regulatory additionality requirement for a coal mine waste gas project is that the coal mine lease holder must have no existing regulatory obligation to destroy the methane component of coal mine waste gas from the mine.
Part 4—Net abatement amounts

Division 1—Operation of this Part

17 Operation of this Part

For paragraph 106(1)(c) of the Act, this Part specifies methods for working out the carbon dioxide equivalent net abatement amount for a reporting period for a coal mine waste gas project.

18 Overview of gases accounted for in abatement calculations

The following table provides an overview of the greenhouse gases and emissions sources that are relevant to working out the carbon dioxide equivalent net abatement amount for a coal mine waste gas project.

<table>
<thead>
<tr>
<th>Item</th>
<th>Relevant emissions calculation</th>
<th>Emissions source</th>
<th>Greenhouse gas</th>
</tr>
</thead>
</table>
| 1    | Project emissions              | Fuel consumption | Carbon dioxide (CO₂)  
|      |                                |                  | Methane (CH₄)      
|      |                                |                  | Nitrous oxide (N₂O) |
| 2    | Project emissions              | Methane destruction | Carbon dioxide (CO₂)  
|      |                                |                  | Methane (CH₄)      
|      |                                |                  | Nitrous oxide (N₂O) |
| 3    | Project emissions              | Unburned methane | Methane (CH₄)      |

19 References to factors and parameters from external sources

(1) If a calculation in this Part includes a factor or parameter that is defined by reference to another instrument or writing, the factor or parameter to be used for a reporting period is the factor or parameter referred to in the instrument or writing as in force on the earlier of the following days:
   (a) the day the offsets report for the reporting period is given to the Regulator; 
   (b) the day that report is required to be given to the Regulator.

(2) Subsection (1) does not apply to a parameter that is required to be worked out in accordance with the monitoring requirements.
Part 4  Net abatement amounts  
Division 2  New flaring project method

Section 20

Division 2—New flaring project method

20 Net abatement amount

(1) The carbon dioxide equivalent net abatement amount \( (A_{net}) \) for a new flaring project for the reporting period, in tonnes CO\(_2\)-e, is worked out:

(a) if there has been no historic abatement—using subsection (2); or

(b) if there has been historic abatement that is not material abatement—using subsection (3).

No historic abatement

(2) The carbon dioxide equivalent net abatement amount \( (A_{net}) \) for the new flaring project for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 1):

\[
A_{net} = A_p
\]

where:

\( A_{net} \) means the carbon dioxide equivalent net abatement amount for the new flaring project for the reporting period, in tonnes CO\(_2\)-e.

\( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e, worked out using equation 3.

Historic abatement that is not material abatement

(3) The carbon dioxide equivalent net abatement amount \( (A_{net}) \) for the new flaring project for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 2):

\[
A_{net} = A_p - A_{hist} \times \frac{T}{365}
\]

where:

\( A_{net} \) means the carbon dioxide equivalent net abatement amount for the new flaring project for the reporting period, in tonnes CO\(_2\)-e.

\( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e, worked out using equation 3.

\( A_{hist} \) means the historic abatement from the destruction of the methane component of coal mine waste gas from the mine, in tonnes CO\(_2\)-e, worked out under section 33.

\( T \) means the total number of days in the reporting period.

(4) The project emissions abated \( (A_p) \) for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 3):
\[ A_p = M_{\text{com}} - \left( E_{\text{MD}} + E_{\text{AN}} \right) \]

where:

- \( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e.
- \( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 4.
- \( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 5.
- \( E_{\text{AN}} \) means the ancillary project emissions for the reporting period, in tonnes CO\(_2\)-e, worked out under section 34.

(5) The volume of the methane component of coal mine waste gas destroyed by the project \( (M_{\text{com}}) \) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 4):

\[ M_{\text{com}} = \gamma \times DE \times \sum_h Q_{\text{CH}_4,h} \]

where:

- \( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.
- \( \gamma \) means the factor for converting a quantity of methane from cubic metres to tonnes CO\(_2\)-e in section 3.21 of the NGER (Measurement) Determination.
- \( DE \) has the value of 0.98.

Note: This is the default methane destruction efficiency for a destruction device.

\( Q_{\text{CH}_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \( (h) \) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or
(b) if the proponent uses an integrated monitoring device—using that device.

(6) The emissions from the methane component of coal mine waste gas destroyed by the project \( (E_{\text{MD}}) \) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 5):

\[ E_{\text{MD}} = \sum_h \sum_j E_{\text{MD},h,j} \]

where:

\( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.
Part 4  Net abatement amounts
Division 2  New flaring project method

Section 21

\( E_{MD,h,j} \) means the emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes CO\(_2\)-e, worked out under section 22.

21 Volume of methane destroyed

(1) The volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project \((Q_{CH_4,h})\) in the reporting period, in cubic metres is worked out using the formula (equation 6):

\[
Q_{CH_4,h} = \sum Q_{CH_4,h,t} \times O_{h,t}
\]

where:

\( Q_{CH_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres.

\( Q_{CH_4,h,t} \) means the volume of the methane component of coal mine waste gas sent to be destroyed by device \((h)\) as part of the project during time interval \((t)\), in cubic metres, estimated in accordance with the AAA criterion in Division 2.3.6 of the NGER (Measurement) Determination.

\( O_{h,t} \) means a binary function which has the value 1 if the device is operating during time interval \((t)\) and 0 for all other times.

Note:  Operating is defined in section 5.

(2) The summation in this equation is to be performed over all time intervals \((t)\) in the reporting period and over all devices \((h)\) that are part of the project.

22 Emissions

(1) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes CO\(_2\)-e, is worked out using one of the options in subsections (3), (4), (5) and (8).

(2) However, the same option must be used to work out emissions for all devices that are part of the project and:

(a) if the option in subsection (4) is used in a reporting period, then only an option in subsection (4), (5) or (8) may be used in the next reporting period; and

(b) if the option in subsection (5) is used in a reporting period, then only an option in subsection (5) or (8) may be used in the next reporting period; and

(c) if the option in subsection (8) is used in a reporting period, then only that option may be used in any subsequent reporting period.
Option 1

(3) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes CO\(_2\)-e, may be worked out using the formula \((equation\ 7)\):

\[
E_{MD,h,j} = \frac{Q_{CMWG,h} \times EC_{CMWG} \times EF_j}{1000} \times OF_{fl}
\]

where:

\(E_{MD,h,j}\) means the emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes CO\(_2\)-e.

\(Q_{CMWG,h}\) means the volume of coal mine waste gas destroyed by device \((h)\) in the reporting period estimated in accordance with Division 2.3.6 of the NGER (Measurement) Determination, in cubic metres.

\(EC_{CMWG}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\(EF_j\) means the emission factor for gas type \((j)\) released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO\(_2\)-e per gigajoule.

\(OF_{fl}\) has the value of 0.98/0.995.

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

Option 2

(4) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes CO\(_2\)-e, may be worked out using the formula \((equation\ 8)\):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j}{1000} \times OF_{fl}
\]

where:

\(E_{MD,h,j}\) means the emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes CO\(_2\)-e.

\(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or
(b) if the proponent uses an integrated monitoring device—using that device.

\[ EC_{CMWG} \] means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\[ EF_j \] means the emission factor for gas type \( j \) released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO\(_2\)-e per gigajoule.

\[ OF_{fl} \] has the value of \( 0.98/0.995 \).

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

Option 3

(5) The emissions of gas \( (j) \) released from the destruction of the methane component of coal mine waste gas by device \( (h) \) as part of the project \( (E_{MD,h,j}) \) in the reporting period, in tonnes CO\(_2\)-e, may be worked out using subsections (6) and (7).

(6) The emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \( (h) \) as part of the project \( (E_{MD,h,CO_2}) \) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 9):

\[
E_{MD,h,CO_2} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_i}{1000} \times OF_{fl}
\]

where:

\( E_{MD,h,CO_2} \) means the emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \( (h) \) as part of the project in the reporting period, in tonnes CO\(_2\)-e.

\( Q_{CH_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \( (h) \) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

\( EC_{CMWG} \) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\( EF_i \) means the emission factor for methane released from the destruction of the methane component coal mine waste gas estimated in accordance with Division 2.3.4 of the NGER (Measurement) Determination, in kilograms of CO\(_2\)-e per gigajoule.

\( OF_{fl} \) has the value of \( 0.98/0.995 \).
Note: This is the correction factor for the oxidation of coal mine waste gas flared.

(7) The emissions of methane or nitrous oxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes \(\text{CO}_2\)-e, is worked out using the formula (equation 10):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j \times OF_{fl}}{1000}
\]

where:

\(E_{MD,h,j}\) means the emissions of gas type \((j)\), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes \(\text{CO}_2\)-e.

\(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

\(EC_{CMWG}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\(EF_j\) means the emission factor of gas type \((j)\), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of \(\text{CO}_2\)-e per gigajoule.

\(OF_{fl}\) has the value of 0.98/0.995.

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

Option 4

(8) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,CO_2})\) in the reporting period, in tonnes \(\text{CO}_2\)-e, may be worked out using subsections (9) and (10).

(9) The emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,CO_2})\) in the reporting period, in tonnes \(\text{CO}_2\)-e, is worked out using the formula (equation 11):

\[
E_{MD,h,CO_2} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_{CO_2} \times OF_{fl}}{1000}
\]

where:
Part 4 Net abatement amounts
Division 2 New flaring project method

Section 22

$E_{MD,h,CO_2}$ means the emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device ($h$) as part of the project in the reporting period, in tonnes CO$_2$-e.

$Q_{CH_4,h}$ means the volume of the methane component of coal mine waste gas destroyed by device ($h$) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

$EC_{CMWG}$ means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

$EF_j$ means the emission factor for methane released from the destruction of the methane component of coal mine waste gas estimated in accordance with Division 2.3.4 of the NGER (Measurement) Determination, in kilograms of CO$_2$-e per gigajoule.

$OF_{fl}$ has the value of 0.98/0.995.

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

(10) The emissions of methane or nitrous oxide released from the destruction of the methane component of coal mine waste gas by device ($h$) as part of the project ($E_{MD,h,j}$) in the reporting period, in tonnes CO$_2$-e, is worked out using the formula (equation 12):

$$E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j}{1000} \times OF_{fl}$$

where:

$E_{MD,h,j}$ means the emissions of gas type ($j$), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas by device ($h$) as part of the project in the reporting period, in tonnes CO$_2$-e.

$Q_{CH_4,h}$ means the volume of the methane component of coal mine waste gas destroyed by device ($h$) as part of the project in the reporting period, in cubic metres worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

$EC_{CMWG}$ means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

$EF_j$ means the emission factor of gas type ($j$), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO$_2$-e per gigajoule.
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$OF_h$ has the value of 0.98/0.995.

Note: This is the correction factor for the oxidation of coal mine waste gas flared.
Division 3—Expansion flaring project method

23 Net abatement amount

(1) The carbon dioxide equivalent net abatement amount \( A_{\text{net}} \) for an expansion flaring project for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 13):

\[
A_{\text{net}} = A_p
\]

where:

- \( A_{\text{net}} \) means the carbon dioxide equivalent net abatement amount for the expansion flaring project for the reporting period, in tonnes CO\(_2\)-e.
- \( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e, worked out using equation 14.

(2) The project emissions abated \( (A_p) \) for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 14):

\[
A_p = M_{\text{com}} - \left( E_{\text{MD}} + E_{\text{AN}} \right)
\]

where:

- \( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e.
- \( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 15.
- \( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 16.
- \( E_{\text{AN}} \) means the ancillary project emissions for the reporting period, in tonnes CO\(_2\)-e, worked out under section 34.

(3) The volume of the methane component of coal mine waste gas destroyed by the project \( (M_{\text{com}}) \) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 15):

\[
M_{\text{com}} = \gamma \times \text{DE} \times Q_{\text{CH}_4}
\]

where:

- \( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.
- \( \gamma \) means the factor for converting a quantity of methane from cubic metres to tonnes CO\(_2\)-e in section 3.21 of the NGER (Measurement) Determination.
- \( \text{DE} \) has the value of 0.98.
Note: This is the default methane destruction efficiency for a destruction device.

\( Q_{CH_4} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in cubic metres, worked out under section 24.

(4) The emissions from the methane component of coal mine waste gas destroyed by the project (\( E_{MD} \)) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (\textit{equation 16}):

\[
E_{MD} = \sum_h \sum_j E_{MD,h,j}
\]

where:

\( E_{MD} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.

\( E_{MD,h,j} \) means the emissions of gas (\( j \)) released from the destruction of the methane component of coal mine waste gas by device (\( h \)) as part of the project in the reporting period, in tonnes CO\(_2\)-e, worked out under section 25.

24 Volume of methane destroyed

(1) The volume of the methane component of coal mine waste gas destroyed by the project (\( Q_{CH_4} \)) in the reporting period, in cubic metres, is worked out using the following formula (\textit{equation 17}):

\[
Q_{CH_4} = \sum_i \text{Maximum}\left[ X_{fl,t} + X_{gen,t}, 0 \right]
\]

where:

\( Q_{CH_4} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in cubic metres.

\( X_{fl,t} \) means the volume of the methane component of coal mine waste gas destroyed by all flaring devices during time interval (\( t \)) less the recognised capacity of existing flaring devices, in cubic metres, worked out using equation 18.

\( X_{gen,t} \) means the volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval (\( t \)) less the recognised capacity of existing electricity production devices, in cubic metres, worked out using equation 19.

Methane destroyed by flaring devices

(2) The volume of the methane component of coal mine waste gas destroyed by all flaring devices during time interval (\( t \)) less the recognised capacity of existing flaring devices (\( X_{fl,t} \)), in cubic metres, is worked out using the formula (\textit{equation 18}):

\[
X_{fl,t} = \sum_h Q_{\text{exp},h} \times O_{h,t} - \sum_m Q_{\text{exp,m}} \times AF_{t,m}
\]
where:

$X_{ft,t}$ means the volume of the methane component of coal mine waste gas destroyed by all flaring devices during time interval $(t)$ less the recognised capacity of existing flaring devices, in cubic metres.

$Q_{CU,h,t}$ means the volume of the methane component of coal mine waste gas sent to be destroyed by device $(h)$ as part of the project during time interval $(t)$ estimated in accordance with the AAA criterion in Division 2.3.6 of the NGER (Measurement) Determination, in cubic metres.

$O_{h,t}$ means a binary function which has the value 1 if the device is operating during time interval $(t)$ and 0 for all other times.

Note: Operating is defined in section 5.

$Q_{fl,cap,m}$ means the recognised capacity of existing flaring device $(m)$ during time interval $(t)$, in cubic metres.

$AF_{fl,m}$ means the annual availability factor of flaring device $(m)$ which is either:

(a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or

(b) the default value of 1.

(3) The summation over $(h)$ in equation 18 is to be performed over:

(a) all existing flaring devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project; and

(b) all devices installed as part of the project.

(4) The summation over $(m)$ in equation 18 is to be performed over all existing flaring devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project.

Note: The summation over $(m)$ results in a fixed quantity and is the same for all equal time intervals $(t)$.

Methane destroyed by electricity production devices

(5) The volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval $(t)$ less the recognised capacity of existing electricity production devices $(X_{gen,t})$, in cubic metres, worked out using the formula (equation 19):

$$X_{gen,t} = \sum_{m} \frac{Q_{gen,m}}{Eff_{m}} \times \frac{F_{MWh\rightarrow GI}}{EC_{CMWG}} - \sum_{m} \frac{Q_{gen,cap,m}}{Eff_{m}} \times \frac{F_{MWh\rightarrow GI}}{EC_{CMWG}} \times AF_{gen,m}$$

where:
\(X_{\text{gen},t}\) means the volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval \((t)\) less the recognised capacity of existing electricity production devices, in cubic metres.

\(Q_{\text{el,m},t}\) means the quantity of electricity produced by device \((m)\) during time interval \((t)\) estimated in accordance with Part 6.1 of the NGER (Measurement) Determination, in megawatt hours.

\(F_{\text{MWh}\rightarrow\text{GJ}}\) has the value of 3.6.

Note: This is the factor converting energy in megawatt hours to gigajoules.

\(E_{\text{ff},m}\) means the electrical efficiency of device \((m)\) which is either:

(a) the value specified by the manufacturer of the device in the technical specifications for the equipment with reference to Australian Standard AS 4594.1 or equivalent; or

(b) the default value of 0.36.

\(EC_{\text{CMWG}}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\(Q_{\text{gen, cap},m}\) means the recognised capacity of existing electricity production device \((m)\) during time interval \((t)\), in megawatt hours.

\(AF_{\text{gen},m}\) means the annual availability factor of electricity production device \((m)\) which is either:

(a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or

(b) the default value of 1.

(6) The summation over \((m)\) in equation 19 is to be performed over all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project.

Note: The summation over \((m)\) results in a fixed quantity and is the same for all equal time intervals \((t)\).

(7) If the value of \(X_{\text{gen},t}\) is greater than zero for time interval \((t)\), then the value of \(X_{\text{gen},t}\) is taken to be zero for the time interval.

25 Emissions

(1) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{\text{MD,h,j}})\) in the reporting period, in tonnes CO\(_2\)-e, is worked out using one of the options in subsections (3), (4), (5) and (8).

(2) However, the same option must be used to work out emissions for all devices that are part of the project and:
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(a) if the option in subsection (4) is used in a reporting period, then only an option in subsection (4), (5) or (8) may be used in the next reporting period; and

(b) if the option in subsection (5) is used in a reporting period, then only an option in subsection (5) or (8) may be used in the next reporting period; and

(c) if the option in subsection (8) is used in a reporting period, then only that option may be used in any subsequent reporting period.

Option 1

(3) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes \(\text{CO}_2\text{-e}\), may be worked out using the formula (equation 20):

\[
E_{MD,h,j} = \frac{Q_{CMWG,h} \times EC_{CMWG} \times EF_j \times OF_{fl}}{1000}
\]

where:

- \(E_{MD,h,j}\) means the emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes \(\text{CO}_2\text{-e}\).
- \(Q_{CMWG,h}\) means the volume of coal mine waste gas destroyed by device \((h)\) in the reporting period estimated in accordance with Division 2.3.6 of the NGER (Measurement) Determination, in cubic metres.
- \(EC_{CMWG}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.
- \(EF_j\) means the emission factor for gas type \((j)\) released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms \(\text{CO}_2\text{-e}\) per gigajoule.

\(OF_{fl}\) has the value of 0.98/0.995.

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

Option 2

(4) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes \(\text{CO}_2\text{-e}\), may be worked out using the formula (equation 21):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j \times OF_{fl}}{1000}
\]
where:

\( E_{MD,h,j} \) means the emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes CO\(_2\)-e.

\( Q_{CH_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or
(b) if the proponent uses an integrated monitoring device—using that device.

\( EC_{CMWG} \) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\( EF_j \) means the emission factor for gas type \((j)\) released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO\(_2\)-e per gigajoule.

\( OF_r \) has the value of \(0.98/0.995\).

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

Option 3

(5) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes CO\(_2\)-e, may be worked out using subsections (6) and (7).

(6) The emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,CO_2})\) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula \((equation \ 22)\):

\[
E_{MD,h,CO_2} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j}{1000} \times OF_r
\]

where:

\( E_{MD,h,CO_2} \) means the emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes CO\(_2\)-e.

\( Q_{CH_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or
(b) if the proponent uses an integrated monitoring device—using that device.
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EC<sub>CMWG</sub> means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

EF<sub>j</sub> means the emission factor for methane released from the destruction of the methane component of coal mine waste gas estimated in accordance with Division 2.3.3 of the NGER (Measurement) Determination, in kilograms of CO<sub>2</sub>-e per gigajoule.

OF<sub>f</sub> has the value of 0.98/0.995.

Note:  This is the correction factor for the oxidation of coal mine waste gas flared.

(7)  The emissions of methane or nitrous oxide released from the destruction of the methane component of coal mine waste gas by device (h) as part of the project (E<sub>MD,h,j</sub>) in the reporting period, in tonnes CO<sub>2</sub>-e, is worked out using the formula (equation 23):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_j}{1000} \times OF_f
\]

where:

E<sub>MD,h,j</sub> means the emissions of gas type (j), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas by device (h) as part of the project in the reporting period, in tonnes CO<sub>2</sub>-e.

Q<sub>CH_4,h</sub> means the volume of the methane component of coal mine waste gas destroyed by device (h) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

EC<sub>CMWG</sub> means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

EF<sub>j</sub> means the emission factor of gas type (j), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO<sub>2</sub>-e per gigajoule.

OF<sub>f</sub> has the value of 0.98/0.995.

Note:  This is the correction factor for the oxidation of coal mine waste gas flared.

Option 4

(8)  The emissions of gas (j) released from the destruction of the methane component of coal mine waste gas by device (h) as part of the project (E<sub>MD,h,j</sub>) in the reporting period, in tonnes CO<sub>2</sub>-e, may be worked out using subsections (9) and (10).
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(9) The emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,CO_2})\) in the reporting period, in tonnes \(\text{CO}_2\text{-e}\), is worked out using the formula (equation 24):

\[
E_{MD,h,CO_2} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_k}{1000} \times OF_{fl}
\]

where:

\(E_{MD,h,CO_2}\) means the emissions of carbon dioxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes \(\text{CO}_2\text{-e}\).

\(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.

\(EC_{CMWG}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\(EF_k\) means the emission factor for methane released from the destruction of the methane component of coal mine waste gas estimated in accordance with in Division 2.3.4 of the NGER (Measurement) Determination, in kilograms of \(\text{CO}_2\text{-e}\) per gigajoule.

\(OF_{fl}\) has the value of \(0.98/0.995\).

Note: This is the correction factor for the oxidation of coal mine waste gas flared.

(10) The emissions of methane or nitrous oxide released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes \(\text{CO}_2\text{-e}\), is worked out using the formula (equation 25):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_k}{1000} \times OF_{fl}
\]

where:

\(E_{MD,h,j}\) means the emissions of gas type \((j)\), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project in the reporting period, in tonnes \(\text{CO}_2\text{-e}\).

\(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 21; or

(b) if the proponent uses an integrated monitoring device—using that device.
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\[ EC_{CMWG} \] means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

\[ EF_j \] means the emission factor of gas type \((j)\), being methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in kilograms of CO\(_2\)-e per gigajoule.

\[ OF_{fl} \] has the value of \(0.98/0.995\).

Note: This is the correction factor for the oxidation of coal mine waste gas flared.
Division 4—New electricity production project method

26 Net abatement amount

(1) The carbon dioxide equivalent net abatement amount \( (\text{A}_\text{net}) \) for a new electricity production project for the reporting period, in tonnes CO\(_2\)-e, is worked out:

(a) if there has been no historic abatement—using subsection (2); or

(b) if there has been historic abatement that is not material abatement—using subsection (3).

No historic abatement

(2) The carbon dioxide equivalent net abatement amount for the new electricity production project for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 26):

\[
\text{A}_\text{net} = \text{A}_p + \text{A}_G
\]

where:

\( \text{A}_\text{net} \) means the carbon dioxide equivalent net abatement amount for the new electricity production project, for the reporting period, in tonnes CO\(_2\)-e.

\( \text{A}_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e, worked out using equation 28.

\( \text{A}_G \) means the displaced grid emissions from electricity production in the reporting period, in tonnes CO\(_2\)-e, worked out under section 35.

Historic abatement that is not material abatement

(3) The carbon dioxide equivalent net abatement amount \( (\text{A}_\text{net}) \) for the new electricity production project for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 27):

\[
\text{A}_\text{net} = \text{A}_p + \text{A}_G - \text{A}_\text{hist} \times \frac{T}{365}
\]

where:

\( \text{A}_\text{net} \) means the carbon dioxide equivalent net abatement amount for the new electricity production project for the reporting period, in tonnes CO\(_2\)-e.

\( \text{A}_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e, worked out using equation 28.

\( \text{A}_G \) means the displaced grid emissions from electricity production in the reporting period, in tonnes CO\(_2\)-e, worked out under section 35.

\( \text{A}_\text{hist} \) means the historic abatement from the destruction of the methane component of coal mine waste gas from the mine, in tonnes CO\(_2\)-e, worked out under section 33.
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\( T \) means the total number of days in the reporting period.

(4) The project emissions abated \((A_p)\) for the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 28):

\[
A_p = M_{\text{com}} - \left( E_{\text{MD}} + E_{\text{AN}} \right)
\]

where:

\( A_p \) means the project emissions abated for the reporting period, in tonnes CO\(_2\)-e.

\( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 29.

\( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e, worked out using equation 30.

\( E_{\text{AN}} \) means the ancillary project emissions for the reporting period, in tonnes CO\(_2\)-e, worked out under section 34.

(5) The volume of the methane component of coal mine waste gas destroyed by the project \((M_{\text{com}})\) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 29):

\[
M_{\text{com}} = \gamma \times DE \times \sum_h Q_{\text{CH}_4,h}
\]

where:

\( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.

\( \gamma \) means the factor for converting a quantity of methane from cubic metres to tonnes CO\(_2\)-e in section 3.21 of the NGER (Measurement) Determination.

\( DE \) has the value of 0.98.

Note: This is the default methane destruction efficiency for a destruction device.

\( Q_{\text{CH}_4,h} \) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out:

(a) under section 27; or

(b) if the proponent uses an integrated monitoring device—using that device.

(6) The emissions from the methane component of coal mine waste gas destroyed by the project \((E_{\text{MD}})\) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 30):

\[
E_{\text{MD}} = \sum_h \sum_j E_{\text{MD,hj}}
\]

where:
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**27 Volume of methane destroyed**

1. The volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project \((Q_{\text{CH}_4,h})\) in the reporting period, in cubic metres, is worked out using one of the options in subsections (3) and (5).

2. However, the option used to work out \(Q_{\text{CH}_4,h}\) must be used for all devices that are part of the project and if the option in subsection (5) is used in a reporting period, then only that option may be used in any subsequent reporting period.

**Option 1**

3. The volume of the methane component of coal mine waste gas destroyed by the project in cubic metres \((Q_{\text{CH}_4})\) for the reporting period may be worked out using the formula (equation 31):

\[
Q_{\text{CH}_4} = \sum_t Q_{\text{CH}_4,h,t} \times O_{h,t}
\]

where:

- \(Q_{\text{CH}_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres.

- \(Q_{\text{CH}_4,h,t}\) means the volume of the methane component of coal mine waste gas sent to be destroyed by device \((h)\) as part of the project during time interval \((t)\), in cubic metres, estimated in accordance with the AAA criterion in Division 2.3.6 of the NGER (Measurement) Determination.

- \(O_{h,t}\) means a binary function which has the value 1 if the device is operating during time interval \((t)\) and 0 for all other times.

Note: **Operating** is defined in section 5.

4. The summation in equation 31 is to be performed over all time intervals \((t)\) in the reporting period and over all devices \((h)\) that are part of the project.

**Option 2**

5. The volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project \((Q_{\text{CH}_4,h})\) in the reporting period, in cubic metres, may be worked out using the formula (equation 32):

\[
E_{\text{MD}} \text{ means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO}_2\text{-e.}
\]

\[
E_{\text{MD},h,j} \text{ means the emissions of gas (}j\text{) released from the destruction of the methane component of coal mine waste gas by device (}h\text{) as part of the project in the reporting period, in tonnes CO}_2\text{-e, worked out under section 28.}
\]
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\[
Q_{CH_4,h} = \sum_{h}^{Q_{CH_4,h}} \times \frac{F_{MW_{h} \rightarrow GJ}}{Eff_h \times EC_{CMWG}} 
\]

Where:

- \(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres.

- \(Q_{eg,h}\) means the quantity of electricity produced by device \((h)\) that is supplied to the grid or used for the purposes of the mine or the project in the reporting period estimated in accordance with Part 6.1 of the NGER (Measurement) Determination, in megawatt hours.

- \(F_{MW_{h} \rightarrow GJ}\) has the value of 3.6.

**Note:** This is the factor converting energy in megawatt hours to gigajoules.

- \(Eff_h\) means the electrical efficiency of device \((h)\) which is either:
  - (a) the value specified by the manufacturer of the device in the technical specifications for the equipment with reference to Australian Standard AS 4594.1 or equivalent; or
  - (b) the default value of 0.36.

- \(EC_{CMWG}\) means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

**28 Emissions**

(1) The emissions of gas \((j)\) released from the destruction of the methane component of coal mine waste gas by device \((h)\) as part of the project \((E_{MD,h,j})\) in the reporting period, in tonnes \(CO_2\)-e, is worked out using the formula \((equation 33)\):

\[
E_{MD,h,j} = \frac{Q_{CH_4,h} \times EC_{CMWG} \times EF_{OX,j}}{1000} 
\]

where:

- \(E_{MD,h,j}\) means the emissions from device \((h)\) of gas type \((j)\), being either carbon dioxide, methane or nitrous oxide, released from the destruction of the methane component of coal mine waste gas as part of the project in the reporting period, in tonnes \(CO_2\)-e.

- \(Q_{CH_4,h}\) means the volume of the methane component of coal mine waste gas destroyed by device \((h)\) as part of the project in the reporting period, in cubic metres, worked out under section 27.

- \(EC_{CMWG}\) means the energy content factor of the coal mine waste gas, in gigajoules per cubic metre, worked out under subsection (2).
$EF_{OX,j}$ means the emission factor for each gas type (j) released from the destruction of the methane component of coal mine waste gas that is captured for combustion (including relevant oxidation factors), in kilograms of CO$_2$-e per gigajoule of fuel, worked out under subsection (4), (6) or (8).

(2) The energy content factor of the coal mine waste gas ($EC_{CMWG}$), in gigajoules per cubic metre, is worked out using one of the following options:
   
   (a) using the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;
   
   (b) by analysis in accordance with Subdivision 2.3.3.2 of the NGER (Measurement) Determination.

(3) However, the option used to work out $EC_{CMWG}$ must be used for all devices that are part of the project and if the option in paragraph (2)(b) is used in a reporting period, then only that option may be used in any subsequent reporting period.

(4) The emission factor ($EF_{OX,j}$) where (j) is carbon dioxide is worked out using one of the following options:
   
   (a) using the emission factor for carbon dioxide released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;
   
   (b) estimated in accordance with section 2.22 of the NGER (Measurement) Determination;
   
   (c) by analysis in accordance with section 2.26 of the NGER (Measurement) Determination.

(5) However, the option used to work out $EF_{OX,j}$ where (j) is carbon dioxide must be used for all devices that are part of the project and:
   
   (a) if the option in paragraph (4)(b) is used in a reporting period, then only an option in paragraph (4)(b) or (c) may be used in the next reporting period; and
   
   (b) if the option used in paragraph (4)(c) is used in a reporting period, then only that option may be used in any subsequent reporting period.

(6) The emission factor ($EF_{OX,j}$) where (j) is methane is worked out using one of the following options:
   
   (a) using the emission factor for methane released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;
   
   (b) using the emission factor that applies in estimating emissions of methane in section 2.27 of the NGER (Measurement) Determination.

(7) However, the option used to work out $EF_{OX,j}$ where (j) is methane must be used for all devices that are part of the project and if the option in paragraph (6)(b) is used in a reporting period, then only that option may be used in any subsequent reporting period.
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(8) The emission factor \( EF_{ox,j} \) where \( j \) is nitrous oxide is the emission factor for nitrous oxide released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination.
Division 5—Expansion electricity production project method

29 Net abatement amount

(1) The carbon dioxide equivalent net abatement amount for an expansion electricity production project for the reporting period, in tonnes CO\textsubscript{2}-e, is worked out using the formula (equation 34):

\[ A_{\text{net}} = A_p + A_G \]

where:

\( A_{\text{net}} \) means the carbon dioxide equivalent net abatement amount for the expansion electricity production project for the reporting period, in tonnes CO\textsubscript{2}-e.

\( A_p \) means the project emissions abated for the reporting period, in tonnes CO\textsubscript{2}-e, worked out using equation 35.

\( A_G \) means the displaced grid emissions from electricity production in the reporting period, in tonnes CO\textsubscript{2}-e, worked out under section 35.

(2) The project emissions abated (\( A_p \)) for the reporting period, in tonnes CO\textsubscript{2}-e, is worked out using the formula (equation 35):

\[
A_p = M_{\text{com}} - \left( E_{\text{MD}} + E_{\text{AN}} \right)
\]

where:

\( A_p \) means the project emissions abated for the reporting period, in tonnes CO\textsubscript{2}-e.

\( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\textsubscript{2}-e, worked out using equation 36.

\( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\textsubscript{2}-e, worked out using equation 37.

\( E_{\text{AN}} \) means the ancillary project emissions for the reporting period, in tonnes CO\textsubscript{2}-e, worked out under section 34.

(3) The volume of the methane component of coal mine waste gas destroyed by the project (\( M_{\text{com}} \)) in the reporting period, in tonnes CO\textsubscript{2}-e, is worked out using the formula (equation 36):

\[
M_{\text{com}} = \gamma \times DE \times Q_{\text{CH}_4}
\]

where:

\( M_{\text{com}} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\textsubscript{2}-e.
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\( \gamma \) means the factor for converting a quantity of methane from cubic metres to tonnes CO\(_2\)-e in section 3.21 of the NGER (Measurement) Determination.

\( \text{DE} \) has the value of 0.98.

Note: This is the default methane destruction efficiency for a destruction device.

\( Q_{\text{CH}_4} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in cubic metres, worked out under section 30.

(4) The emissions from the methane component of coal mine waste gas destroyed by the project (\( E_{\text{MD}} \)) in the reporting period, in tonnes CO\(_2\)-e, is worked out using the formula (equation 37):

\[
E_{\text{MD}} = \sum_{h} \sum_{j} E_{\text{MD},h,j}
\]

where:

\( E_{\text{MD}} \) means the emissions from the methane component of coal mine waste gas destroyed by the project in the reporting period, in tonnes CO\(_2\)-e.

\( E_{\text{MD},h,j} \) means the emissions of gas (\( j \)) released from the destruction of the methane component of coal mine waste gas by device (\( h \)) as part of the project in the reporting period, in tonnes CO\(_2\)-e, worked out under section 31.

### 30 Volume of methane destroyed

(1) The volume of the methane component of coal mine waste gas destroyed by the project (\( Q_{\text{CH}_4} \)) in the reporting period, in cubic metres, is worked out using the following formula (equation 38):

\[
Q_{\text{CH}_4} = \sum_{t} \text{Maximum}[X_{\text{fl},t} + X_{\text{gen},t}, 0]
\]

where:

\( Q_{\text{CH}_4} \) means the volume of the methane component of coal mine waste gas destroyed by the project in the reporting period, in cubic metres.

\( X_{\text{fl},t} \) means the volume of the methane component of coal mine waste gas destroyed by all flaring devices during time interval (\( t \)) less the recognised capacity of existing flaring devices, in cubic metres, worked out using equation 39.

\( X_{\text{gen},t} \) means the volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval (\( t \)) less the recognised capacity of existing electricity production devices, in cubic metres, worked out using equation 40.

**Methane destroyed by flaring devices**

(2) The volume of the methane component of coal mine waste gas destroyed by all flaring devices during time interval (\( t \)) less the recognised capacity of existing
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flaring devices \( (X_{fl,t}) \), in cubic metres, is worked out using the formula (equation 39):

\[
X_{fl,t} = \sum_m Q_{CH_4,m,t} \times O_{m,t} - \sum_m Q_{fl,cap,m} \times AF_{fl,m}
\]

where:

\( X_{fl,t} \) means the amount of the methane component of coal mine waste gas destroyed by all flaring devices during time interval \((t)\) less the recognised capacity of existing flaring devices, in cubic metres.

\( Q_{CH_4,m,t} \) means the volume of the methane component of coal mine waste gas sent to be destroyed by device \((m)\) as part of the project during time interval \((t)\) estimated in accordance with the AAA criterion in Division 2.3.6 of the NGER (Measurement) Determination, in cubic metres.

\( O_{m,t} \) means a binary function which has the value 1 if the device is operating during time interval \((t)\) and 0 for all other times.

Note: Operating is defined in section 5.

\( Q_{fl,cap,m} \) means the recognised capacity of existing flaring device \((m)\) during time interval \((t)\), in cubic metres.

\( AF_{fl,m} \) means the annual availability factor of flaring device \((m)\) which is either:

(a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or

(b) the default value of 1.

(3) The summation over \((m)\) in equation 39 is to be performed over all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project.

Note: The second summation over \((m)\) results in a fixed quantity and is the same for all equal time intervals \((t)\).

(4) If the value of \(X_{fl,t}\) is greater than zero for time interval \((t)\), then the value of \(X_{fl,t}\) is taken to be zero for the time interval.

Methane destroyed by electricity production devices

(5) The volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval \((t)\) less the recognised capacity of existing electricity production devices \((X_{gen,t})\), in cubic metres, worked out using the formula (equation 40):

\[
X_{gen,t} = \sum_h \frac{Q_{eq,h,t}}{\text{Eff}_h} \times \frac{F_{MWh\rightarrow GI}}{\text{EC}_{CMWG}} - \sum_m \frac{Q_{gen,cap,m}}{\text{Eff}_m} \times \frac{F_{MWh\rightarrow GI}}{\text{EC}_{CMWG}} \times AF_{gen,m}
\]

where:
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$X_{\text{gen},t}$ means the volume of the methane component of coal mine waste gas destroyed by all electricity production devices during time interval $(t)$ less the recognised capacity of existing electricity production devices, in cubic metres.

$Q_{\text{eg},ht}$ means the quantity of electricity produced by device $(h)$ that is supplied to the grid or used for the purposes of the mine or the project during time interval $(t)$ estimated in accordance with Part 6.1 of the NGER (Measurement) Determination, in megawatt hours.

$F_{\text{MWh}\rightarrow\text{GJ}}$ has the value of 3.6.

Note: This is the factor converting energy in megawatt hours to gigajoules.

$Eff_h$ or $Eff_m$ means the electrical efficiency of device $(h)$ or $(m)$ which is either:

(a) the value specified by the manufacturer of the device in the technical specifications for the equipment with reference to Australian Standard AS 4594.1 or equivalent; or

(b) the default value of 0.36.

$EC_{\text{CMWG}}$ means the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per cubic metre.

$Q_{\text{gen, cap, m}}$ means the recognised capacity of existing electricity production device $(m)$ that produces electricity during time interval $(t)$, in megawatt hours.

$AF_{\text{gen, m}}$ means the annual availability factor of electricity production device $(m)$ which is either:

(a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or

(b) the default value of 1.

(6) The summation over $(h)$ in equation 40 is to be performed over:

(a) all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project; and

(b) all devices installed as part of the project.

(7) The summation over $(m)$ in equation 40 is to be performed over all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project.

Note: The second summation over $(m)$ results in a fixed quantity and is the same for all equal time intervals $(t)$.

31 Emissions

(1) The emissions of gas $(j)$ released from the destruction of the methane component of coal mine waste gas by device $(h)$ as part of the project $(E_{\text{MD, h, j}})$ in the
The energy content factor of the coal mine waste gas ($EC_{CMWG}$), in gigajoules per cubic metre, is worked out using one of the following options:

(a) using the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;

(b) by analysis in accordance with Subdivision 2.3.3.2 of the NGER (Measurement) Determination.

However, the option used to work out $EC_{CMWG}$ must be used for all devices that are part of the project and if the option in paragraph (2)(b) is used in a reporting period, then only that option may be used in any subsequent reporting period.

The emission factor ($EF_{OX,j}$) where ($j$) is carbon dioxide is worked out using one of the following options:

(a) using the emission factor for carbon dioxide released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;

(b) estimated in accordance with section 2.22 of the NGER (Measurement) Determination;

(c) by analysis in accordance with section 2.26 of the NGER (Measurement) Determination.

However, the option used to work out $EF_{OX,j}$ where ($j$) is carbon dioxide must be used for all devices that are part of the project and:
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(a) if the option in paragraph (4)(b) is used in a reporting period, then only an option in paragraph (4)(b) or (c) may be used in the next reporting period; and

(b) if the option used in paragraph (4)(c) is used in a reporting period, then that only option may be used in any subsequent reporting period.

(6) The emission factor \( EF_{OX,j} \) where \( j \) is methane is worked out using one of the following options:

(a) using the emission factor for methane released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination;

(b) using the emission factor that applies in estimating emissions of methane in section 2.27 of the NGER (Measurement) Determination.

(7) However, the option used to work out \( EF_{OX,j} \) where \( j \) is methane must be used for all devices that are part of the project and if the option in paragraph (6)(b) is used in a reporting period, then only that option may be used in any subsequent reporting period.

(8) The emission factor \( EF_{OX,j} \) where \( j \) is nitrous oxide is the emission factor for nitrous oxide released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination.
Division 6—Displacement electricity production project method

32 Net abatement amount

The carbon dioxide equivalent net abatement amount for a displacement electricity production project for the reporting period, in tonnes CO₂-e, is worked out using the formula (equation 42):

$$A_{\text{net}} = A_G$$

where:

- $$A_{\text{net}}$$ means the carbon dioxide equivalent net abatement amount for the displacement electricity production project for the reporting period, in tonnes CO₂-e.
- $$A_G$$ means the displaced grid emissions from electricity production in the reporting period, in tonnes CO₂-e, worked out under section 35.
**Division 7—Historic abatement**

**33 Historic abatement**

The historic abatement from the destruction of the methane component of coal mine waste gas from the mine ($A_{hist}$), in tonnes CO₂-e, is worked using the formula (equation 43):

$$A_{hist} = 6.775 \times E_{hist}$$

where:

- $A_{hist}$ means the historic abatement from the destruction of the methane component of coal mine waste gas from the mine, in tonnes CO₂-e.
- $E_{hist}$ means the greater of:
  
  (a) the highest total emissions resulting from the destruction of the methane component of coal mine waste gas as reported in any NGER report relating to the mine, in tonnes CO₂-e; and
  
  (b) the total emissions released as a result of the destruction of the methane component of coal mine waste gas from the mine, in tonnes CO₂-e, and determined in accordance with reporting requirements under the *National Greenhouse and Energy Reporting Act 2007* in the period between:
    
    (i) the start of the current NGER reporting year; and
    
    (ii) the time of application for the declaration of the project as an eligible offsets project.
Division 8—Ancillary project emissions

34 Ancillary project emissions

(1) The ancillary project emissions ($E_{AN}$) for the reporting project, in tonnes CO$_2$-e, is worked out using the formula (equation 44):

$$E_{AN} = (Q_{elec} \times EF_{elec}) + \left( \sum_i \sum_j Q_{SE,i,j} \times EC_i \times EF_{OX,i,j} \right) / 1000$$

where:

$E_{AN}$ means the ancillary project emissions for the reporting period, in tonnes CO$_2$-e.

$Q_{elec}$ means the quantity of electricity purchased from the electricity grid and consumed from the operation of the project (if any) in the reporting period, in megawatt hours.

$EF_{elec}$ means:

(a) for electricity obtained from, or supplied to, an electricity grid that is a grid in relation to which the NGA Factors document, in force on the day the project is declared to be an eligible offsets project, includes an emissions factor—that factor, in kilograms CO$_2$-e per kilowatt hour (or its equivalent of tonnes CO$_2$-e per megawatt hours); or

(b) for electricity obtained from, or supplied to, an electricity grid not covered by paragraph (a) or obtained from a source other than an electricity grid:

(i) if the operator of the grid or the supplier of electricity from the other source is able to provide an emissions factor that reflects the emissions intensity of the electricity and is applicable on the day the project is declared to be an eligible offsets project—that factor, in kilograms CO$_2$-e per kilowatt hour (or its equivalent of tonnes CO$_2$-e per megawatt hours); or

(ii) otherwise—the emissions factor, in kilograms CO$_2$-e per kilowatt hour (or its equivalent of tonnes CO$_2$-e per megawatt hours), for off-grid electricity included in the NGA Factors document in force on the day the project is declared to be an eligible offsets project.

$Q_{SE,i,j}$ means the quantity of additional fuel type ($i$) that is not coal mine waste gas combusted for stationary energy purposes (if any) in the reporting period, estimated in accordance with Division 2.2.5 of the NGER Measurement Determination in kilolitres (or other volume units appropriate for the application of the energy content factor ($EC_i$)).

$EC_i$ means the energy content factor of fuel type ($i$) combusted for stationary energy purposes in Part 3 of Schedule 1 to the NGER (Measurement) Determination, in gigajoules per kilolitre (or other appropriate units).

$EF_{OX,i,j}$ means the emission factor for each gas type ($j$) released due to the combustion of fuel type ($i$) for stationary energy purposes in Part 3 of Schedule 1
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...to the NGER (Measurement) Determination, in kilograms of CO$_2$-e per gigajoule of fuel type (i).

Note: The emission factor incorporates relevant oxidation factors for the gas type.

(2) In working out the ancillary project emissions, the project proponent must include any emissions that are reasonably associated with any energy required for the collection, transport and destruction of the coal mine waste gas destroyed as part of the project.

(3) This includes any emissions resulting from the combustion of fossil fuel or the consumption of electricity purchased from a State, Territory or electricity grid by the following:
   (a) compressors, blowers or coal mine waste gas gathering systems;
   (b) transporting coal mine waste gas for the purposes of destroying it as part of the project.

(4) However, emissions relating to equipment installed for the safety of the mine are not ancillary project emissions.

(5) If the project is an expansion electricity production project or expansion flaring project, in working out the ancillary project emissions for the project the proponent must include the proportion of emissions attributable to the operation of the project associated with the operation of the following:
   (a) supporting equipment for the project;
   (b) any other destruction device;
   (c) supporting equipment for the other destruction devices.
Division 9—Displaced grid emissions

35 Displaced grid emissions

(1) The displaced grid emissions from electricity production in the reporting period \( A_G \), in tonnes CO\(_2\)-e, is worked out using the formula (equation 45):

\[
A_G = NTLEG_p \times EF_{elec}
\]

where:

\( A_G \) means the displaced grid emissions from electricity production in the reporting period, in tonnes CO\(_2\)-e.

\( NTLEG_p \) means the net amount of electricity produced by the combustion of coal mine waste gas by all electricity production devices that are part of the project in the reporting period, in megawatt hours, worked out using equation 46.

\( EF_{elec} \) means:

(a) for electricity obtained from, or supplied to, an electricity grid that is a grid in relation to which the NGA Factors document, in force on the day the project is declared to be an eligible offsets project, includes an emissions factor—that factor, in kilograms CO\(_2\)-e per kilowatt hour (or its equivalent of tonnes CO\(_2\)-e per megawatt hours); or

(b) for electricity obtained from, or supplied to, an electricity grid not covered by paragraph (a) or obtained from a source other than an electricity grid:

(i) if the operator of the grid or the supplier of electricity from the other source is able to provide an emissions factor that reflects the emissions intensity of the electricity and is applicable on the day the project is declared to be an eligible offsets project—that factor, in kilograms CO\(_2\)-e per kilowatt hour (or its equivalent of tonnes CO\(_2\)-e per megawatt hours); or

(ii) otherwise—the emissions factor, in kilograms CO\(_2\)-e per kilowatt hour (or its equivalent of tonnes CO\(_2\)-e per megawatt hours), for off-grid electricity included in the NGA Factors document in force on the day the project is declared to be an eligible offsets project.

(2) The net amount of electricity produced by the combustion of coal mine waste gas by all electricity production devices that are part of the project \( NTLEG_p \) in the reporting period, in megawatt hours, is worked out using the formula (equation 46):

\[
NTLEG_p = TLEG - \left( FSL + AUX + \left( DLEG \times \left( 1 - MLF \right) \right) \right)
\]

where:

\( NTLEG_p \) means the net amount of electricity produced by the combustion of coal mine waste gas by all electricity production devices that are part of the project in the reporting period, in megawatt hours.
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**TLEG** means the total amount of electricity produced by all electricity production devices that are part of the project in the reporting period, in megawatt hours, worked out using equation 47.

**FSL** means the amount of electricity produced by all electricity production devices that are part of the project using energy sources that are not coal mine waste gas in the reporting period, in megawatt hours, worked out using equation 49.

**AUX** means the auxiliary loss for the project in the reporting period, in megawatt hours, worked out subject to subsections (4) and (5).

**DLEG** means the amount of electricity transmitted or distributed by all electricity production devices that are part of the project in the reporting period, in megawatt hours, measured:

(a) if the project is part of the national electricity market—at the point determined under the National Electricity Rules; or

(b) in any other case—at the point determined by a relevant authority of the State or Territory in which the project is located.

**MLF** means the marginal loss factor for the project and, subject to subsections (6) and (7), is the:

(a) if the project is part of the national electricity market:

(i) the factor published by the Australian Energy Market Operator Limited (ACN 072 010 327) that was valid for the most number of days in the reporting period; or

(ii) if more than one factor satisfies subparagraph (i) in the reporting period—the average of all the factors that satisfy subparagraph (i) in the reporting period; or

(b) in any other case:

(i) the factor determined by the relevant authority of the State or Territory in which the device is located that was valid for the most number of days in the reporting period; or

(ii) if more than one factor satisfies subparagraph (i) in the reporting period—the average of all the factors that satisfy subparagraph (i) in the reporting period.

(3) The following electricity produced by electricity production devices that are part of the project is disregarded for the purposes of equation 46:

(a) electricity that was not used to directly meet demand for electricity;

(b) electricity produced by a device where an approval to use coal mine waste gas as an energy source:

(i) is required by a Commonwealth, State, Territory or local government authority; and

(ii) the nominated person for the device is unable to give evidence of that approval.
Auxiliary loss

(4) The auxiliary loss for the project:
   (a) includes the amount of electricity used to produce electricity and to operate and maintain electricity production devices that are part of the project; and
   (b) does not include any electricity used for network support and control ancillary services.

(5) If the project also produces electricity using an energy source that is not coal mine waste gas, the project proponent may deduct auxiliary losses that are attributable to that source from the total auxiliary loss for the project proportionate to the amount of electricity produced from that source.

Note: See regulation 16 of the Renewable Energy (Electricity) Regulations 2001 in relation to working out the auxiliary loss from energy sources that are not eligible energy sources.

Marginal loss factor

(6) The marginal loss factor is taken to be 1 if all the electricity produced by the project is used by:
   (a) electricity production devices that are part of the project; or
   (b) the local distribution network; or
   (c) both the devices and the local distribution network.

(7) If the amount calculated using equation 46 exceeds 1 megawatt hour and results in an amount that is not a whole megawatt hour, the amount must be rounded down to the nearest megawatt hour.

36 Electricity produced by project

(1) The total amount of electricity produced by all electricity production devices that are part of the project (TLEG) in the reporting period, in megawatt hours, is worked out using the formula (equation 47):

\[
TLEG = \sum_{i} \text{Maximum}[X_i, 0]
\]

where:

- \(TLEG\) means the total amount of electricity produced by all electricity production devices that are part of the project in the reporting period, in megawatt hours.
- \(X_i\) means the amount of electricity produced from all electricity production devices that are part of the project during time interval \(t\) less the recognised capacity of existing electricity production devices, in megawatt hours, worked out using equation 48.

(2) The amount of electricity produced from all devices that are part of the project during time interval \(t\) less the recognised capacity of existing electricity production devices (\(X_i\)), in megawatt hours, is worked out using the formula (equation 48):
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\[ X_t = \sum_{h} Q_{eg,h,t} - \sum_{m} Q_{gen, cap, m} \]

where:

- \( X_t \) means the amount of electricity produced from all devices that are part of the project during time interval (\( t \)) less the recognised capacity of existing electricity production devices, in megawatt hours.

- \( Q_{eg,h,t} \) means the quantity of electricity produced by device (\( h \)) that is supplied to the grid or used for the purposes of the mine or the project during time interval (\( t \)) in the reporting period estimated in accordance with Part 6.1 of the NGER (Measurement) Determination, in megawatt hours.

- \( Q_{gen, cap, m} \) means the recognised capacity of existing electricity production device (\( m \)) during time interval (\( t \)), in megawatt hours.

(3) The summation over (\( h \)) in equation 48 is to be performed over:
   (a) all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project; and
   (b) all devices installed as part of the project.

(4) The summation over (\( m \)) in equation 48 is to be performed over all existing electricity production devices at the point of the highest total recognised capacity of all of the existing devices in the period between 24 April 2014 and the time of application for the declaration of the project as an eligible offsets project.

Note: The summation over (\( m \)) results in a fixed quantity and is the same for all equal time intervals (\( t \)).

37 Electricity produced by using fuel other than coal mine waste gas

(1) The amount of electricity produced by all electricity production devices that are part of the project using energy sources that are not coal mine waste gas (\( FSL \)), in megawatt hours, is worked out using the formula (equation 49):

\[ FSL = \sum_{i} Z_i \]

where:

- \( FSL \) means the amount of electricity produced by all electricity production devices that are part of the project using energy sources that are not coal mine waste gas in the reporting period, in megawatt hours.

- \( Z_i \) means the energy content of fuel type (\( i \)) that is not coal mine waste gas consumed during the reporting period, in gigajoules, worked out using equation 50.

(2) The energy content of fuel type (\( i \)) that is not coal mine waste gas (\( Z_i \)) consumed during the reporting period, in gigajoules, is worked out using the formula (equation 50):
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\[ Z_i = Q_{FSL,i} \times EC_{FSL,i} \]

where:

\( Z_i \) means the energy content of fuel type \((i)\) that is not coal mine waste gas consumed during the reporting period, in gigajoules.

\( Q_{FSL,i} \) means the quantity of fuel type \((i)\) consumed as part of the project in the reporting period estimated in accordance with section 6.5 of the NGER (Measurement) Determination, in appropriate units.

\( EC_{FSL,i} \) means the energy content factor of fuel type \((i)\) estimated in accordance with section 6.5 of the NGER (Measurement) Determination, in appropriate units.

Note: Energy includes the fuels and energy commodities listed in Schedule 1 to the NGER Regulations 2008. See the definition of energy in section 7 of the Act and regulation 2.03 of the NGER Regulations 2008.
Part 5—Reporting, monitoring and record keeping requirements

Division 1—Offsets report requirements

38 Operation of this Division

For paragraph 106(3)(a) of the Act, this Division sets out information that must be included in an offsets report for a coal mine waste gas project that is an eligible offsets project.

39 Offsets report requirements

The following information is to be included in offsets reports for the project:

(a) the carbon dioxide equivalent net abatement amount for the project for the reporting period;
(b) the total volume (if any) of the methane component of coal mine waste gas from the mine sent to one or more flaring devices in the reporting period, in cubic metres;
(c) the total volume (if any) of the methane component of coal mine waste gas destroyed by those devices in the reporting period, in cubic metres;
(d) the total volume (if any) of the methane component of coal mine waste gas from the mine sent to one or more electricity production devices in the reporting period, in cubic metres;
(e) the total volume (if any) of the methane component of coal mine waste gas destroyed by those devices in the reporting period, in tonnes CO$_2$-e;
(f) the electrical efficiency of the electricity production devices (by reference to Australian Standard AS 4594.1 or equivalent);
(g) the total amount of fuel and electricity used by the project in the reporting period, in kilolitres, cubic meters or kilowatt hours.
Division 2—Record-keeping requirements

40 Operation of this Division

For paragraph 106(3)(c) of the Act, this Division sets out record-keeping requirements for a coal mine waste gas project that is an eligible offsets project.

41 Record-keeping requirements

The project proponent must keep records on:

(a) information on any existing flaring device or existing electricity production device; and

(b) information as to the devices and supporting equipment installed and operated as part of the project.
Part 5 Reporting, monitoring and record keeping requirements
Division 3 Monitoring requirements

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Division 3—Monitoring requirements

42 Operation of this Division

For paragraph 106(3)(d) of the Act, this Division sets out requirements to monitor a coal mine waste gas project that is an eligible offsets project.

43 Monitoring requirements

(1) The project proponent for a coal mine waste gas project must monitor each parameter that is relevant to the project which is mentioned in the following table in accordance with the unit, manner and frequency of monitoring mentioned in the table for the parameter.

<table>
<thead>
<tr>
<th>Monitored parameters</th>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 T</td>
<td>Total number of days in the reporting period</td>
<td>Days</td>
<td>N/A</td>
<td>Once at the end of the reporting period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Q&lt;sub&gt;CH₄,h&lt;/sub&gt;</td>
<td>The volume of the methane component of coal mine waste gas destroyed by device (h) as part of the project in the reporting period</td>
<td>m³</td>
<td>If monitored using an integrated monitoring device estimated in accordance with: (a) the AAR criterion in Division 2.3.6 of the NGER (Measurement) Determination; and (b) subsections (2) and (3)</td>
<td>Continuously</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Q&lt;sub&gt;CH₄,h,t&lt;/sub&gt; (or Q&lt;sub&gt;CH₄,m,t&lt;/sub&gt;)</td>
<td>The volume of the methane component of coal mine waste gas sent to be destroyed by device (h) (or device (m)) as part of the project during time interval (t)</td>
<td>m³</td>
<td>Estimated in accordance with: (a) the AAR criterion in Division 2.3.6 of the NGER (Measurement) Determination; and (b) subsections (2) and (3)</td>
<td>Continuously, at a frequency of at least once every 15 minutes, but not more frequent than once per second, and at the same frequency as Oₜₕ or Oₜₘ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Q&lt;sub&gt;CMWG,h&lt;/sub&gt;</td>
<td>Volume of coal mine waste gas destroyed by device (h) as part of the</td>
<td>m³</td>
<td>Estimated in accordance with Division 2.3.6 of the NGER (Measurement)</td>
<td>Continuously</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Monitored parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$Q_{gen,cap,m}$</td>
<td>Recognised capacity of existing electricity production device ($m$) during time interval ($t$)</td>
<td>MWh</td>
<td>Determined in accordance with subsection (4)</td>
<td>At the commencement of the project</td>
</tr>
<tr>
<td>6</td>
<td>$Q_{fl,cap,m}$</td>
<td>Recognised capacity of existing flaring device ($m$) during time interval ($t$)</td>
<td>m$^3$</td>
<td>Determined in accordance with subsections (5) and (6)</td>
<td>At the commencement of the project</td>
</tr>
<tr>
<td>7</td>
<td>$AF_{gen,m}$</td>
<td>Annual availability factor of electricity production device ($m$)</td>
<td>N/A</td>
<td>Either: (a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or (b) the default value of 1</td>
<td>At the commencement of the project</td>
</tr>
<tr>
<td>8</td>
<td>$AF_{fl,m}$</td>
<td>Annual availability factor of flaring device ($m$)</td>
<td>N/A</td>
<td>Either: (a) the value calculated in accordance with the standard maintenance cycle specified by the manufacturer; or (b) the default value of 1</td>
<td>At the commencement of the project</td>
</tr>
<tr>
<td>9</td>
<td>$Q_{eg,h}$</td>
<td>Quantity of electricity produced by device ($h$) that is supplied to the grid or used for the purposes of the mine or the project in</td>
<td>MWh</td>
<td>Estimated in accordance with Part 6.1 of the NGER (Measurement) Determination</td>
<td>Continuously</td>
</tr>
</tbody>
</table>
## Part 5 Reporting, monitoring and record keeping requirements
### Section 43

**Division 3 Monitoring requirements**

### Monitored parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>( Q_{\text{eg},h,t} ) (or ( Q_{\text{eg},m,t} ))</td>
<td>Quantity of electricity produced by device ((h)) that is supplied to the grid or used for the purposes of the mine or the project during time interval ((t))</td>
<td>MWh</td>
<td>Estimated in accordance with Part 6.1 of the NGER (Measurement) Determination</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>( O_{h,t} ) (or ( O_{m,t} ))</td>
<td>Binary function which has the value 1 if the device ((h)) or ((m)) is operating during time interval ((t)) and 0 for all other times</td>
<td>N/A</td>
<td>Whether the device is operating is determined in accordance with: (a) for flaring devices—the manufacturer’s specifications for the device and subsections (7) to (9); or (b) for electricity production devices—the manufacturer’s specifications for the device</td>
<td>Continuously, at a frequency of at least once per 15 minutes, but not more frequent than once per second, and at the same frequency as ( Q_{\text{CH}<em>4,h,t} ) or ( Q</em>{\text{CH}_4,m,t} )</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>( \text{Eff}_h ) (or ( \text{Eff}_m ))</td>
<td>Electrical efficiency of device ((h)) or ((m))</td>
<td>N/A</td>
<td>Either: (a) the value specified by the manufacturer of the device in the technical specifications for the equipment, with reference to Australian Standard AS 4594.1 or equivalent; or (b) the default value of 0.36</td>
<td>At the commencement of the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>( \text{EF}_k )</td>
<td>Emission factor for methane</td>
<td>kg CO(_2)-e/GJ</td>
<td>Estimated in accordance with</td>
<td>Continuously</td>
</tr>
</tbody>
</table>

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Carbon Credits (Carbon Farming Initiative) Methodology (Coal Mine Waste Gas) Determination 2014

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#### Division 3

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**Monitored parameters**

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>$E_{O_{i},j}$</td>
<td>Emission factor for gas type $(j)$ released from the destruction of the methane component of coal mine waste gas that is captured for combustion (including relevant oxidation factors)</td>
<td>kg CO$_2$-e/GJ</td>
<td>Estimated: (a) using the emission factor for gas type $(j)$ released from the destruction of the methane component of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement) Determination subject to subsection (10); or (b) if permitted by the method for the project and $(j)$ is carbon dioxide—in accordance with section 2.22 of the NGER (Measurement) Determination; or (c) if permitted by the method for the project and $(j)$ is carbon dioxide—by analysis in accordance with section 2.26 of the NGER (Measurement) Determination; or (d) if permitted by the method for the project and $(j)$ is</td>
<td>In accordance with the NGER (Measurement) Determination</td>
</tr>
</tbody>
</table>
### Section 43

**Monitored parameters**

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>$Q_{elec}$</td>
<td>Quantity of electricity purchased from the electricity grid and consumed from the operation of the project (if any) in the reporting period</td>
<td>MWh</td>
<td>Monitored using a commercial grade meter</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>If measured in gigajoules, the quantity of megawatt hours is calculated by dividing the amount in gigajoules by the conversion factor of 3.6</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>$Q_{SE,i}$</td>
<td>Quantity of additional fuel type $(i)$ that is not coal mine waste gas combusted for stationary energy purposes (if any) in the reporting period</td>
<td>kL (or other volume units appropriate for the application of the energy content factor $(EC_i)$)</td>
<td>Estimated in accordance with Division 2.2.5 of the NGER (Measurement) Determination</td>
<td>Continuously</td>
</tr>
<tr>
<td>17</td>
<td>AUX</td>
<td>Auxiliary loss for the project in the reporting period</td>
<td>MWh</td>
<td>Monitored using a commercial grade meter</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>If measured in gigajoules, the quantity of megawatt hours is calculated by dividing the amount in gigajoules by the conversion factor of 3.6</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>DLEG</td>
<td>Amount of electricity transmitted or distributed by all electricity</td>
<td>MWh</td>
<td>Monitored using a commercial grade meter measured: (a) if the project is part of the</td>
<td>Continuously</td>
</tr>
</tbody>
</table>
## Monitoring requirements

### Division 3

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### Reporting, monitoring and record keeping requirements

**Part 5**

### Monitored parameters

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>(Q_{\text{FSL,i}})</td>
<td>Quantity of fuel type ((i)) consumed as part of the project in the reporting period</td>
<td>Appropriate units</td>
<td>Estimated in accordance with Part 6.5 of the NGER (Measurement) Determination</td>
<td>Continuously</td>
</tr>
<tr>
<td>20</td>
<td>(\text{EC}_{\text{FSL,i}})</td>
<td>Energy content factor of fuel type ((i))</td>
<td>Appropriate units</td>
<td>Estimated in accordance with Part 6.5 of the NGER (Measurement) Determination subject to subsection (10)</td>
<td>In accordance with the NGER (Measurement) Determination</td>
</tr>
<tr>
<td>21</td>
<td>(\text{EC}_{\text{CMWG}})</td>
<td>Energy content factor of coal mine waste gas</td>
<td>(\text{GJ/m}^3)</td>
<td>Either: (a) using the energy content factor of coal mine waste gas that is captured for combustion in item 19 of Schedule 1 to the NGER (Measurement)</td>
<td>In accordance with the NGER (Measurement) Determination</td>
</tr>
</tbody>
</table>

If measured in gigajoules, the quantity of megawatt hours is calculated by dividing the amount in gigajoules by the conversion factor of 3.6.
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<table>
<thead>
<tr>
<th>Monitored parameters</th>
<th>Description</th>
<th>Unit of monitoring</th>
<th>Manner of monitoring</th>
<th>Frequency of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Parameter</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Determination subject to subsection (10); or (b) if permitted by the method for the project—by analysis in accordance with Subdivision 2.3.3. 2 of the NGER (Measurement) Determination</td>
<td></td>
</tr>
</tbody>
</table>

\[ Q_{\text{CH}_4,\text{h}}, Q_{\text{CH}_4,\text{h,t}} \text{ or } Q_{\text{CH}_4,\text{m,t}} \]

(2) To estimate \( Q_{\text{CH}_4,\text{h}}, Q_{\text{CH}_4,\text{h,t}} \text{ or } Q_{\text{CH}_4,\text{m,t}} \) the project proponent may use one of the following to measure the methane component of coal mine waste gas destroyed by device (h) (or (m)):

(a) a flow computer;
(b) a gas chromatograph;
(c) a gas analyser.

(3) However, if a gas analyser is used:

(a) the maximum upper bound percentage uncertainty, expressed as a decimal fraction \( (U_h) \), associated with the measurement of the fraction of the volume of coal mine waste gas that is methane that is sent to each device (h) must be calculated according to standard methods; and
(b) the quantity of methane is adjusted by multiplying \( Q_{\text{CH}_4,\text{h}}, Q_{\text{CH}_4,\text{h,t}} \text{ or } Q_{\text{CH}_4,\text{m,t}} \) by the factor \( (1-U_h) \).

Recognised capacity—\( Q_{\text{gen,cap,m}} \)

(4) The recognised capacity of an electricity production device in a time interval is calculated by multiplying the manufacturer’s specifications for the maximum electricity capable of being produced by operating the device in the time interval in appropriate units, with the result expressed in megawatt hours.

Recognised capacity—\( Q_{\text{fl,cap,m}} \)

(5) Subject to subsection (6), the recognised capacity of a flaring device in a time interval is calculated by multiplying the manufacturer’s specifications for the maximum volume of the methane component of coal mine waste gas capable of being destroyed by operating the device in the time interval in appropriate units, with the result expressed in cubic metres.
(6) Where the manufacturer’s specifications for the device is provided in units of energy per unit time, the recognised capacity of the device in the time interval is calculated by:

(a) multiplying the manufacturer’s specifications for the maximum energy released per unit time by the time interval in appropriate units, with the result expressed in gigajoules; and

(b) converting the result of paragraph (a) to cubic metres by multiplying it by the factor 37.7x10^{-3}, with the result expressed in gigajoules per cubic metre.

Operating—\(O_{h,t} \) (or \(O_{m,t} \))

(7) Subject to subsections (8) and (9), the project proponent may use one of the following methods to measure whether device \((h) \) (or \((m) \)) is operating in time interval \((t) \):

(a) temperature measurement;

(b) a UV detection sensor coupled to a flare management system;

(c) another internationally recognised apparatus for monitoring the operation of a flaring device.

(8) If temperature measurement is used, then the device is taken not to be operating in a time interval if:

(a) there is no record of the temperature of the exhaust gas of the flare for the time interval; or

(b) the recorded temperature is less than 500°C for any period in the time interval.

(9) If a UV detection sensor or another internationally recognised apparatus is used, then the device is taken not to be operating in a time interval if:

(a) there is no record of the operation of the device for the time interval or;

(b) the operation of the device falls below one of the following operational thresholds for any period in the time interval:

(i) if the manufacturer has specified an operational threshold for the device—that threshold;

(ii) otherwise—the internationally recognised standard for the device.

References to NGER (Measurement) Determination factors—\(EF_K\), \(EF_{OX,p}\), \(EC_{FSL,p}\), or \(E_{CMWG}\)

(10) If a factor defined in the NGER (Measurement) Determination is used to calculate a parameter for the reporting period and the calculation of that factor is subject to this subsection, the factor to be used for the reporting period is the factor referred to in the NGER (Measurement) Determination as in force on the earlier of the following days:

(a) the day the offsets report for the reporting period is given to the Regulator;

(b) the day that report is required to be given to the Regulator.
## Part 5 Reporting, monitoring and record keeping requirements

### Division 3 Monitoring requirements

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### 44 Consequence of failure to monitor certain parameters

If during a particular period in a reporting period, a project proponent for a coal mine waste gas project does not monitor a parameter in accordance with section 43, the method for working out the carbon dioxide equivalent net abatement amount for the reporting period is affected as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Parameter</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$Q_{\text{elec}}, Q_{\text{SE,i}}, AUX, DLEG, Q_{\text{FSL,i}}$, or $EC_{\text{FSL},i}$</td>
<td>The net amount of electricity produced by the combustion of coal mine waste gas by all electricity production devices that are part of the project ($NTLEG_p$) in the particular period is taken to be zero</td>
</tr>
<tr>
<td>2</td>
<td>$Q_{\text{CH}<em>4,h,t}$, $Q</em>{\text{CH}<em>4,m,t}$, $Q</em>{\text{eg,h,t}}$ or $Q_{\text{eg,m,t}}$, or $O_{h,t}$ or $O_{m,t}$</td>
<td>The value of the parameter in the particular period is taken to be zero</td>
</tr>
<tr>
<td>3</td>
<td>$Q_{\text{CMWG,h}}$, or $Q_{\text{eg,h}}$</td>
<td>In calculating the value of the parameter for the reporting period the project proponent may take the value of the parameter in the particular period to be zero if all the parameters referred to in item 2 relevant to the calculation are also taken to be zero in the particular period</td>
</tr>
<tr>
<td>4</td>
<td>$EF_{k},EF_{OX,j}$, or $EC_{\text{CMWG}}$</td>
<td>The carbon dioxide net abatement amount for the reporting period is to be worked out without inputs from that particular period.</td>
</tr>
</tbody>
</table>