

EXPLANATORY STATEMENT

Carbon Credits (Carbon Farming Initiative) Act 2011

Carbon Credits (Carbon Farming Initiative—Coal Mine Waste Gas) Methodology Determination Variation 2021

Purpose

The proposed *Carbon Credits (Carbon Farming Initiative—Coal Mine Waste Gas) Methodology Determination Variation 2021* (the proposed Variation) amends the *Carbon Credits (Carbon Farming Initiative—Coal Mine Waste Gas) Methodology Determination 2015* (the Determination).

The Determination credits emissions reductions achieved through the conversion of the methane component of coal mine waste gas, including by electricity generation, flaring and treatment of mine ventilation air (known as ventilation air methane), to carbon dioxide, which has a lower global warming potential. Emission reductions for displacing grid electricity can also be credited.

The proposed Variation implements the recommendations of the crediting period extension review commenced in late 2020 by the Emissions Reduction Assurance Committee (the Committee) as required under section 255A of the *Carbon Credits (Carbon Farming Initiative) Act 2011* (the Act). In summary, the proposed Variation:

- Extends the crediting period for coal mine waste gas project activities (other than those formerly participating solely in the Renewable Energy Target (RET) scheme – see further below) by five years (from seven to 12 years).
- Allows waste coal mine gas projects, whose eligibility to generate large-scale generation certificates for generation of electricity from waste coal mine gas under the RET scheme ceased on 31 December 2020, to transition to the Emissions Reduction Fund (ERF) for a crediting period of five years if the electricity production devices were not already participating in the ERF.
- Amends the grid emissions intensity used in the calculations for abatement from electricity displacement activities to the grid emissions intensity factor current at the end of the reporting period.
- Requires project proponents to do all that is practicable to minimise any period during which there is a failure to monitor a parameter in accordance with the monitoring requirements in the Determination.

Legislative provisions

The Determination was made under subsection 106(1) of the Act.

The proposed Variation amends the Determination, and is made under subsection 114(1) of the Act, which empowers the Minister to vary, by legislative instrument, a methodology determination.

Background to the Emissions Reduction Fund

The Act enables the crediting of greenhouse gas abatement from emissions reduction activities across the economy. Greenhouse gas abatement is achieved either by reducing or avoiding emissions or by removing carbon from the atmosphere and storing it in soil or trees.

In 2014, the Australian Parliament passed the *Carbon Farming Initiative Amendment Act 2014*, which established the ERF. Further Information on the ERF is available at:

www.industry.gov.au/funding-and-incentives/emissions-reduction-fund or
www.cleanenergyregulator.gov.au/ERF.

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

Subsection 106(1) of the Act empowers the Minister to make by legislative instrument a methodology determination. The purpose of a methodology determination is to establish procedures for estimating abatement (emissions reductions and sequestration) from eligible projects and rules for monitoring, record keeping, and reporting. These methodologies will ensure that emissions reductions are genuine—that they are both real and additional to business as usual.

In deciding to make a methodology determination, the Minister must have regard to the advice of the Emissions Reduction Assurance Committee (ERAC), an independent expert panel which assesses whether methods meet the integrity requirements of the ERF. The Minister must not make or vary a methodology determination if the ERAC considers it inconsistent with the offsets integrity standards, which are set out in section 133 of the Act. The Minister will also consider any adverse environmental, economic, or social impacts likely to arise as a result of projects to which a methodology determination applies.

Offsets projects that are undertaken in accordance with a methodology determination and approved by the Clean Energy Regulator (the Regulator) can generate Australian carbon credit units (ACCUs). These units represent emissions reductions from the project.

Background to the proposed Variation

In late 2020 the Committee commenced a crediting period extension review of the Determination as required under section 255A of the Act.

The Committee's crediting period review considered stakeholder submissions and additional analysis by the Regulator in 2021. The Committee found there was sufficient evidence to demonstrate that abatement from projects under the Determination was additional. The Committee found that CMWG projects were unlikely to be economically viable without ACCUs and would be unlikely to continue to occur in the ordinary course of business. On

balance, the Committee also formed the view that there is a high risk that existing projects would cease operations without an extension of the crediting period. On this basis, the Committee recommended a crediting period extension of five years for project types listed in the current Determination.

The Committee also considered two other questions: whether to allow waste coal mine gas projects solely under the *Renewable Energy (Electricity) Act 2000* that could not generate large-scale generation certificates (LGCs) after 31 December 2020, to transition into the ERF; and what grid electricity emissions intensity factor to be used to calculate abatement.

The Committee recommended RET waste coal mine gas projects that were in place as at 31 December 2020 and that were not participating in the ERF could transition into the ERF to generate credits for up to five years on the basis that these projects were likely to discontinue generating abatement in the absence of ACCU revenue and were therefore likely to be additional. The crediting period of five years for transitioning RET projects is intended to encourage continued abatement from transitioning RET projects while recognising that projects have previously received government support under other schemes.

The Committee also recommended that the emissions intensity factor used in the calculations for abatement from electricity displacement activities and emissions from electricity consumed from the operation of the project be amended from the value that is fixed at the time of project declaration to the factor that is current at the end of each reporting period. The proposed change ensures that abatement credited under the method meets the offsets integrity standards, specifically that estimates are accurate and conservative, particularly given the decline in grid emissions intensity overtime. This proposed amendment will apply to all projects, including projects currently registered, if their project proponents elect to have the varied Determination apply to their projects.

The proposed Variation implements these recommendations.

Operation of the Variation

Section 17A extends the crediting period for the six existing eligible project activities in the current Determination to 12 years.

To facilitate the inclusion of transitioning RET projects, the proposed Variation includes new project requirements for transitioning electricity production projects in section 16B and transitioning displacement electricity production projects in section 16C.

The transitioning electricity production project type credits for abatement from converting the methane component of the coal mine waste gas to carbon dioxide and displacing grid electricity. The transitioning displacement electricity production project type credits only for displacement of grid electricity. This project type is to enable participation in the ERF by projects where there is an existing regulatory requirement to destroy incidental methane (usually by flaring) and those projects are therefore not eligible to earn ACCUs for conversion abatement. These projects may still be eligible to earn ACCUs for the displacement of grid electricity, subject to meeting the eligibility requirements.

Both types of transitioning projects have a specified crediting period of five years and eligibility is limited to former RET electricity production devices, as defined in Part 1, that are not part of another coal mine waste gas project.

The proposed Variation includes a requirement in lieu of newness under subparagraph 27(4A)(a)(ii) of the Act for the transitioning project types. Amendments are also made to the in lieu of regulatory additionality provision in section 17 specifically for transitioning displacement electricity production projects. These amendments are required given the projects previously operated under the RET and the transitioning displacement electricity production projects are subject to existing regulatory obligations to destroy the methane component of coal mine waste gas.

The abatement calculations for transitioning projects are set out in Division 7B and Division 7C that the Variation proposes to insert in Part 4 of the Determination.

Amendments to sections 36 and 41 will require project proponents to use the emissions intensity factor for grid electricity that is in place at the end of the reporting period for all projects, including transitioning projects. The intention is to ensure that the abatement credited for electricity displacement is accurate and conservative. Setting the emissions factor to be the factor in force at the end of the reporting period better reflects the emissions intensity of the electricity being displaced, particularly as grid electricity emissions intensity is declining.

The proposed Variation includes a new provision in section 48 to clarify the intended use of non-reporting periods. This change specifies that project proponents must make all practicable efforts to minimise the non-monitored period to ensure that estimated abatement is accurate and conservative, in accordance with the offsets integrity standards set out in section 133 of the Act.

Consultation

The proposed Variation was developed by the Regulator.

A detailed proposal for the Variation, in the form of a marked up copy of the Determination as varied by the Variation, will be published on the Department's website for public consultation from **XX Month to XX Month 2021**. Details on how to make a submission are provided on the Departments website at: www.industry.gov.au.

Variation details

Details of the proposed Variation are at Attachment A. Numbered sections and items in this explanatory statement align with the relevant sections and items of the proposed Variation. This is intended to assist the interpretation of the Determination as amended by the proposed Variation.

Details of the varied methodology determination

1 Name

Section 1 sets out the full name of the proposed Variation, which is the *Carbon Credits (Carbon Farming Initiative—Coal Mine Waste Gas) Methodology Determination Variation 2021*.

2 Commencement

Section 2 provides that the proposed Variation commences on the day after it is registered on the Federal Register of Legislation.

3 Authority

Section 3 provides that the proposed Variation is made under subsection 114(1) of the Act.

4 Amendment of methodology determination

Section 4 provides that the *Carbon Credits (Carbon Farming Initiative—Coal Mine Waste Gas) Methodology Determination 2015* is amended as set out in Schedule 1 of the proposed Variation.

Schedule 1 Amendment

Part 1 Preliminary

[1] Section 5

Item 1 sets out the meaning of the following defined terms in Section 5:

- eligible renewable energy source
- former RET electricity production device
- RE(E) Act refers to the *Renewable Energy (Electricity) Act 2000*
- transitioning displacement electricity production project
- transitioning electricity production project.

These defined terms are inserted to support the inclusion of the new project types by Item 5.

Part 2 Coal mine waste gas projects

[2] Paragraph 10(1)(a)

Item 2 amends section 10(1)(a) to include the operation of a former RET electricity production device as a coal mine waste gas offsets project under the Determination. This is limited to electricity production devices existing on 31 December 2020 that were among the components of an accredited power station within the meaning of the *Renewable Energy (Electricity) Act 2000*.

[3] At the end of paragraph 10(3)(f)

Item 3 amends section 10 to include transitioning electricity production projects and transitioning displacement electricity production project as additional kinds of coal mine waste gas projects.

Part 3 Project requirements

[4] Section 16 (note at the end of the section)

Item 4 amends the note at the end of the section to include a transitioning electricity production project to the list of projects that are eligible to receive abatement from the conversion of the methane component of coal mine waste gas.

[5] After section 16A

Item 5 insets two new sections, 16B and 16C after section 16A. New section 16B sets out requirements for a ***transitioning electricity production project***, to be one that:

- operates a former RET electricity production device; and
- not use an eligible renewable energy source to produce electricity.

The project may operate an existing flaring or flameless oxidation device. The project proponent must provide a statement at the time of application under section 22 of the Act that the project is a transitioning electricity production project and identify each former RET electricity production device and existing flaring or flameless oxidation device that will be operated as part of the project. This ensures each former RET electricity production device and existing flaring or flameless oxidation device that may form part of another ERF project are identified during the project declaration process, as the policy intent is that transitioning electricity production projects should not be able to claim abatement from operation of such devices.

These requirements ensure that the project was formerly eligible under the *Renewable Energy (Electricity) Act 2000* and the project is not using an eligible renewable energy source under that Act to generate electricity as part of the project. Components existing at 31 December 2020 are eligible to form part of the project and these must have been declared in the application to declare the project as an eligible offsets project.

Abatement calculations provided in the new Division 7B for transitioning electricity production projects include abatement from the conversion of the methane component of coal mine waste gas and abatement from the displacement of grid electricity.

Further, item 5 sets out new requirements for a ***transitioning displacement electricity production project*** in the new section 16C. The transitioning displacement electricity production project must be one that:

- operates a former RET electricity production device; and

- not use an eligible renewable energy source to produce electricity.

The project may operate an existing flaring or flameless oxidation device. The project proponent must provide a statement at the time of application under section 22 of the Act that the project is a transitioning displacement electricity production project and identify each former RET electricity production device and existing flaring or flameless oxidation device that will be operated as part of the project. This ensures each former RET electricity production device and existing flaring or flameless oxidation device that may form part of another coal mine waste gas ERF project are identified during the project declaration process, as the policy intent is that transitioning displacement electricity production projects should not be able to claim abatement from operation of such devices.

These requirements ensure that the project was formerly eligible under the *Renewable Energy (Electricity) Act 2000* and the project is not using an eligible renewable energy source under that Act to generate electricity as part of the project. Components existing at 31 December 2020 are eligible to form part of the project and this must have been declared in the application to declare the project as an eligible offsets project.

Unlike a transitioning electricity production project, the abatement calculations for transitioning displacement electricity production projects do not include abatement from the conversion of the methane component of coal mine waste gas. Only the abatement from displacing grid electricity is accounted for. This allows for such projects to generate abatement from the production of electricity where there is an existing regulatory obligation to destroy the methane component of coal mine waste gas.

[6] After the heading to Division 2 of Part 3

Item 6 adds new sections after the heading to Division 2 – Additionality requirements. The new section 16D outlines the operation of the Division, including requirements in lieu of newness and in lieu of regulatory additionality.

The new section 16E includes a requirement in lieu of newness for certain former RET projects for the purposes of subsection 27(4A)(a)(ii) of the Act. Transitioning electricity production projects or transitioning displacement electricity production projects meet the substituted newness requirement if the project operates a former RET electricity production device that is not operated as part of another coal mine waste gas project.

[7] Subsection 17(1)

Item 7 amends the requirement in lieu of regulatory additionality in section 17. Subsection 17(1) is amended to clarify that projects that undertake conversion and displacement abatement activities must have no existing regulatory obligation to destroy the methane component of coal mine waste gas. The amendment clarifies that this subsection does not apply to displacement only project types being displacement electricity production projects, ventilation air methane projects, and transitioning displacement electricity production projects.

[8] After subsection 17(2)

Item 8 adds a new subsection 17(2A) after subsection 17(2) to include a requirement in lieu of regulatory additionality for transitioning displacement electricity production projects that operate a former RET electricity production device.

This provision allows transitioning electricity generation projects in jurisdictions that have an existing regulatory obligation to destroy the methane component of coal mine waste gas to generate abatement from the displacement of grid electricity. These projects are not eligible for abatement generated from the conversion of the methane component of coal mine waste gas.

[9] After section 17

Item 9 adds a new division to Part 3 – Project requirements, after section 17. The new Division 3 – Crediting period sets out the crediting period for certain projects under paragraph 69(3)(b) of the Act.

The new section 17A(1) specifies a crediting period of 12 years for a coal mine waste gas project that is:

- a new flaring or flameless oxidation project; or
- an expansion flaring or flameless oxidation project; or
- a new electricity production project; or
- an expansion electricity production project; or
- a displacement electricity production project; or
- a ventilation air methane project.

This implements the crediting period extension of five years for the project activities contained in the current Determination.

The new section 17A(2) specifies a crediting period of five years for a coal mine waste gas project that is:

- a transitioning electricity production project; or
- a transitioning displacement electricity production project.

This limited crediting period acknowledges that these types of projects have previously received support under other programs.

Part 4 Net abatement amounts

[10] Section 25 (definition of *h*)

Item 10 clarifies the definition of h in the calculation of the volume of the methane component of coal mine waste gas sent to device h as part of the project in the reporting period in **equation 12**.

Item 10 specifies that h is an existing flaring or flameless oxidation device for a transitioning electricity production project, or in the case of any other coal mine waste gas project using equation 12 – an installed flaring or flameless oxidation device.

[11] Section 26 (paragraph (a) of the definition of $Q_{CH_4,h}$)

Item 11 clarifies the definition of the term $Q_{CH_4,h}$ in the calculation of the emissions of gas type j released from the conversion of the methane component of coal mine waste gas by a flaring or flameless oxidation device in **equation 13**.

The definition replaces (a) with “a coal mine waste gas project other than an expansion flaring or flameless oxidation project” to clarify that (a) applies to all coal mine waste gas projects using equation 13 other than expansion flaring or flameless oxidation projects.

[12] Section 26 (definition of h)

Item 12 specifies that term h in **equation 13** is an existing flaring or flameless oxidation device for a transitioning electricity production project, or in the case of any other coal mine waste gas project – an installed flaring or flameless oxidation device.

Items 10-12- allow for **equation 12** and **equation 13** to apply to the new transitioning electricity production projects. Additionally, the changes allow for the use of **equation 12** for new electricity production projects and displacement electricity production projects in addition to new flaring or flameless oxidation projects. They also allow for the use of **equation 13** for new flaring or flameless oxidation projects, new electricity production projects, expansion electricity production projects and displacement electricity production projects in addition to expansion flaring or flameless oxidation projects. This follows the original intent of the Determination.

[13] Section 32

Item 13 adds transitioning electricity displacement projects to the listed project activities that receive abatement from displacing electricity.

[14] After Division 7A of Part 4

Item 14 adds two new divisions (Division 7B and Division 7C) to Part 4 – Net abatement amounts, after section 33B. The new divisions set out abatement calculations for transitioning electricity production projects and transitioning displacement electricity production projects, respectively.

In the new Division 7B, the new section 33C summarises the net abatement amount for a transitioning electricity production project, which comprises the methane component of coal mine waste gas converted by the project and emissions displaced from the electricity

produced. Emissions released by running the project, including emissions from other electricity used during the reporting period, are subtracted.

Section 33D sets out the net abatement in **equation 25D**, including the abated project emissions (A_P) and displaced electricity emissions (A_D).

Abated project emissions (A_P) are calculated in **equation 25E**. A_P is calculated as the volume of the methane component of coal mine waste gas converted by the project (M_{COM}) minus the emissions from the methane component of coal mine waste gas converted by the project (E_{MD}) and the ancillary project emissions (E_{AN}).

The volume of the methane component of coal mine waste gas converted by the project (M_{COM}) is given in **equation 25F**. The equation sets out two parts of the methane component:

- the volume of the methane component of coal mine waste gas ($Q_{CH_4,i}$) sent to a former RET electricity production device (i) multiplied by the factor for converting methane from cubic metres to the equivalent tonne of carbon dioxide in section 3.21 of the NGER (Measurement) Determination (γ); and
- the volume of the methane component of coal mine waste gas ($Q_{CH_4,h}$) sent to an existing flaring or flameless oxidation device (h) multiplied by the factor (γ) and the methane destruction efficiency factor OF_{if} in 3.14 of the NGER (Measurement) Determination.

The emissions from the methane component of coal mine waste gas converted by the project in the reporting period are set out in **equation 25G**. This is the sum of the emissions of gas type j from the methane component converted in the former RET electricity production device ($E_{MD,i,j}$) and the emissions of gas type j converted in the existing flaring or flameless oxidation device ($E_{MD,h,j}$).

The new Division 7C sets out the abatement calculations for transitioning displacement electricity production projects. The new section 33E summarises the net abatement amount, specifying transitioning displacement electricity production projects generate abatement from the displacement of emissions from electricity only, less certain parameters associated with electricity production.

The abatement calculation is set out in **equation 25H**. This includes one term (A_G), the displaced electricity emissions from electricity production by operating a former RET electricity device. The displaced emissions are calculated in **equation 28** that is set out in section 36.

[15] Subsection 34(1) (definition of i)

Item 15 substitutes the definition of electricity production device i in **equation 26** in subsection 34(1). The new definition for i means:

- a former RET electricity production device operated as part of the project for transitioning electricity production projects; or

- an installed electricity production device for any other coal mine waste gas project using equation 26.

[16] Section 35 (paragraph (a) of the definition of $Q_{CH_4,i}$)

Item 16 amends the definition of the methane component of coal mine waste gas sent to electricity production device i ($Q_{CH_4,i}$) in **equation 27** to include transitioning electricity production projects in paragraph (a) of that definition.

[17] Section 35 (definition of i)

Item 17 substitutes the definition of electricity production device i in **equation 27** in section 35. The new definition for i means:

- a former RET electricity production device operated as part of the project for transitioning electricity production projects; or
- an installed electricity production device for any other coal mine waste gas project using equation 27.

[18] Subsections 36(1) and (4)

Item 18 substitutes “installed and existing” with “relevant” when referring to electricity production devices throughout subsections 36(1) and 36(4). This change reflects the new defined term ‘relevant electricity production devices’ for the purposes of section 36 (see Item 21).

[19] Subsection 36(1) (definition of EF_{Elec})

Item 19 amends the definition for the emissions intensity factor (EF_{Elec}) in **equation 28**. The amended definition substitutes all references to “in force on the declaration day” with “in force at the end of the reporting period”. This has the effect of changing the emissions intensity factor used to calculate displaced emissions from electricity generation from a fixed value at the time of project declaration to the value that is updated and current at the end of each reporting period. This change is intended to ensure that the abatement calculations are conservative and accurate, as the emission intensity of electricity generation has declined since the Determination was made and is projected to continue to decline.

[20] Subsection 36(3)(c)

Item 20 substitutes “on the declaration day” with “at the end of the reporting period” to reflect the new emissions factor to be used when calculating displaced emissions from electricity generation. This clarification reflects the amendment in subsection 36(1) (see Item 19).

[21] After subsection 36(6)

Item 21 adds a definition for **relevant electricity production devices** in a new subsection 36(7) after subsection 36(6). This specifies that for transitioning electricity production

projects and transitioning displacement electricity production projects the relevant device is a former RET electricity production device, while for other coal mine waste gas projects using equation 28 it is the installed and existing devices operated as part of the project.

[22] Subsection 37(1) (definition of X_t)

Item 22 amends the definition of the term X_t in **equation 30** in section 37. The amended term adds a paragraph (a) for transitioning electricity production projects or transitioning displacement electricity production projects that specifies X_t as the amount of electricity produced by a former RET electricity production device operated as part of the project.

[23] After subsection 37(1)

Item 23 adds a new equation, **equation 30A**, to section 37 after **equation 30**. This equation is to calculate X_t for transitioning electricity production projects and transitioning displacement electricity production projects. **Equation 30A** sets out that X_t is the sum of electricity produced by a former RET electricity production device i for time interval t , in megawatt hours, worked out in accordance with the monitoring requirements ($Q_{EG,i,t}$).

The method to calculate X_t for all other project activities is not affected by the Items 22 and 23.

[24] Section 38

Item 24 substitutes “installed and existing” with “relevant” when referring to electricity production devices throughout section 38. This change reflects the new defined term ‘relevant electricity production devices’ for the purposes of section 38 (see Item 25).

[25] After subsection 38(2)

Item 25 adds a new subsection 38(3) after subsection 38(2) to define ***relevant electricity production devices***. This specifies that for transitioning electricity production projects and transitioning displacement electricity production projects, the relevant device is a former RET electricity production device, while for other coal mine waste gas projects using equation 32 it is the installed and existing devices operated as part of the project.

[26] Subsection 41(1) (definition of EF_{Elec})

Item 26 amends the definition for EF_{Elec} in section 41. The amended definition substitutes references to “in force on the declaration day” with “in force at the end of the reporting period”. This has the effect of changing the emissions intensity factor used to calculate ancillary project emissions from electricity obtained from an electricity grid that is consumed by the project from a fixed value at the time of project declaration to the value that is updated and current at the end of the reporting period. This change is intended to ensure that the calculation for project emissions is accurate as the emission intensity of electricity generation has declined since the Determination was made and is projected to continue to decline.

Part 5 – Reporting, record-keeping and monitoring requirements

[27] Subsection 47(1) (items 7 and 15 of the table)

Item 27 substitutes “installed and existing” with “relevant” when referring to electricity production devices in items 7 and 15 of the table in section 47. This change reflects the new defined term ‘relevant electricity production devices’ for the purposes of section 47 (see Item 29).

[28] Subsection 47(1) (item 11 of the table)

Item 28 amends the description of monitored parameter item 11 of the table (DEG) to include former RET electricity production devices, in addition to installed and existing electricity production devices. The measurement procedure to monitor the parameter has not changed.

[29] After subsection 47(6)

Item 29 adds a new subsection 47(7) after subsection 47(6) to define ***relevant electricity production devices***. This specifies that for transitioning electricity production projects and transitioning displacement electricity production projects the relevant device is a former RET electricity production device, while for other coal mine waste gas projects it is the installed and existing devices operated as part of the project.

[30] After the table to subsection 48(1)

Item 30 adds a new subsection 1A after subsection 1. This states that project proponents must make all practicable efforts to minimise the non-monitoring period during the reporting period.