



Carbon Credits (Carbon Farming Initiative— Carbon Capture and Storage) Methodology Determination 2021

I, Angus Taylor, Minister for Energy and Emissions Reduction, make the following legislative instrument.

Dated: 24 September 2021

Angus Taylor
Minister for Energy and Emissions Reduction

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Part 1—Preliminary

1 Name

This is the *Carbon Credits (Carbon Farming Initiative—Carbon Capture and Storage) Methodology Determination 2021*.

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- (b) unless this determination is sooner revoked, ends on the day before it would otherwise be repealed under subsection 50(1) of the *Legislation Act 2003*.

5 Definitions

In this determination:

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

capture point means any plant, building, structure or stationary equipment at which greenhouse gases:

- (a) generated from industrial processes (including electricity generation); or
- (b) extracted from a hydrocarbon field;

are captured by a person for the purpose of permanent storage by the holder of a relevant authority in a storage site or any part of it.

Note: The capture of greenhouse gases may or may not be undertaken by the holder of a relevant authority who permanently stores them in a storage site or any part of it.

carbon capture and storage project has the meaning given by section 7.

CCS project plan has the meaning given by subsection 9(2).

co-mingled greenhouse gases means a greenhouse gas stream constituted of:

- (a) greenhouse gases that are captured for permanent storage by a carbon capture and storage project at one or more capture points used by the project and subjected to processing, compression and transportation for the purpose of being permanently stored by the project; and
- (b) greenhouse gases that are captured for permanent storage by any other project and subjected to processing, compression and transportation for a purpose other than being permanently stored by the project.

GWP_{CH4} means the global warming potential value for methane set out in regulation 2.02 of the NGER Regulations.

GWP_{N2O} means the global warming potential value for nitrous oxide set out in regulation 2.02 of the NGER Regulations.

injection point means the pipe and associated infrastructure that conveys greenhouse gases from the surface to the subsurface for permanent storage in a storage site or any part of it, but does not include a pipeline involved in conveying greenhouse gases from a capture point to the surface of the storage site.

monitoring and verification activities mean the monitoring, verification, measurement and estimation activities conducted by a project proponent in relation to each storage site used in a carbon capture and storage project.

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

Note: In September 2021, the NGA Factors document could be viewed on the Department’s website (<http://www.industry.gov.au>).

NGER (Measurement) Determination means the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*.

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

non-monitored period has the meaning given by subsection 37(1).

off-taker means a person to whom greenhouse gases captured at a capture point are transferred for a purpose other than permanent storage by the project.

Note: The owner or operator of the capture point can be an off-taker.

permanently stored, in relation to greenhouse gases, means storage of the greenhouse gases in a storage site:

- (a) in accordance with the relevant authority and any Commonwealth, State or Territory legislation governing the use of the storage site; and
- (b) in a way that the greenhouse gases would not be released into the atmosphere;

and ***permanent storage*** has a corresponding meaning.

project greenhouse gases means greenhouse gases captured for permanent storage by a carbon capture and storage project at a capture point used by the project that are subjected to processing, compression and transportation for the purpose of being permanently stored by the project without being co-mingled with greenhouse gases that are processed, compressed and transported for a purpose other than being permanently stored by the project.

recognised law of a State or Territory means a law of a State or Territory that makes provision for regulation of the injection and permanent storage of greenhouse gases in a recognised reservoir located in that State or Territory, and that meets, or is part of a legislative framework that in combination meets, the following criteria:

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- (a) the law or legislative framework requires the owners or operators of proposed projects to provide to the person or body responsible for the administration of that law or framework, detailed assessments and technical specifications of the proposed recognised reservoir including its estimated storage capacity and its ability to be used to permanently store injected greenhouse gases;
 - (b) the law or legislative framework imposes requirements, or requires conditions to be imposed on or in relation to the recognised licence, about the greenhouse gases to be injected, including technical specifications of the composition, injection rate, and volume of the greenhouse gases;
 - (c) the law or legislative framework requires monitoring and regular reporting of greenhouse gases that are intended to be, and have been, stored in the recognised reservoir, at a minimum for the duration of the relevant authority;
 - (d) the law or legislative framework requires the assessment of the likelihood of greenhouse gas loss from the recognised reservoir and potential migration paths of injected greenhouse gases from the recognised reservoir;
 - (e) the law or legislative framework requires all risks of greenhouse gas loss from the recognised reservoir to public health and the surrounding environment to be identified in a detailed assessment;
 - (f) the law or legislative framework requires mitigation and management strategies to be developed and implemented to address identified risks;
 - (g) the law or legislative framework establishes criteria for when a proposed project will be required to be notified widely and be subject to public consultation;
 - (h) the law or legislative framework requires relevant stakeholders to be advised of the proposed project;
 - (i) the law or legislative framework provides for site plans (however described) of the proposed project to be regularly reviewed by the person or body responsible for the administration of that law or framework periodic reports regarding project operations to be provided to that person or body..

Note: In September 2021, each of the following is a recognised law of a State or Territory:

- (a) the *Greenhouse Gas Geological Sequestration Act 2008* (Vic);
- (b) the *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (Vic);
- (c) the *Greenhouse Gas Storage Act 2009* (Qld);
- (d) the *Petroleum and Geothermal Energy Act 2000* (SA).

recognised licence means an authorisation (however described) for the injection of greenhouse gases into a recognised reservoir issued to a person under a recognised law of a State or Territory.

recognised reservoir means an underground geological formation, reservoir or site that is suitable, with or without engineering enhancements, for the injection and permanent storage of greenhouse gases in accordance with a recognised law of a State or Territory.

relevant authority means either of the following licences or leases for a carbon capture and storage project:

- (a) if the project involves injection of greenhouse gases into an identified greenhouse gas storage formation in accordance with the *Offshore*

Petroleum and Greenhouse Gas Storage Act 2006—a greenhouse gas injection licence under that Act;

- (b) if the project involves injection of greenhouse gases into a recognised reservoir in accordance with a recognised law of a State or Territory—a recognised licence under that law.

Note: In September 2021, recognised licences under a recognised law of a State or Territory include the following licences and leases:

- (a) an injection and monitoring licence within the meaning of the *Greenhouse Gas Geological Sequestration Act 2008* (Vic);
- (b) a greenhouse gas injection licence within the meaning of the *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (Vic);
- (c) an injection and storage lease within the meaning of the *Greenhouse Gas Storage Act 2009* (Qld);
- (d) a gas storage licence within the meaning of the *Petroleum and Geothermal Energy Act 2000* (SA).

scope 1 emissions and **scope 2 emissions** have the same meaning as in the *National Greenhouse and Energy Reporting Act 2007*.

section 22 application, in relation to an offsets project, means an application under section 22 of the Act to declare the project as an eligible offsets project under this determination.

storage site means an underground geological formation, reservoir or site that is either:

- (a) an identified greenhouse gas storage formation within the meaning of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*;
- (b) a recognised reservoir for the purposes of a recognised law of a State or Territory.

Note: In September 2021, recognised reservoirs for the purposes of a recognised law of a State or Territory include the following formations, reservoirs and sites:

- (a) an underground geological formation within the meaning of the *Greenhouse Gas Geological Sequestration Act 2008* (Vic);
- (b) an identified greenhouse gas storage formation within the meaning of the *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (Vic);
- (c) a GHG stream storage site within the meaning of the *Greenhouse Gas Storage Act 2009* (Qld);
- (d) a natural reservoir within the meaning of the *Petroleum and Geothermal Energy Act 2000* (SA).

storage site fugitive emissions has the meaning given by section 24.

storage site monitoring emissions has the meaning given by section 23(1).

transportation includes conveyance, and **transports** has a corresponding meaning.

Note: Other words and expressions used in this determination have the meaning given by the Act. These terms include:

carbon abatement
carbon dioxide equivalent
crediting period
eligible carbon abatement
eligible offsets project
emission

extended accounting period

greenhouse gas

offsets project

offsets report

project

project proponent

Regulator

reporting period

6 References to factors and parameters from external sources

- (1) If a calculation in this determination includes a factor or parameter that is defined or calculated 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, or calculated by reference to, the instrument or writing as in force at the end of the reporting period.
- (2) Subsection (1) does not apply if:
 - (a) this determination specifies otherwise; or
 - (b) it is not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.

Part 2—Carbon capture and storage projects

7 Carbon capture and storage projects

- (1) For paragraph 106(1)(a) of the Act, this determination applies to an offsets project that:
 - (a) captures, from one or more capture points, greenhouse gases that would otherwise be released into the atmosphere; and
 - (b) transports the greenhouse gases to one or more storage sites; and
 - (c) injects the greenhouse gases into a storage site, at one or more injection points, so that they are permanently stored in the storage site or any part of it; and
 - (d) could reasonably be expected to result in eligible carbon abatement.
- (2) A project covered by subsection (1) is a ***carbon capture and storage project*** for the purposes of this determination.
- (3) To avoid doubt, neither of the following is a carbon capture and storage project:
 - (a) a project that involves or includes the injection of greenhouse gases into a storage site which has the effect of enhanced oil, gas or hydrocarbon recovery;
 - (b) a project that involves direct air capture and storage (that is, the capture from the atmosphere of greenhouse gases that would otherwise reside in the atmosphere and the injection of those greenhouse gases into, or their storage in, an underground geological formation, reservoir or site).

Part 3—Project requirements

8 Operation of this Part

- (1) For paragraph 106(1)(b) of the Act, section 9 requires an application under section 22 of the Act (for a declaration that a carbon capture and storage project is an eligible offsets project) to be accompanied by a CCS project plan for the project and makes related provisions.
- (2) For paragraph 106(1)(b) of the Act, sections 10 and 13 set out requirements that must be met for a carbon capture and storage project to be an eligible offsets project.
- (3) For subparagraph 27(4A)(a)(ii) of the Act, section 11 specifies a requirement in lieu of the newness requirement.
- (4) For paragraph 69(3)(b) of the Act, section 12 specifies the crediting period for a carbon capture and storage project.

9 CCS project plan must accompany section 22 application

- (1) A section 22 application for a carbon capture and storage project must be accompanied by the CCS project plan for the project.
- (2) The **CCS project plan** for a carbon capture and storage project is a document that outlines aspects of the implementation of the project, including (but not limited to) the following:
 - (a) information about each relevant authority required for the project, including information about each relevant authority required for the project that has been obtained;
 - (b) a brief summary of the overall project operations, including the installation and operation of:
 - (i) equipment to capture greenhouse gases at capture points to be used by the project; and
 - (ii) equipment to process captured greenhouse gases; and
 - (iii) equipment to transport greenhouse gases from capture points to each storage site proposed to be used in the project;
 - (c) a detailed description of the location and characteristics of each storage site to be used by the project, including its suitability for permanently storing the greenhouse gases injected into the storage site and the estimated capacity of the storage site;
 - (d) a detailed description of how each storage site to be used by the project will be operated, including a description of the composition of the greenhouse gases that will be injected into the storage site and how they will be injected;
 - (e) a detailed description of the location of the injection points to be used by the project to inject greenhouse gases into each storage site and how they will be managed and monitored;
 - (f) a detailed description of the location and nature of the capture points to be used by the project and, where a capture point relates to greenhouse gases

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- extracted from a hydrocarbon field, a detailed description of the location of the hydrocarbon field;
- (g) a detailed description of the processing, transport or pipeline infrastructure to be used by the project for processing and transporting greenhouse gases between one or more capture points and a storage site;
 - (h) details of the steps to be taken to ensure that greenhouse gases stored in a storage site will be permanently stored;
 - (i) a detailed description of how any risk of release of the greenhouse gases to the atmosphere from a storage site will be managed;
 - (j) an outline of how monitoring of a storage site, and reporting about that monitoring, will be undertaken;
 - (k) if multiple parties are involved in the project, a description of the project responsibilities of each party to the project;
 - (l) information about any workplace health and safety plan covering the operations of the project that is required by or under any Commonwealth, State or Territory law to be in place.
- (3) The project proponent must take reasonable steps to implement or oversee the implementation of the carbon capture and storage project in accordance with the CCS project plan (as revised from time to time pursuant to subsection (4)) until the end of the extended accounting period.
- (4) The project proponent must revise the CCS project plan if:
- (a) the project proponent's implementation of the carbon capture and storage project changes materially from that outlined in the CCS project plan; and
 - (b) the Regulator notifies the project proponent that a particular issue omitted from, or covered by the CCS project plan needs to be addressed—by the date specified in the notification (which must be at least three months from the date of the notification).

10 Requirements for a carbon capture and storage project

- (1) A carbon capture and storage project must not use a capture point for capturing greenhouse gases generated from industrial processes (including electricity generation) if that capture point has previously been identified in an offsets report given to the Regulator for another carbon capture and storage project (the **second project**) as a capture point for the second project for capturing greenhouse gases generated from industrial processes (including electricity generation).
- (2) A carbon capture and storage project must not involve the capture for permanent storage of greenhouse gases extracted from a hydrocarbon field if the field has previously been identified in an offsets report given to the Regulator for another carbon capture and storage project (the **second project**) as a field from which greenhouse gases have been extracted then captured for permanent storage by the second project.

11 Newness

- (1) For subparagraph 27(4A)(a)(ii) of the Act, the substitute newness requirement is in lieu of the newness requirement for a carbon capture and storage project.

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- (2) A carbon capture and storage project meets the *substitute newness requirement* if:
- (a) a final investment decision has not been made for the project at the time of the making of a declaration under subsection 27(2) of the Act that the project is an eligible offsets project that is covered by this determination; and
 - (b) if applicable, a capture point used in the project for capturing greenhouse gases extracted from a hydrocarbon field has previously been identified in an offsets report given to the Regulator for another carbon capture and storage project (the *second project*) as a capture point for the second project for capturing greenhouse gases extracted from a hydrocarbon field.
- (3) For the purpose of paragraph (2)(a), *final investment decision*:
- (a) has the meaning generally accepted within the corporate finance community; and
 - (b) does not include a decision to proceed with an offsets project that is contingent on the project being declared to be an eligible offsets project that is covered by this determination.

12 Crediting period

For paragraph 69(3)(b) of the Act, the period of 25 years is specified for a carbon capture and storage project.

13 Using NGER methods to work out factors and parameters

- (1) If during a reporting period the emissions from a facility included in a carbon capture and storage project are reported under the *National Greenhouse and Energy Reporting Act 2011* using an NGER method to work out a factor or parameter involved in calculating those emissions, the project proponent must use the same NGER method for working out that factor or parameter for the facility for the purposes of the project during the reporting period.
- (2) In this section, *NGER method* means a method specified in the NGER (Measurement) Determination.

Part 4—Net abatement amount

14 Operation of this Part

For paragraph 106(1)(c) of the Act, this Part specifies the method for working out the carbon dioxide equivalent net abatement amount for a reporting period for a carbon capture and storage project that is an eligible offsets project.

15 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 carbon capture and storage project.

Greenhouse gases and emissions sources			
Item	Relevant emissions calculation	Emissions source	Greenhouse gas
1	Measured emissions from a capture process	Capture process emissions	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
2	Measured emissions from processing, compression and transportation	Processing, compression and transportation emissions	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
3	Estimated fugitive emissions from transportation and injection	Transportation and injection fugitive emissions	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
4	Measured emissions from monitoring a storage site	Storage site monitoring emissions	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
5	Estimated fugitive emissions from a storage site	Storage site fugitive emissions	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
6	Measured greenhouse gases captured	Captured greenhouse gases	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)
7	Measured methane captured	Captured methane	Methane (CH ₄)
8	Measured greenhouse gases transferred to an off-taker	Captured greenhouse gases	Carbon dioxide (CO ₂) Methane (CH ₄) Nitrous oxide (N ₂ O)

16 Net abatement amount for a reporting period in the crediting period

The carbon dioxide equivalent net abatement amount for a reporting period in the crediting period, in tonnes CO₂-e, is worked out using the formula (*equation 1*):

$$A = (CGG - Q_{CM} - CCSE) \times 0.97$$

where:

A means the carbon dioxide equivalent net abatement amount for the reporting period, in tonnes CO₂-e.

CGG means the amount of greenhouse gases captured for permanent storage by the project during the reporting period, in tonnes CO₂-e, worked out using equation 2.

Q_{CM} means the amount of methane captured for permanent storage by the project during the reporting period, in tonnes CO₂-e, worked out using equation 4.

Note: In some circumstances, the value of Q_{CM} will be zero—see subsection 19(1).

CCSE means the sum of the following:

- (a) emissions from the capture of greenhouse gases for the reporting period, in tonnes CO₂-e, worked out using equation 5;
- (b) emissions from the processing, compression and transportation of greenhouse gases for the reporting period, in tonnes CO₂-e, worked out using equation 8;
- (c) fugitive emissions from transportation and injection for the reporting period, in tonnes CO₂-e, worked out using equation 12;
- (d) emissions from total fuel use for conducting monitoring and verification activities for the reporting period, in tonnes CO₂-e, worked out using equation 13;
- (e) fugitive emissions from the storage site for the reporting period, in tonnes CO₂-e, worked out using equation 15;
- (f) amount of captured greenhouse gases transferred to an off-taker for the reporting period, in tonnes CO₂-e, worked out using equation 16.

17 Amount of captured greenhouse gases

- (1) The amount of greenhouse gases captured for permanent storage by the project during a reporting period in the crediting period, in tonnes CO₂-e, is worked out using the formula (**equation 2**):

$$CGG = \sum_j Vol_j \times \gamma_j$$

where:

CGG means the amount of greenhouse gases captured for permanent storage by the project during the reporting period, in tonnes CO₂-e.

Vol_j means the quantity of greenhouse gas type j captured for permanent storage by the project during the reporting period at one or more capture points used by the project, in cubic metres, worked out using equation 3.

γ_j means the factor for converting a quantity of greenhouse gas type j from cubic metres at standard conditions of pressure and temperature to CO₂-e tonnes, being:

- (a) for methane— $6.784 \times 10^{-4} \times GWP_{CH_4}$; and

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- (b) for carbon dioxide— 1.861×10^{-3} ; and
(c) for nitrous oxide— $1.861 \times 10^{-3} \times \text{GWP}_{\text{N}_2\text{O}}$.
- (2) Conversion of a quantity of greenhouse gas to a quantity under standard conditions of pressure and temperature must be made in a manner that is consistent with the requirements in subsection 2.32(7) of the NGER (Measurement) Determination.

18 Greenhouse gases captured

- (1) The quantity of greenhouse gas type j captured for permanent storage by the project during a reporting period in the crediting period at one or more capture points used by the project, in cubic metres, is worked out using the formula (*equation 3*):

$$\text{Vol}_j = \sum_n \text{Vol}_{j,n}$$

where:

Vol_j means the quantity of greenhouse gas type j captured for permanent storage by the project during the reporting period at one or more capture points used by the project, in cubic metres.

$\text{Vol}_{j,n}$ means the quantity of greenhouse gas type j captured for permanent storage by the project during the reporting period at a capture point n , measured in cubic metres:

- (a) in a manner that:
- (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion AAA set out for the measurement of captured greenhouse gas stream in section 1.19G of that determination, converted at standard conditions of pressure and temperature; and
 - (iii) assumes references to the greenhouse gas stream in those provisions to be references to the greenhouse gas stream captured at the capture point for permanent storage by the project; or
- (b) at the project proponent's election—in a manner that:
- (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion BBB set out for the measurement of captured greenhouse gas stream in section 1.19GA of that determination, converted at standard conditions of pressure and temperature; and
 - (iii) assumes references to the greenhouse gas stream in those provisions to be references to the greenhouse gas stream captured at the capture point for permanent storage by the project; or

n means a capture point used by the project.

- (2) Conversion of a quantity of greenhouse gas to a quantity under standard conditions of pressure and temperature must be made in a manner that is consistent with the requirements in subsection 2.32(7) of the NGER (Measurement) Determination.

19 Amount of captured methane

- (1) The amount of methane captured for permanent storage by the project during a reporting period in the crediting period, in tonnes CO₂-e, is worked out using the formula (*equation 4*):

$$Q_{CM} = \sum_n ((Vol_{CH_4,n} \times \gamma) - E_{CH_4,n})$$

where:

Q_{CM} means the amount of methane captured for permanent storage by the project during the reporting period, in tonnes CO₂-e.

$Vol_{CH_4,n}$ means the amount of methane captured for permanent storage by the project during the reporting period at a capture point n, in cubic metres, worked out as follows:

- (a) if the capture point does not relate to oil or natural gas production or processing—zero;
- (b) if the capture point relates to oil or natural gas production or processing and, in the absence of the project, the methane captured at the capture point would not be converted to carbon dioxide prior to release into the atmosphere—zero;
- (c) if the capture point relates to oil or natural gas production or processing and, in the absence of the project, the methane captured at the capture point would be converted to carbon dioxide prior to release into the atmosphere—the amount of methane captured for permanent storage by the project at the capture point during the reporting period, measured in cubic metres in accordance with subsection (2).

γ means the factor for converting a quantity of methane from cubic metres at standard conditions of pressure and temperature to CO₂-e tonnes, being $6.784 \times 10^{-4} \times GWP_{CH_4}$.

$E_{CH_4,n}$ means:

- (a) if the value for $Vol_{CH_4,n}$ for a capture point n for the reporting period is determined in accordance with paragraphs (a) or (b) of the definition of $Vol_{CH_4,n}$ —zero;
- (b) if the value for $Vol_{CH_4,n}$ for a capture point n for the reporting period is determined in accordance with paragraph (c) of the definition of $Vol_{CH_4,n}$ —the emissions that would have occurred if the amount of methane comprised in that value for $Vol_{CH_4,n}$ had been combusted, in tonnes CO₂-e, calculated in accordance with section 2.20 of the NGER (Measurement) Determination.

n means a capture point used by the project.

- (2) For paragraph (c) of the definition of $Vol_{CH_4,n}$ in subsection (1), the amount of methane must be measured:
- (a) in a manner that:
 - (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion AAA set out for the measurement of captured greenhouse gas stream in section 1.19G of that

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- determination, converted at standard conditions of pressure and temperature; and
- (iii) assumes references to the greenhouse gas stream in those provisions to be references to methane captured at a capture point *n* for permanent storage by the project; or
- (b) at the project proponent's election—in a manner that:
- (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion BBB set out for the measurement of captured greenhouse gas stream in section 1.19GA of that determination, converted at standard conditions of pressure and temperature; and
 - (iii) assumes references to the greenhouse gas stream in those provisions to be references to methane captured at a capture point *n* for permanent storage by the project; or
- (3) Conversion of a quantity of methane to a quantity under standard conditions of pressure and temperature must be made in a manner that is consistent with the requirements in subsection 2.32(7) of the NGER (Measurement) Determination.

20 Calculating emissions from the capture of greenhouse gases

- (1) The emissions from the capture of greenhouse gases for a reporting period in the crediting period, in tonnes CO₂-e, are worked out using the formula (*equation 5*):

$$CR_E = \sum_n CR_n$$

where:

CR_E means emissions from the capture of greenhouse gases for the reporting period, in tonnes CO₂-e.

CR_n means emissions from the capture of greenhouse gases at capture point *n* for the reporting period, in tonnes of CO₂-e, worked out using equation 6.

n means a capture point used by the project.

- (2) Subject to subsection (3), the emissions from the capture of greenhouse gases at a capture point *n* for the reporting period, in tonnes of CO₂-e, are worked out using the formula (*equation 6*):

$$CR_n = ECRE_{Scope1,n} + ECRE_{Scope2,n}$$

where:

CR_n means the emissions from the capture of greenhouse gases at the capture point for the reporting period, in tonnes CO₂-e.

ECRE_{Scope1,n} means the scope 1 emissions relating to the capture of greenhouse gases at the capture point for the reporting period, in tonnes CO₂-e, estimated:

- (a) for solid fuels used during the reporting period in relation to the capture of greenhouse gases for permanent storage by the project at the capture point during the reporting period—in accordance with Part 2.2 of the NGER (Measurement) Determination;

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- (b) for gaseous fuels used during the reporting period in relation to the capture of greenhouse gases for permanent storage by the project at the capture point during the reporting period—in accordance with Part 2.3 of the NGER (Measurement) Determination;
 - (c) for liquid fuels used during the reporting period in relation to the capture of greenhouse gases for permanent storage by the project at the capture point during the reporting period—in accordance with Part 2.4 of the NGER (Measurement) Determination.

$ECRE_{Scope2,n}$ means the scope 2 emissions relating to the capture of greenhouse gases at the capture point for the reporting period, in tonnes CO₂-e, worked out using equation 7.

n means a capture point used by the project.

- (3) The emissions from the capture of greenhouse gases at a capture point n for the reporting period (**CR_n**) are taken to be zero if greenhouse gases:
 - (a) were being captured at the capture point before the section 22 application for the project was made; or
 - (b) would be required to be captured at the capture point in the absence of the project.
- (4) The scope 2 emissions relating to the capture of greenhouse gases at a capture point n for the reporting period, in tonnes CO₂-e, are worked out using the formula (**equation 7**):

$$ECRE_{Scope2,n} = Q_{ecre,n} \times EF / 1000$$

where:

$ECRE_{Scope2,n}$ means the scope 2 emissions relating to the capture of greenhouse gases at the capture point for the reporting period, in tonnes CO₂-e.

$Q_{ecre,n}$ means the quantity of electricity used during the reporting period in relation to the capture of greenhouse gases for permanent storage by the project at the capture point during the reporting period, in kilowatt hours, worked out in accordance with the monitoring requirements.

EF means:

- (a) for electricity obtained from an electricity grid that is a grid in relation to which the NGA Factors document includes an emissions factor—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hour); or
- (b) for electricity obtained from an electricity grid not covered by paragraph (a) or obtained from a source other than an electricity grid:
 - (i) if the supplier of the electricity is able to provide an emissions factor that reflects the emissions intensity of the electricity (worked out in accordance with subsection (5))—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hour); or
 - (ii) otherwise—the emissions factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hour), for off-grid electricity included in the NGA Factors document.

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- (5) For subparagraph (b)(i) of the definition of **EF** in subsection (4), the emissions factor must be worked out:
- (a) on a sent-out basis; and
 - (b) using a measurement or estimation approach that is consistent with the NGER (Measurement) Determination.
- (6) If the NGER (Measurement) Determination does not include any relevant measurement or estimation approach, the emissions factor must be worked out in a manner that is consistent with relevant standards and other requirements under the *National Measurement Act 1960*.

Note: In many cases energy from the same source will be used in the capture processes and in the capture point's ordinary production process. In this circumstance, emissions from that source will need to be apportioned to the capture process based on the energy use of that process.

21 Calculating processing, compression and transportation emissions

- (1) The emissions from processing, compression and transportation of greenhouse gases for a reporting period in the crediting period, in tonnes CO₂-e, are worked out using the formula (**equation 8**):

$$E_{PCT} = \sum_n E_{PCT,n} + (\sum_m E_{CMPCT,m} \times CGG / \text{Total } CGG)$$

where:

E_{PCT} means emissions from processing, compression and transportation of greenhouse gases for the reporting period, in tonnes CO₂-e.

$E_{PCT,n}$ means emissions from processing, compression and transportation of project greenhouse gases captured at a capture point n for the reporting period, in tonnes CO₂-e, worked out using equation 9.

$E_{CMPCT,m}$ means emissions from processing, compression and transportation of co-mingled greenhouse gases captured at a capture point m for the reporting period, in tonnes CO₂-e, worked out using equation 11.

CGG means the amount of greenhouse gases captured for permanent storage by the project during the reporting period, in tonnes CO₂-e, worked out using equation 2

Total CGG means the sum total of greenhouse gases captured at one or more capture points during the reporting period by one or more persons for permanent storage into each storage site into which greenhouse gases are or were injected as part of the project during the reporting period, in tonnes CO₂-e, as ascertained by the project proponent.

n means a capture point used by the project.

m means a capture point used by any project (including the project) contributing the co-mingled greenhouse gases.

- (2) The emissions from processing, compression and transportation of project greenhouse gases captured at a capture point n for the reporting period, in tonnes CO₂-e, are worked out using the following formula (**equation 9**):

Equation 9

$$E_{PCT,n} = EPCT_{Scope1,n} + EPCT_{Scope2,n}$$

where:

$E_{PCT,n}$ means the emissions from processing, compression and transportation of project greenhouse gases captured at the capture point for the reporting period, in tonnes CO₂-e.

$EPCT_{Scope1,n}$ means the scope 1 emissions relating to the processing, compression and transportation of project greenhouse gases captured at the capture point for the reporting period, in tonnes CO₂-e, estimated:

- (a) for solid fuels used during the reporting period in relation to the processing, compression and transportation of the project greenhouse gases captured at the capture point—in accordance with Part 2.2 of the NGER (Measurement) Determination;
- (b) for gaseous fuels during the reporting period in relation to the processing, compression and transportation of project greenhouse gases captured at the capture point—in accordance with Part 2.3 of the NGER (Measurement) Determination;
- (c) for liquid fuels used during the reporting period in relation to the processing, compression and transportation of project greenhouse gases captured at the capture point—in accordance with Part 2.4 of the NGER (Measurement) Determination.

$EPCT_{Scope2,n}$ means the scope 2 emissions relating to the processing, compression and transportation of project greenhouse gases capture at a capture point n for the reporting period, in tonnes CO₂-e, worked out using equation 10.

n means a capture point used by the project.

- (3) The scope 2 emissions relating to the processing, compressing and transportation of project greenhouse gases captured at a capture point n for the reporting period, in tonnes CO₂-e, are worked out using the formula (**equation 10**):

$$EPCT_{Scope2,n} = Q_{EPCT,n} \times EF / 1000$$

where:

$EPCT_{Scope2,n}$ means scope 2 emissions relating to the processing, compression and transportation of project greenhouse gases captured at the capture point for the reporting period, in tonnes CO₂-e.

$Q_{EPCT,n}$ means the quantity of electricity used during the reporting period in relation to the processing, compression and transportation of project greenhouse gases captured at the capture point, in kilowatt hours, worked out in accordance with the monitoring requirements.

EF means:

- (a) for electricity obtained from an electricity grid that is a grid in relation to which the NGA Factors document includes an emissions factor—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hour); or

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- (b) for electricity obtained from an electricity grid not covered by paragraph (a) or obtained from a source other than an electricity grid:
- (i) if the supplier of the electricity is able to provide an emissions factor that reflects the emissions intensity of the electricity (worked out in accordance with subsection (6))—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hours); or
 - (ii) otherwise—the emissions factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hours), for off-grid electricity included in the NGA Factors document.
- (4) The emissions from processing, compression and transportation of co-mingled greenhouse gases captured at a capture point *m* for the reporting period, in tonnes CO₂-e, are worked out using the following formula (*equation 11*):

$$E_{\text{CMPCT},m} = E_{\text{CMPCT}_{\text{Scope1},m}} + E_{\text{CMPCT}_{\text{Scope2},m}}$$

where:

E_{CMPCT,m} means the emissions from processing, compression and transportation of co-mingled greenhouse gases captured at the capture point for the reporting period, in tonnes CO₂-e.

E_{CMPCT_{Scope1,m}} means the scope 1 emissions relating to the processing, compression and transportation of co-mingled greenhouse gases captured at the capture point for the reporting period, in tonnes CO₂-e, estimated:

- (a) for solid fuels used during the reporting period in relation to the processing, compression and transportation of co-mingled greenhouse gases captured at the capture point—in accordance with Part 2.2 of the NGER (Measurement) Determination;
- (b) for gaseous fuels used during the reporting period in relation to the processing, compression and transportation of co-mingled greenhouse gases captured at the capture point—in accordance with Part 2.3 of the NGER (Measurement) Determination;
- (c) for liquid fuels used during the reporting period in relation to the processing, compression and transportation of co-mingled greenhouse gases captured at the capture point—in accordance with Part 2.4 of the NGER (Measurement) Determination.

E_{CMPCT_{Scope2,m}} means scope 2 emissions relating to the processing, compression and transportation of co-mingled gases captured at the capture point for the reporting period, in tonnes CO₂-e, worked out using equation 11A.

m means a capture point used by any project (including the project) contributing the co-mingled greenhouse gases.

- (5) The scope 2 emissions from processing, compression and transportation of co-mingled gases captured at a capture point *m* for the reporting period, in tonnes CO₂-e, are worked out using the formula (*equation 11A*):

$$E_{\text{CMPCT}_{\text{Scope2},m}} = Q_{\text{ECMPCT},m} \times \text{EF} / 1000$$

where:

$ECMPCT_{Scope2,m}$ means scope 2 emissions from processing, compression and transportation of co-mingled gases captured at the capture point for the reporting period, in tonnes CO₂-e.

$Q_{ECMPCT,m}$ means the quantity of electricity used during the reporting period in relation to the processing, compression and transportation of co-mingled greenhouse gases captured at the capture point, in kilowatt hours, worked out in accordance with the monitoring requirements.

EF means:

- (a) for electricity obtained from an electricity grid that is a grid in relation to which the NGA Factors document includes an emissions factor—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hour); or
- (b) for electricity obtained from an electricity grid not covered by paragraph (a) or obtained from a source other than an electricity grid:
 - (i) if the supplier of the electricity is able to provide an emissions factor that reflects the emissions intensity of the electricity (worked out in accordance with subsection (6))—that factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hours); or
 - (ii) otherwise—the emissions factor, in kilograms CO₂-e per kilowatt hour (or its equivalent of tonnes CO₂-e per megawatt hours), for off-grid electricity included in the NGA Factors document.

m means a capture point used by any project (including the project) contributing the co-mingled greenhouse gases.

- (6) For subparagraph (b)(i) of the definition of **EF** in subsection (3) and (5), the emissions factor must be worked out:
 - (a) on a sent-out basis; and
 - (b) using a measurement or estimation approach that is consistent with the NGER (Measurement) Determination.
- (7) If the NGER (Measurement) Determination does not include any relevant measurement or estimation approach, the emissions factor must be worked out in a manner that is consistent with relevant standards and other requirements under the *National Measurement Act 1960*.

22 Calculating fugitive emissions from transportation and injection

The fugitive emissions from transportation and injection of greenhouse gases for a reporting period in the crediting period, in tonnes CO₂-e, are worked out using the formula (**equation 12**):

$$TIF = (\sum_{j,s} TF_{j,s} + \sum_{j,s} IF_j) \times CGG / \text{Total CGG}$$

where:

TIF means the fugitive emissions from transportation and injection of greenhouse gases for the reporting period, in tonnes CO₂-e.

$TF_{j,s}$ means the fugitive emissions during the reporting period from the transport of greenhouse gas type j captured for permanent storage by the project to a storage site s , in tonnes CO₂-e, estimated in accordance with Division 3.4.2 of the NGER (Measurement) Determination.

$IF_{j,s}$ means the fugitive emissions during the reporting period from the injection of greenhouse gas type j captured for permanent storage by the project into a storage site s , in tonnes CO₂-e, estimated in accordance with Division 3.4.3 of the NGER (Measurement) Determination.

CGG means the amount of greenhouse gases captured by the project for permanent storage during the reporting period, in tonnes CO₂-e, worked out using equation 2.

Total CGG means the sum total of greenhouse gases captured at one or more capture points during the reporting period by one or more persons for permanent storage into each storage site into which greenhouse gases are or were injected as part of the project, in tonnes CO₂-e, as ascertained by the project proponent.

s means a storage site used by the project.

23 Calculating storage site monitoring emissions

- (1) The emissions from total fuel use for the project for conducting monitoring and verification activities for a reporting period, in tonnes CO₂-e (the **storage site monitoring emissions**), are worked out using the formula (**equation 13**):

$$E_F = \sum_{f,k,s} (E_{f,k,s} \times IP_s / TI_s)$$

where:

E_F means emissions from total fuel use for the project for conducting monitoring and verification activities for the reporting period, in tonnes CO₂-e.

$E_{f,k,s}$ means the emissions from fuel use during the reporting period for conducting monitoring and verification activities for a storage site s , for each fuel type f and each greenhouse gas type k , in tonnes CO₂-e, as worked out using equation 14.

k means the type of greenhouse gas (carbon dioxide, methane or nitrous oxide) emitted for a given fuel type.

IP_s means the total greenhouse gases injected by the project from the start of the crediting period for the project up to and including the current reporting period for permanent storage into storage site s , as ascertained by the project proponent.

TI_s means the total greenhouse gases injected by each person up to and including the current reporting period for permanent storage into storage site s , as ascertained by the project proponent.

s means a storage site used by the project.

- (2) The emissions from fuel use during a reporting period for conducting monitoring and verification activities for a storage site s , each fuel type f and each

greenhouse gas type k , in tonnes CO₂-e, are worked out using the formula (*equation 14*):

$$E_{f,k,s} = Q_{f,s} \times e_f \times F_{fk} / 1000$$

where:

$E_{f,k,s}$ means emissions from fuel use during the reporting period for conducting monitoring and verification activities for each fuel type f and each greenhouse gas type k and each storage site s , in tonnes CO₂-e.

Q_f means the quantity of fuel type f combusted during the reporting period in undertaking monitoring and verification activities for storage site s (in kilolitres).

E_f means energy content factor of fuel type f , as prescribed in Schedule 1 to the NGER (Measurement) Determination (in gigajoules per kilolitre).

$F_{f,k}$ means emissions factor for gas type k for fuel type f as prescribed in Schedule 1 to the NGER (Measurement) Determination (in kilograms CO₂-e per gigajoule).

f means fuel type.

k means the type of greenhouse gas (carbon dioxide, methane or nitrous oxide) emitted for a given fuel type.

s means a storage site used by the project.

24 Calculating storage site fugitive emissions

The amount of fugitive emissions, for the project, of greenhouse gases for a reporting period from all storage sites into which greenhouse gases are or were injected as part of the project, in tonnes CO₂-e (the *storage site fugitive emissions*), is worked out using the formula (*equation 15*):

$$FGG = \sum_{j,s} (FGG_{j,s} \times IP_s / TI_s)$$

where:

FGG means the fugitive emissions, for the project, of greenhouse gases for the reporting period from all such storage sites, in tonnes CO₂-e.

$FGG_{j,s}$ means the emissions of fugitive greenhouse gas type j released to the atmosphere during the reporting period from storage site s into which greenhouse gases are or were injected by the project, in tonnes CO₂-e, estimated from data obtained to satisfy monitoring and verification obligations under each relevant authority for the storage site.

IP_s means the total greenhouse gases injected by the project from the start of the crediting period for the project up to and including the current reporting period for permanent storage into storage site s , as ascertained by the project proponent.

TI_s means the total greenhouse gases injected by each person up to and including the current reporting period for permanent storage into storage site s , as ascertained by the project proponent.

s means a storage site used by the project.

25 Calculating amount of captured greenhouse gases transferred to an off-taker

- (1) The amount of captured carbon dioxide transferred to an off-taker during a reporting period, in tonnes CO₂-e, is worked out using the formula (*equation 16*):

$$Q_{OT} = \sum_n (Vol_{OT,n} \times \gamma_j)$$

where:

Q_{OT} means the amount of greenhouse gases captured for permanent storage by the project and transferred to the off-taker during the reporting period, in tonnes CO₂-e.

Vol_{OT,n} means the quantity of greenhouse gases captured for permanent storage by the project at a capture point *n* and transferred to an off-taker during the reporting period, measured in cubic metres:

- (a) in a manner that:
- (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion AAA set out for the measurement of captured greenhouse gas stream in section 1.19G of that determination, converted at standard conditions of pressure and temperature; and
 - (iii) assumes references to the greenhouse gas stream in those provisions to be references to greenhouse gases captured by the project at the capture point and transferred to the off-taker; or
- (b) at the project proponent's election—in a manner that:
- (i) is consistent with the requirements in subsections 1.19E(3), (4), (5) and (6) of the NGER (Measurement) Determination; and
 - (ii) is consistent with criterion BBB set out for the measurement of captured greenhouse gas stream in section 1.19GA of that determination, converted at standard conditions of pressure and temperature; and
 - (iii) assumes references to the greenhouse gas stream in those provisions to be references to greenhouse gases captured by the project at the capture point and transferred to the off-taker.

n means a capture point used by the project.

γ_j means the factor for converting a quantity of greenhouse gas type *j* from cubic metres at standard conditions of pressure and temperature to tonnes CO₂-e, being:

- (a) for methane— $6.784 \times 10^{-4} \times GWP_{CH_4}$; and
- (b) for carbon dioxide— 1.861×10^{-3} ; and
- (c) for nitrous oxide— $1.861 \times 10^{-3} \times GWP_{N_2O}$

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- (2) Conversion of a quantity of greenhouse gases to a quantity under standard conditions of pressure and temperature must be made in a manner that is consistent with the requirements in subsection 2.32(7) of the NGER (Measurement) Determination.

26 Calculating extended accounting period net abatement

- (1) The carbon dioxide equivalent net abatement amount for a reporting period in the extended accounting period in which a return event does not occur, is zero.
- (2) The carbon dioxide equivalent net abatement amount for a reporting period in the extended accounting period in which a return event occurs, in tonnes CO₂-e, is worked out using the formula (*equation 17*):

$$EAA = \sum_n A_n \times 3 / 97 - \sum_r E_{F,r} - \sum_r FGG_r$$

where:

EAA means the carbon dioxide equivalent net abatement amount for the reporting period, in tonnes CO₂-e.

A_n means the carbon dioxide equivalent net abatement amount for a reporting period n in the crediting period, worked out using equation 1.

n means a reporting period in the crediting period.

E_{F,r} means the total emissions from fuel use for the project for conducting any monitoring and verification activities for a reporting period r in the extended accounting period, worked out using equation 13.

FGG_r means the fugitive emissions of greenhouse gases for a reporting period r in the extended accounting period from all storage sites into which greenhouse gases are or were injected by the project, worked out using equation 15.

r means a reporting period in the extended accounting period.

- (3) A **return event** occurs when either of the following has occurred for each storage site in which greenhouse gases are or were injected by the project:
- a closure assurance period has been declared under section 399 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*;
 - in case of the project involved the injection of greenhouse gases into a recognised reservoir in accordance with a recognised law of a State or Territory:
 - a recognised licence under that law has been surrendered to the satisfaction of the authority responsible for administering that law; or
 - an analogous certification in relation to the recognised reservoir has been issued under that law by that authority.

Note: In September 2021, some of the circumstances in which a recognised licence under a recognised law of a State or Territory may be considered to have been surrendered to the satisfaction of the authority responsible for administering that law is if one of the following events has happened:

- a surrender of authority under section 168 of the *Greenhouse Gas Geological Sequestration Act 2008* (Vic) has been consented to by the relevant Minister;

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- (b) a site closing certificate has been issued under section 427 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (Vic);
 - (c) a lease surrender has been approved under section 179 of the *Greenhouse Gas Storage Act 2009* (Qld);
 - (d) the relevant Minister has accepted an application to surrender the licence under section 89 of the *Petroleum and Geothermal Energy Act 2000* (SA).

Part 5—Reporting, notification and monitoring requirements

Note: The reporting, notification and monitoring requirements in this Part supplement the general requirements relating to those matters set out in regulations and legislative rules made under the Act.

Division 1—Reporting requirements

27 Operation of this Division

For paragraph 106(3)(a) of the Act, this Division sets out the information that must be included in each offsets report about a carbon capture and storage project that is an eligible offsets project.

28 Information that must be included in an offsets report during the crediting period

An offsets report for a reporting period in the crediting period for a carbon capture and storage project must include all of the following information:

- (a) a summary of how the components of the net abatement amount have been calculated, including (but not limited to) a description of the method used to calculate (under section 20) the emissions from the capture of greenhouse gases from each capture point that is the source of greenhouse gas stored by the project;
- (b) a description of any change to the location of the project that occurred during the reporting period, including (if relevant) a description of any new storage sites and capture points;
- (c) a description of any increase or decrease in the number of injection points used in the project during the reporting period, including the location of any new injection points;
- (d) a description of any change to any storage site used in the project, or any material change in the operation of a storage site, during the reporting period;
- (e) if during the reporting period the project operated in a manner that deviated from that described in the CCS project plan—a description of the deviation, including the duration and frequency of the deviation.

29 Information that must be included in an offsets report during the extended accounting period

An offsets report for a reporting period in the extended accounting period for a carbon capture and storage project must include all of the following information:

- (a) the storage site monitoring emissions for the reporting period;
- (b) the storage site fugitive emissions for the reporting period;
- (c) a description of any material changes to the behaviour of the greenhouse gases in the storage site that increases the risk of a material volume of storage site fugitive emissions being released to the atmosphere during the extended accounting period.

30 Information that must be included in each offsets report

An offsets report for a reporting period for a carbon capture and storage project must include the sum total of greenhouse gases injected by each person for permanent storage in each storage site into which greenhouse gases are or were injected as part of the project, in tonnes CO₂-e, up to and including the current reporting period, as ascertained by the project proponent, and a summary of how each component of that sum total has been calculated and the method used to calculate it.

31 Determination of certain factors and parameters

- (1) If, in the circumstances described in paragraph 6(2)(b), a factor or parameter is defined or calculated for a reporting period by reference to an instrument or writing as in force from time to time, the offsets report about a carbon capture and storage project for the reporting period must include the following information for the factor or parameter:
 - (a) the versions of the instrument or writing used;
 - (b) the start and end dates of each use;
 - (c) the reasons why it was not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.
- (2) If a parameter is determined under section 37 during a reporting period for the purpose of working out the carbon dioxide equivalent net abatement amount for the reporting period or a future reporting period, the offsets report for the reporting period must include the following information for the parameter:
 - (a) the name of the parameter;
 - (b) the start and end dates of the non-monitored period for which the parameter was determined;
 - (c) the value of the parameter and how that value was calculated;
 - (d) the reasons why the project proponent for the carbon capture and storage project failed to monitor the parameter as required by the monitoring requirements in section 36.

Note: Storage site monitoring emissions and storage site fugitive emissions are monitored for each reporting period in the extended accounting period and their cumulative sum is used to calculate the carbon dioxide equivalent net abatement amount for the reporting period in the extended accounting period in which a return event occurs—see section 26.

Division 2—Notification requirements

32 Operation of this Division

For paragraph 106(3)(b) of the Act, this Division sets out requirements to notify the Regulator of certain matters relating to a carbon capture and storage project that is an eligible offsets project.

33 Obligation to notify Regulator about changes in project's regulatory approvals

- (1) The project proponent must notify the Regulator in writing of any change to the project proponent's relevant authority or other regulatory approvals that has had or may have an impact on the project proponent's ability to continue to implement the carbon capture and storage project, including (without limitation) any such change that occurs during the extended accounting period.
- (2) The project proponent must notify the Regulator of that change as soon as practicable after the project proponent becomes aware that the change has occurred.

34 Obligation to notify Regulator about certain storage site fugitive emissions

- (1) The project proponent must notify the Regulator in writing if:
 - (a) any material volume of storage site fugitive emissions has been released during a reporting period or during the extended accounting period; or
 - (b) the greenhouse gases injected into a storage site are behaving in a manner that has created a material risk of a material volume of storage site fugitive emissions being released from the storage site during the project's crediting period or extended accounting period.
- (2) The project proponent must notify the Regulator of those matters as soon as practicable after the project proponent becomes aware of the release or material risk.

Division 3—Monitoring requirements

35 Operation of this Division

For paragraph 106(3)(d) of the Act, this Division sets out:

- (a) a requirement to monitor relevant parameters relating to a carbon capture and storage project that is an eligible offsets project (see section 36); and
- (b) in the event that the project proponent fails to monitor any parameter as required, a requirement that the project proponent estimates the parameter (see section 37).

36 Requirement to monitor certain parameters

- (1) The project proponent must, during a reporting period, monitor and determine any parameter that is required to calculate the carbon dioxide equivalent net abatement amount for the reporting period or a future reporting period:
 - (a) in a manner that is consistent with the NGER (Measurement) Determination; or
 - (b) if the NGER (Measurement) Determination does not include any relevant requirements, in a manner that is consistent with relevant standards and other requirements under the *National Measurement Act 1960*.

Note: Storage site monitoring emissions and storage site fugitive emissions are monitored for each reporting period in the extended accounting period and their cumulative sum is used to calculate the carbon dioxide equivalent net abatement amount for the reporting

period in the extended accounting period in which a return event occurs—see section 26.

- (2) Any equipment or device used to monitor a parameter must be calibrated:
 - (a) in a manner that is consistent with the NGER (Measurement) Determination; or
 - (b) if the NGER (Measurement) Determination does not include any relevant requirements, by an accredited third-party technician at intervals, and using methods, that are in accordance with the manufacturer’s specifications.

37 Value of certain parameters may be estimated if project proponent fails to monitor them

- (1) This section applies if in any period in a reporting period the project proponent is unable or fails to monitor a parameter that is required to calculate the carbon dioxide net abatement amount for the reporting period or a future reporting period. In this determination this period is called the *non-monitored period*.

Note: Storage site monitoring emissions and storage site fugitive emissions are monitored for each reporting period in the extended accounting period and their cumulative sum is used to calculate the carbon dioxide equivalent net abatement amount for the reporting period in the extended accounting period in which a return event occurs—see section 26.

- (2) In that case, the value of the parameter for that purpose is to be determined for the non-monitored period by the project proponent making a conservative estimate of the parameter having regard to:
 - (a) any relevant historical data for the parameter; and
 - (b) any other data that relates to the parameter; and
 - (c) any other matter the project proponent considers relevant.
- (3) The project proponent must make the estimate clearly distinct from other measured records for consideration during auditing and must clearly document any approaches taken to derive any estimates.
- (4) The project proponent must make all practicable efforts to minimise the non-monitored period during a reporting period.
- (5) To avoid doubt, this section does not prevent the Regulator from taking action under the Act, or the regulations or the legislative rules, in relation to the project proponent’s failure to monitor a parameter as required by the monitoring requirements in this Division.

Note: Examples of action that may be taken include the following:

- (a) if the failure constitutes a breach of a civil penalty provision in section 194 of the Act (which deals with project monitoring requirements), the Regulator may apply for a civil penalty order in respect of the breach;
- (b) if false or misleading information was given to the Regulator in relation to the failure, the Regulator may revoke the project’s section 27 declaration under regulations or legislative rules made for the purposes of section 38 of the Act.