



# **National Greenhouse and Energy Reporting (Measurement) Amendment (2024 Update) Determination 2024**

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I, Chris Bowen, Minister for Climate Change and Energy, make the following determination.

Dated

Chris Bowen  
Minister for Climate Change and Energy

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## 1 Name

This instrument is the *National Greenhouse and Energy Reporting (Measurement) Amendment (2024 Update) Determination 2024*.

## 2 Commencement

- (1) Each provision of this instrument specified in column 1 of the table commences, or is taken to have commenced, in accordance with column 2 of the table. Any other statement in column 2 has effect according to its terms.

Commencement information		
Column 1	Column 2	Column 3
Provisions	Commencement	Date/Details
1. Sections 1 to 4 and anything in this instrument not elsewhere covered by this table	1 July 2024.	
2. Schedule 1, item 5	1 July 2025.	
3. Schedule 1, item 6	1 July 2026.	

Note: This table relates only to the provisions of this instrument as originally made. It will not be amended to deal with any later amendments of this instrument.

- (2) Any information in column 3 of the table is not part of this instrument. Information may be inserted in this column, or information in it may be edited, in any published version of this instrument.

## 3 Authority

This instrument is made under subsection 10(3) of the *National Greenhouse and Energy Reporting Act 2007*.

## 4 Schedules

Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

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## Schedule 1—Amendments

### *National Greenhouse and Energy Reporting (Measurement) Determination 2008*

#### 1 Section 1.8 (Definitions)

In the appropriate alphabetic position, add:

**2021 API Compendium** means the document entitled *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry*, published in November 2021 by the American Petroleum Institute.

Note: The 2021 API Compendium is available at [www.api.org](http://www.api.org).

**Shared infrastructure system** means a fuel supply system from which fuel may be drawn by multiple facilities.

Note: for example, a Joint User Hydrant Installation.

#### 2 Subsections 2.23(1) and 2.23(2)

Repeal the subsections, substitute:

- (1) Samples must be collected on enough occasions to be representative.

#### 3 Section 2.67 (notation)

At the end of the section, insert:

Note: The application of this section is subject to section 2.67B.

#### 4 Chapter 2, Part 2.7

At the end of section 2.67A, add:

##### **2.67B Market-based approach for determining the amount of drop-in renewable fuel in a blended fuel supplied through shared infrastructure**

- (1) Where a drop-in renewable fuel is supplied through a shared infrastructure system as a component of a blended fuel with its fossil fuel equivalent, section 2.67 does not apply for the purposes of determining the amounts of each kind of fuel that is in the blended fuel drawn from the shared infrastructure system.
- (2) A person may only claim to have combusted a quantity of drop-in renewable fuel in a quantity of blended fuel drawn from a shared infrastructure system, if:
  - (a) the person retains and can provide to the Regulator:
    - (i) invoices from the relevant vendor or vendors of the fuel evidencing:
      - (A) purchase of the quantity of drop-in renewable fuel being claimed;
      - (B) purchase of the total quantity of blended fuel drawn from the shared infrastructure system that was combusted from the operation of the facility; and

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- (ii) written evidence from the vendor of fuel, or other responsible party, that the quantity of drop-in renewable fuel claimed, has been delivered into the shared infrastructure system on behalf of the facility; and
    - (iii) a certificate or declaration from the vendor of the fuel demonstrating that the drop-in renewable fuel delivered into the shared infrastructure system is derived or recovered from biomass.
  - (b) the quantity of drop-in renewable fuel claimed to have been combusted, is less than or equal to the total quantity of blended fuel drawn from the shared infrastructure system.
  - (3) If a person claims to have combusted a quantity of drop-in renewable fuel under subsection (2), they must report the quantity of the fossil fuel equivalent as having been combusted from the operation of the facility, equal to the total quantity of blended fuel drawn from the shared infrastructure system minus the quantity of drop-in renewable fuel claimed.
  - (4) If a person does not claim combustion of any drop-in renewable fuel under subsection (2), all blended fuel drawn by that person from a shared infrastructure system is deemed to be the fossil fuel equivalent.
  - (5) In this section, *drop-in renewable fuel* means renewable aviation kerosene or renewable diesel.
  - (6) In this section, *fossil fuel equivalent* means:
    - (a) for renewable aviation kerosene – kerosene for use as fuel in an aircraft;
    - (b) for renewable diesel – diesel oil.

## 5 Section 3.19

After subsection 3.19(2), add:

- (2A) Despite paragraph (2)(a), a facility must not use Method 1 if it:
  - (a) is covered by section 22XJ of the Act, and
  - (b) reported more than 10 million tonnes run-of-mine coal extracted during the financial year starting on 1 July 2022 and ending 30 June 2023.

## 6 Subsection 3.19(2A)

Repeal the subsection, substitute:

- (2A) Despite paragraph (2)(a), a facility must not use Method 1 if it is covered by section 22XJ of the Act.

## 7 Section 3.42

After paragraph 3.42(g), add:

; and (h) mud degassing.

## 8 Subsection 3.46A(2)

Omit “process vents, systems upsets and accidents”, substitute “system upsets, accidents and deliberate releases from process vents”.

## 9 Paragraph 3.46A(2)(a)

After subparagraph 3.46A(2)(a)(iv), add:

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and (v) section 3.46AC (mud degassing).

## 10 Division 3.3.2, Subdivision 3.3.2.3.1

After section 3.46AB, add:

### **3.46AC Method 1— emissions from system upsets, accidents and deliberate releases from process vents— mud degassing**

Method 1 is, for a process mentioned in column 2 of an item in the following table, as described in the section of the 2021 API Compendium in column 3 for the item.

<b>Item</b>	<b>Emission process</b>	<b>2021 API Compendium section</b>
1	Other venting sources—mud degassing	Section 6.2.1

## 11 Subsection 3.73NB(1) (definition of $W_i$ )

Omit the definition of  $W_i$ , substitute:

$W_i$  is the net quantity of produced water during the year associated with the relevant activity measured in megalitres of produced water, where the net quantity is the total quantity of produced water during the year minus the total quantity of produced water not exposed to the atmosphere that is re-injected over the same period.

## 12 Subsection 3.73Q(3) (definition $EF_{ijs}$ and $Q_i$ )

Omit “gathering and boosting”, substitute “processing”.

## 13 Sections 3.85A, 3.85B, 3.85K, 3.85L, 3.85M, 3.85N, 3.85R and 3.85S

Omit every occurrence of “Method 1”, substitute “Method 2”.

## 14 Sections 3.85A, 3.85K, 3.85M, 3.85R (notations)

Omit every occurrence of “method 2” in the note, substitute “method 1”.

## 15 Sections 3.85B, 3.85L, 3.85N, 3.85S

Omit “as described”, insert “the engineering calculations provided”.

## 16 Section 3.87A (definition $EF_{nij}$ )

Omit “3.85(2)”, substitute “3.86(2)”.

## 17 Section 3.96

Repeal the section, substitute:

### **3.96 Method 2—fugitive emissions from injection of a greenhouse gas into a geological formation (other than deliberate releases from process vents, system upsets and accidents)**

(1) Method 2 is:



$$E_{ij} = \sum_k (T_{ik} \times N_{ik} \times EF_{ijk})$$

where:

$E_{ij}$  is the fugitive emissions of gas type ( $j$ ), being carbon dioxide, from the injection of a greenhouse gas into a geological formation during the year, measured in CO<sub>2</sub>-e tonnes.

$\sum_k$  is the total emissions of gas type ( $j$ ), being carbon dioxide, measured in CO<sub>2</sub>-e tonnes and estimated by summing up the emissions released from each equipment type ( $k$ ) specified in column 2 of an item in the table in subsection (2), if the equipment is used in the injection of a greenhouse gas into a geological formation.

$T_{ik}$  is the average hours of operation during the year of the equipment of each equipment type ( $k$ ), if the equipment is used in the injection of a greenhouse gas into a geological formation.

$N_{ik}$  is the total number of equipment units of each equipment type ( $k$ ), if the equipment type is used in the injection of a greenhouse gas into a geological formation during the year.

$EF_{ijk}$  is the emission factor of gas type ( $j$ ), being carbon dioxide, measured in tonnes of CO<sub>2</sub>-e per equipment type ( $k$ ) – hour as determined under subsection (2), if the equipment is used in the injection of a greenhouse gas into a geological formation.

Note: Consistent with subsection 3.41(2), emissions associated with any piece of equipment included in this definition should not be counted under this section if those emissions are also counted as equipment emissions under another section within this Part.

(2) For  $EF_{ijk}$  in subsection (1):

(a) column 3 of an item in the following table specifies the emission factor for carbon dioxide ( $j$ ) for an equipment type ( $k$ ) specified in column 2 of that item:

Item	Equipment type (k)	Emission factor for gas type (j)	
		CO <sub>2</sub>	Units
1	Injection wellheads	$1.25 \times 10^{-6}$	tonnes CO <sub>2</sub> -e /equipment - hour
2	Reciprocating compressor	$1.14 \times 10^{-4}$	tonnes CO <sub>2</sub> -e /equipment - hour
3	Screw compressor	$7.15 \times 10^{-5}$	tonnes CO <sub>2</sub> -e /equipment - hour
4	Metering installation and associated piping	$2.45 \times 10^{-6}$	tonnes CO <sub>2</sub> -e /equipment - hour

(b) if the manufacturer of the equipment supplies equipment-specific emission factors for the equipment type—those factors are the relevant emissions factors.

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**18 Subsections 5.4(2), 5.4(3), 5.15(3), 5.15(4), 5.15(5), 5.15A(1), 5.15B(1)**

Omit every occurrence of “collection efficiency amount”, substitute “collection efficiency limit”.

**19 Subsections 5.4(3) and 5.15(4) (definition of CEA)**

Omit “CEA”, substitute “CEL”.

**20 Subsections 5.4(3) and 5.15(4)**

Omit the following equation:

$$\text{CH}_4^* = \gamma (Q_{\text{cap}} + Q_{\text{flared}} + Q_{\text{tr}}) \times \left( \frac{1}{\text{CEA}} \right)$$

Substitute:

$$\text{CH}_4^* = \gamma (Q_{\text{cap}} + Q_{\text{flared}} + Q_{\text{tr}}) \times \left( \frac{1}{\text{CEL}} \right)$$

**21 Subsection 5.15A(3) (Note 2)**

Omit every occurrence of “collection efficiency amount” in Note 2, substitute “collection efficiency limit”.

**22 Subsection 5.4B(1)**

Omit “0.75”, substitute “the collection efficiency limit for the landfill calculated in accordance with section 5.15C”.

**23 Subsection 5.4B(3) (Note 2)**

Omit every occurrence of “0.75” in Note 2, substitute “the collection efficiency limit for the landfill calculated in accordance with section 5.15C”.

**24 Subsection 5.4C(1)**

Omit “0.75”, substitute “the collection efficiency limit for the landfill calculated in accordance with section 5.15C”.

**25 Section 5.4D (Note 4)**

Omit every occurrence of “0.75” in Note 4, substitute “the collection efficiency limit for the landfill calculated in accordance with section 5.15C”.

**26 Subsection 5.15A(3) (Note 2)**

Omit every occurrence of “collection efficiency amount” in Note 2, substitute “collection efficiency limit”.

**27 Subsection 7.4(1) (definition of RMF)**

After “kilowatt hour”, insert “for the State or Territory in which the consumption occurs as mentioned in Part 6 of Schedule 1”.

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## 28 Schedule 1, Part 6

Omit all figures under Columns 2 and 3 for Items 77 to 83, substitute:

Item	Column 2	Column 3
	Emission factor	Residual mix factor
	kg CO <sub>2</sub> -e/kWh	kg CO <sub>2</sub> -e/kWh
77	0.66	0.80
78	0.77	1.08
79	0.71	0.83
80	0.23	0.51
81	0.51	0.55
82	0.15	0.19
83	0.56	0.57

## 29 Schedule 4, Part 1 (Table under Source 2A – Underground mine)

In Item 2, under ‘Matters to be identified’, after paragraph (e), add:

- (f) whether the mine uses Periodic Emissions Monitoring or Continuous Emissions Monitoring.

## 30 Schedule 4, Part 2 (Table under Source 2R—Onshore natural gas production—venting)

Omit “Methods 1”, substitute “Methods 2”.

## 31 Schedule 4, Part 2 (Table under Source 2S—Offshore natural gas production—venting)

Omit “Methods 1”, substitute “Methods 2”.

## 32 Schedule 4, Part 6 (Table under Source 4A—Solid waste disposal on land)

In Item 1, under “Matters to be identified”, after clause (i)(viii), insert:

- (ix) the tonnes of methane (CO<sub>2</sub>-e), other than legacy emissions, that would be emitted if emissions were not captured, and oxidation did not occur, calculated as:

$$NLCH_4 = \frac{\text{non-legacy emissions}}{1 - OF} + CH_4 \text{ recovery}$$

Where:

‘NLCH<sub>4</sub>’ is the tonnes of methane (CO<sub>2</sub>-e), other than legacy emissions, that would be emitted by the facility if emissions were not captured, and oxidation did not occur.

‘Non-legacy emissions’ is the emissions (CO<sub>2</sub>-e), other than legacy emissions, from the decomposition of waste.

‘OF’ is the oxidation factor (0.1) for near surface methane in the landfill.

‘CH<sub>4</sub> recovery’ is the sum of the tonnes of methane (CO<sub>2</sub>-e), other than legacy emissions, that are captured for combustion, or captured and transferred offsite, and flared.