

EXPOSURE DRAFT



National Greenhouse and Energy Reporting (Measurement) Amendment (2025 Update) Determination 2025

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

Dated

Chris Bowen [**DRAFT ONLY—NOT FOR SIGNATURE**]
Minister for Climate Change and Energy

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1 Name

This instrument is the *National Greenhouse and Energy Reporting (Measurement) Amendment (2025 Update) Determination 2025*

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. The whole of this instrument	1 July 2025.	

Note: This table relates only to the provisions of this instrument as originally made.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Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

Schedule 1—Amendments

National Greenhouse and Energy Reporting (Measurement) Determination 2008

1 Section 1.8

Repeal the definition of ‘blended fuel’, substitute:

blended fuel means fuel that is a blend of fossil fuel and:

- (a) if the blended fuel is a gaseous fuel:
 - (i) biogenic carbon fuel; or
 - (ii) hydrogen; or
 - (iii) biogenic carbon fuel and hydrogen;
- (b) otherwise – biogenic carbon fuel.

2 Section 1.10 (table Item 4B, column headed “Source of emissions”)

Omit “Wastewater handling (industrial)”, substitute “Wastewater handling (domestic or commercial)”.

3 Section 1.10 (table Item 4C, column headed “Source of emissions”)

Omit “Wastewater handling (domestic or commercial)”, substitute “Wastewater handling (industrial)”.

4 At the end of section 2.67A

Add:

Note 2: The application of this section is subject to section 2.67C.

5 After section 2.67B

Add:

2.67C Market-based approach for determining the amount of renewable gas in a blended fuel received from a natural gas network

- (1) A person must not use section 2.67A to determine the amount of a renewable gas in a blended fuel received, in a reporting year, from a natural gas network into which renewable gas has been injected.
- (2) A person may determine that an amount of blended fuel received from a natural gas network and consumed at a facility in a reporting year contains an amount, in gigajoules, of a renewable gas equal to Q_{RG} calculated using the following formula:

$$Q_{RG} = RGC_{RoC} \times (1 - LF)$$

where:

$RGCRoC$ is an amount, in gigajoules, of a renewable gas that has been injected into the natural gas network, as represented by an amount of eligible Renewable Gas Certificates retired or completed by or on behalf of the person prior to the submission of the report for the facility for the reporting year.

LF is a default loss factor equal to:

- (a) if the renewable gas is biomethane – 0.01; or
- (b) if the renewable gas is hydrogen – 0.009.

- (3) Any blended fuel received from a natural gas network that is not determined to contain an amount of renewable gas in accordance with subsection (2) is determined to be natural gas transmitted or distributed in a pipeline.
- (4) For **$RGCRoC$** , an ***eligible Renewable Gas Certificate*** is:
 - (a) a Renewable Gas Guarantee of Origin certificate (***RGGO***) issued under the GreenPower Renewable Gas Certification scheme; or
 - (b) a PGO certificate (***PGO***) registered under the *Future Made in Australia (Guarantee of Origin) Act 2024*;in respect of which the conditions in subsection (5) are met.
- (5) For subsection (4), the following conditions must be met for a RGGO or PGO to be an eligible Renewable Gas Certificate:
 - (a) the certificate represents renewable gas that was injected into the natural gas network in the reporting year;
 - (b) if the eligible Renewable Gas Certificate is a PGO – the PGO specifies that the renewable gas covered by the PGO was consumed at the facility or a location that constitutes a part of the facility;
 - (c) if the eligible Renewable Gas Certificate is a RGGO – the Beneficiary on the Retirement Statement covering the RGGO is:
 - (i) the facility; or
 - (ii) the person with operational control of the facility; or
 - (iii) an entity that constitutes a part of the facility;
 - (d) the certificate represents renewable gas that could reasonably pass from its injection point into the natural gas network to the facility;
 - (e) the certificate represents renewable gas in respect of which a biomethane displacement ACCU has not been surrendered, in accordance with section 22XN of the Act, for the purpose of reducing the net emissions number for a facility.
- (6) In this section:

biomethane displacement ACCU means an Australian carbon credit unit issued for displacement abatement resulting from an eligible offsets project covered by the:

- (a) *Carbon Credits (Carbon Farming Initiative—Animal Effluent Management) Methodology Determination 2019*; or

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- (b) *Carbon Credits (Carbon Farming Initiative—Electricity Generation from Landfill Gas) Methodology Determination 2021*; or
- (c) *Carbon Credits (Carbon Farming Initiative—Domestic, Commercial and Industrial Wastewater) Methodology Determination 2015*.

natural gas network means a natural gas transmission pipeline or natural gas distribution pipeline, located in Australia.

renewable gas means biomethane or hydrogen.

Note: For the purposes of subsection (2), a registered PGO is completed if consumption information has been added to it in accordance with section 59 of the *Future Made in Australia (Guarantee of Origin) Act 2024*.

6 Subsection 3.44(2) (table item 1)

Repeal the item, substitute:

1	Gas	2.69	0.56	0.022
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7 Subsection 3.53(2) (table item 1)

Repeal the item, substitute:

1	Gas	2.69	0.56	0.022
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8 Subsection 3.69(2) (table item 1)

Repeal the item, substitute:

1	Gas	2.73	0.14	0.022
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9 Subsection 3.86(2) (table item 1)

Repeal the item, substitute:

1	Gas	2.69	0.56	0.022
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10 After subparagraph 3.88J(1)(a)(ii)

Insert:

(iia) method 2B under section 3.87B;

11 Subparagraph 3.88J(1)(b)(ii)

Omit "and".

12 At the end of paragraph 3.88J(1)(b)

Add:

(iii) method 2B under section 3.87B; and

13 Subsection 3.88J(2)

Renumber as subsection (3).

14 After subsection 3.88J(1)

Insert:

- (2) If method 2B under section 3.87B has been used to estimate emissions of either methane or carbon dioxide released, no other method in this section may be used to estimate emissions of methane or carbon dioxide.

15 After subparagraph 3.88T(1)(a)(ii)

Insert:

(iia) method 2B under section 3.87B;

16 Subparagraph 3.88T(1)(b)(ii)

Omit “and”.

17 At the end of paragraph 3.88T(1)(b)

Add:

(iii) method 2B under section 3.87B; and

18 Subsection 3.88T(2)

Renumber as subsection (3).

19 After subsection 3.88T(1)

Add:

- (2) If method 2B under section 3.87B has been used to estimate emissions of either methane or carbon dioxide released, no other method in this section may be used to estimate emissions of methane or carbon dioxide.

20 Subsection 5.25(5)

Omit:

$$\text{CH}_{4\text{gen}} = \left[(\text{COD}_{\text{w}} - \text{COD}_{\text{sl}} - \text{COD}_{\text{eff}}) \times \text{MCF}_{\text{ww}} \times \text{EF}_{\text{wij}} \right] \\ + \left[(\text{COD}_{\text{sl}} - \text{COD}_{\text{trl}} - \text{COD}_{\text{tro}}) \times \text{MCF}_{\text{sl}} \times \text{EF}_{\text{slij}} \right]$$

Substitute:

$$\text{CH}_{4\text{gen}} = \left[(\text{COD}_{\text{w}} - \text{COD}_{\text{sl}} - \text{COD}_{\text{eff}}) \times \text{MCF}_{\text{ww}} \times \text{EF}_{\text{wij}} \right] \\ + \left[(\text{COD}_{\text{sl}} - \text{COD}_{\text{trl}} - \text{COD}_{\text{trb}} - \text{COD}_{\text{tro}}) \times \text{MCF}_{\text{sl}} \times \text{EF}_{\text{slij}} \right]$$

21 Subsection 5.25(5) (after the definition of COD_{trl})

Insert:

COD_{trb} is the quantity of COD in sludge transferred out of the plant to a biochar production facility.

22 Subsection 5.25(5) (definition of COD_{tro})

After “landfill”, insert “or a biochar production facility,”.

23 Subsection 5.26(2), Step 1

Omit:

$$\frac{\gamma(Q_{capz} + Q_{flaredz} + Q_{trz})}{\left[\begin{aligned} &\left(COD_{wz} - COD_{slz} - COD_{effz} \right) \times MCF_{wwz} \times EF_{wijz} + \\ &\left(COD_{slz} - COD_{trlz} - COD_{troz} \right) \times MCF_{slz} \times EF_{slijz} \end{aligned} \right]}$$

Substitute:

$$\left(\frac{\gamma(Q_{capz} + Q_{flaredz} + Q_{trz})}{(COD_{wz} - COD_{slz} - COD_{effz}) \times MCF_{wwz} \times EF_{wijz} + (COD_{slz} - COD_{trlz} - COD_{trbz} - COD_{troz}) \times MCF_{slz} \times EF_{slijz}} \right)$$

24 Subsection 5.26(2), Step 1 (after the definition of COD_{trlz})

Insert:

COD_{trbz} is the quantity of COD in sludge transferred out of the sub facility and removed to a biochar production facility, measured in tonnes of COD.

25 Subsection 5.26(2), Step 1 (definition of COD_{troz})

After “landfill”, insert “or a biochar production facility”.

26 Subsection 5.26(2), Step 2

Omit:

$$\left(\begin{aligned} &\left(COD_{wz} - COD_{slz} - COD_{effz} \right) \times MCF_{wwz} \times EF_{wijz} + \\ &\left(COD_{slz} - COD_{trlz} - COD_{troz} \right) \times MCF_{slz} \times EF_{slijz} \end{aligned} \right)$$

Substitute:

$$(COD_{wz} - COD_{slz} - COD_{effz}) \times MCF_{wwz} \times EF_{wijz} +$$

$$(\text{COD}_{\text{slz}} - \text{COD}_{\text{trlz}} - \text{COD}_{\text{trbz}} - \text{COD}_{\text{troz}}) \times \text{MCF}_{\text{slz}} \times \text{EF}_{\text{slijz}}$$

27 Subsection 5.26(2), Step 2 (after the definition of COD_{trlz})

Insert:

COD_{trbz} has the same meaning as in step 1.

28 Subsection 5.31(7), (table item 2, column headed “ EF_{disij} ”)

Omit “1.026”, substitute “1.041”.

29 Subsection 5.42(5)

Omit:

$$\text{CH}_{4\text{gen}} = \left(\sum_{\text{w,i}} \text{COD}_{\text{w,i}} - \text{COD}_{\text{sl}} - \text{COD}_{\text{eff}} \right) \times \text{MCF}_{\text{ww}} \times \text{EF}_{\text{wij}} +$$

$$\left(\text{COD}_{\text{sl}} - \text{COD}_{\text{trl}} - \text{COD}_{\text{tro}} \right) \times \text{MCF}_{\text{sl}} \times \text{EF}_{\text{slij}}$$

Substitute:

$$\text{CH}_{4\text{gen}} = (\sum_{\text{w,i}} \text{COD}_{\text{w,i}} - \text{COD}_{\text{sl}} - \text{COD}_{\text{eff}}) \times \text{MCF}_{\text{ww}} \times \text{EF}_{\text{wij}} +$$

$$(\text{COD}_{\text{sl}} - \text{COD}_{\text{trl}} - \text{COD}_{\text{trb}} - \text{COD}_{\text{tro}}) \times \text{MCF}_{\text{sl}} \times \text{EF}_{\text{slij}}$$

30 Subsection 5.42(5) (after the definition of COD_{trl})

Insert:

COD_{trb} is the quantity of COD in sludge transferred out of the plant to a biochar production facility during the year, measured in tonnes of COD.

31 Subsection 5.42(5) (definition of COD_{tro})

After “landfill”, insert “or a biochar production facility,”.

32 After subsection 7.1(2)

Insert:

- (3) If an entity uses the market-based method under section 7.4 for a facility within their controlling corporation’s group, they must use the market-based method for all facilities within their controlling corporation’s group for which a purchase or acquisition of electricity has occurred in the reporting year.

33 Subsection 7.4(1) (definition of REC_{surr})

Omit “in”, substitute “for”.

34 Subsection 7.4(3)

Repeal the subsection, substitute:

(3) For *REC_{surr}*,

(a) an *eligible Renewable Energy Certificate* is:

- (i) a Largescale Generation Certificate (*LGC*), other than an ineligible Renewable Energy Certificate that is voluntarily surrendered for the reporting year prior to the submission of the report, or
- (ii) a purchase of GreenPower electricity from an accredited GreenPower Provider;

that is supported by evidence in accordance with subsection (5).

(b) an *ineligible Renewable Energy Certificate* is:

- (i) an LGC surrendered to meet a liable entity's obligations for that compliance year under the *Renewable Energy (Electricity) Act 2000*; or
- (ii) an incorrectly created or cancelled LGC; or
- (iii) an LGC that is voluntarily surrendered and has a generation date of more than 36 months prior to the end of the reporting year.

35 Subsection 7.4(4)

Repeal the subsection, substitute:

(4) For *REC_{onsite}* and *JRPP*, an *eligible Renewable Energy Certificate* is a Largescale Generation Certificate (*LGC*).

36 Subsection 8.6(1) (table item 28A)

Renumber as 29A.

37 Subsection 8.6(1) (table item 30, column headed "Fuel Combusted")

Omit "28, 28A and 29", substitute "28, 29 and 29A".

38 Section 8.6 (after table item TBC)

Insert:

TBC	Hydrogen	4	NA
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39 After section 9.19

Add:

9.20 Amendments made by the *National Greenhouse and Energy Reporting (Measurement) Amendment (2025 Update) Determination 2025*

The amendment made by the *National Greenhouse and Energy Reporting (Measurement) Amendment (2025 Update) Determination 2025* applies in relation to:

- (a) the financial year starting on 1 July 2025; and
- (b) later financial years.

40 Part 2 of Schedule 1, Fuel combustion – gaseous fuels (after table item TBC)

Insert:

TBC	Hydrogen	12.2×10^{-3}	0.0	0.0	Factor subject to technical development
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41 Part 6 of Schedule 1 (Column 2, Emission factor kg CO₂e/kWh)

Omit the column, substitute:

Column 2
Emission factor
kg CO ₂ -e/kWh
0.64
0.78
0.67
0.22
0.50
0.20
0.56

42 Part 2 of Schedule 3, Carbon content factors – gaseous fuels (after table item TBC)

Insert:

TBC	Hydrogen	0
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43 Part 1A of Schedule 4 (table item 1, column headed “Matters to be identified”, after paragraph (c))

Insert:

- (d) If section 2.67C was used to determine the amounts of each kind of fuel in the blended fuel:
 - (i) if PGOs were used to determine the amount of a renewable gas in the blended fuel:
 - (A) the unique identification code included on each PGO;
and
 - (B) the total amount, in gigajoules, of each kind of renewable gas represented by the PGOs;
 - (ii) if RGGOs were used to determine the amount of a renewable gas in the blended fuel:
 - (A) the unique serial number for each RGGO;

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- (B) the unique identifying code for each Retirement Statement covering the RGGOs; and
 - (C) the total amount, in gigajoules, of each kind of renewable gas represented by the RGGOs.

44 Part 2 of Schedule 4, Source 2D (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

45 Part 2 of Schedule 4, Source 2F (table item 4, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

46 Part 2 of Schedule 4, Source 2H (table item 4, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

47 Part 2 of Schedule 4, Source 2T (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

48 Part 2 of Schedule 4, Source 2U (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

49 Part 2 of Schedule 4, Source 2W (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

50 Part 2 of Schedule 4, Source 2Y (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

51 Part 2 of Schedule 4, Source 2Z (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

52 Part 2 of Schedule 4, Source 2Z (at the end of the table)

Add:

3	Method 2B for the source, as set out in subsection 3.87B(1)	(a) the tonnes of flared gas (b) the tonnes and gigajoules of methane within the flared gas, calculated through a mass balance
4	Method 2B for the source, as set out in subsection 3.87B(2)	(a) the tonnes of flared crude oil and liquids (hydrocarbon component) within the flared gas, calculated through a mass balance

53 Part 2 of Schedule 4, Source 2ZB (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

54 Part 2 of Schedule 4, Source 2ZE (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

55 Part 2 of Schedule 4, Source 2ZF (table item 2, column headed “Matters to be identified”, before paragraph (a))

Insert:

(aa) the tonnes of flared gas

56 Part 2 of Schedule 4, Source 2ZF (at the end of the table)

Add:

3	Method 2B for the source, as set out in subsection 3.87B(1)	(a) the tonnes of flared gas (b) the tonnes and gigajoules of methane within the flared gas, calculated through a mass balance
4	Method 2B for the source, as set out in subsection 3.87B(2)	(a) the tonnes of flared crude oil and liquids (hydrocarbon component) within the flared gas, calculated through a mass balance

57 Part 6 of Schedule 4, Source 4B (table)

Repeal the table.

58 Part 6 of Schedule 4, Source 4C (table)

Repeal the table.

59 Part 6 of Schedule 4, at the end of Source 4A

Add:

Source 4B—Wastewater handling—domestic or commercial

Item	Method	Matters to be identified
1	Method 1 for the source, as set out in sections 5.25 and 5.31	(a) the population served by the wastewater treatment plant (b) the fraction of COD in wastewater anaerobically treated (c) the tonnes of COD removed as sludge (d) the fraction of COD in sludge anaerobically treated on site (e) the tonnes of COD in sludge transferred off site and disposed of at a landfill facility (ea) the tonnes of COD in sludge transferred out of the plant to a biochar production facility (f) the tonnes of COD in sludge transferred off site and disposed of at a site other than a landfill facility (g) the tonnes of methane (CO ₂ -e) captured for combustion on site (h) the tonnes of methane (CO ₂ -e) captured and transferred off site (i) the tonnes of methane (CO ₂ -e) flared (j) the tonnes of COD in effluent leaving the site (k) the tonnes of nitrogen in sludge transferred out of the plant and disposed of at a landfill facility (l) the tonnes of nitrogen in sludge transferred out of the plant and disposed of at a site other than a landfill facility (m) the tonnes of nitrogen in effluent leaving the plant into enclosed waters (n) the tonnes of nitrogen in effluent leaving the plant into estuarine waters (o) the tonnes of nitrogen in effluent leaving the plant into open coastal waters
2	Methods 2 and 3 for the source, as set out in sections 5.26, 5.30, 5.32 and 5.36	(a) the population served by the wastewater treatment plant (b) the tonnes of COD measured entering treatment facility (c) the fraction of COD in wastewater anaerobically treated (d) the tonnes of COD removed as sludge (e) the fraction of COD in sludge anaerobically treated (f) the tonnes of methane (CO ₂ -e) generated from the decomposition of COD

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- (g) the tonnes of methane (CO₂-e) captured for combustion on site
 - (h) the tonnes of methane (CO₂-e) captured and transferred off site
 - (i) the tonnes of methane (CO₂-e) flared
 - (j) the tonnes of COD in effluent leaving the site
 - (k) the tonnes of COD in sludge transferred offsite and disposed of at a landfill facility
 - (ka) the tonnes of COD in sludge transferred out of the plant to a biochar production facility
 - (l) the tonnes of COD in sludge transferred offsite to a site other than a landfill facility
 - (m) the tonnes of nitrogen in influent entering the plant
 - (n) the tonnes of nitrogen in sludge transferred out of the plant and disposed of at a landfill facility
 - (o) the tonnes of nitrogen in sludge transferred out of the plant and disposed of at a site other than a landfill facility
 - (p) the tonnes of nitrogen in effluent leaving the plant into enclosed waters
 - (q) the tonnes of nitrogen in effluent leaving the plant into estuarine waters
 - (r) the tonnes of nitrogen in effluent leaving the plant into open coastal waters
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Source 4C—Wastewater handling—industrial

Item	Method	Matters to be identified
1	Method 1 for the source, as set out in section 5.42	<ul style="list-style-type: none"> (a) the tonnes of commodity produced (b) the fraction of wastewater anaerobically treated (c) the fraction of COD removed as sludge (d) the fraction of COD in sludge anaerobically treated on site (e) the tonnes of COD in sludge transferred off site and disposed of at a landfill facility (ea) the tonnes of COD in sludge transferred out of the plant to a biochar production facility (f) the tonnes of COD in sludge transferred off site and disposed of at a site other than a landfill facility (g) the tonnes of COD in effluent leaving the site (h) the tonnes of methane (CO₂-e) captured for production of electricity on site (i) the tonnes of methane (CO₂-e) captured and transferred off site (j) the tonnes of methane (CO₂-e) flared
2	Methods 2 and 3 for the source, as set out in sections 5.43 and 5.47	<ul style="list-style-type: none"> (a) the tonnes of commodity produced (b) the tonnes of COD measured entering the treatment site (c) the fraction of wastewater anaerobically treated (d) the tonnes of COD removed as sludge

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- (e) the fraction of COD in sludge anaerobically treated on site
 - (f) the tonnes of COD in sludge transferred off site and disposed of at a landfill facility
 - (fa) the tonnes of COD in sludge transferred out of the plant to a biochar production facility
 - (g) the tonnes of COD in sludge transferred off site and disposed of at a site other than a landfill facility
 - (h) the tonnes of COD in effluent leaving the site
 - (i) the tonnes of emissions (CO₂-e) generated
 - (j) the tonnes of methane (CO₂-e) captured for production of electricity on site
 - (k) the tonnes of methane (CO₂-e) captured and transferred off site
 - (l) the tonnes of methane (CO₂-e) flared
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60 Part 7 of Schedule 4 (cell at table item 1, column headed “Matters to be identified”)

Repeal the cell, substitute:

- (a) The values Q, Qexempt, REC_{surr} and RECon_{site} used to estimate scope 2 emissions under the method
- (b) The RET accreditation codes for any accredited power stations within the facility
- (c) For purchases that are not GreenPower electricity, the Surrender ID numbers from the REC Registry of any REC_{surr}