

EXPLANATORY STATEMENT

Issued by the Authority of the Minister for the Environment, the Honourable Greg Hunt MP

National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No. 1)

The *National Greenhouse and Energy Reporting Act 2007 (Cwlth)* established the National Greenhouse and Energy Reporting (NGER) scheme, which is a national system for reporting greenhouse gas emissions, energy consumption and energy production by Australian corporations.

The *National Greenhouse and Energy Reporting (Measurement) Determination 2008* was made under section 10 of the Act, which provides for the Minister to determine methods, or criteria for methods, for the measurement of (a) greenhouse gas emissions; (b) the production of energy; and (c) the consumption of energy.

The *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No.1)* (the Instrument) will amend the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*.

The instrument will commence on 1 July 2016 and apply to the 2016-17 financial year. It will affect NGER reports submitted by corporations in October 2017.

Details of the amendments to the *NGER (Measurement) Determination 2008* and a Statement of Compatibility with Human Rights are included in the Attachments.

This Instrument is a legislative instrument for the purposes of the *Legislative Instruments Act 2003*.

Overview of the National Greenhouse and Energy Reporting (Measurement) Determination 2008

The *NGER (Measurement) Determination 2008* provides the methods for the estimation of greenhouse gas emissions and the production and consumption of energy.

The scope of the Determination follows international classification systems and includes emissions from:

- Minor technical corrections to methods for the estimation of fugitive emissions from coal seam gas operations, energy, municipal solid waste and some industrial processes,
- Reinsertion of provisions to support the estimation of emissions from legacy waste at landfills,
- Finalisation of additional methods to complete NGER system guidance for the estimation of emissions from carbon capture and storage (CCS) activities, and
- Annual update of scope 2 emission factors reflecting changes within the National Electricity Market in the last financial year.

The most significant source of emissions in Australia is from fuel combustion, which accounts for over 60 per cent of the emissions reported in the national greenhouse gas inventory.

The scope of the Determination does not include land based emissions covered by the Intergovernmental Panel on Climate Change (IPCC) categories ‘Agriculture’ and ‘Land Use, Land Use Change and Forestry’. Emissions from fuel combustion by land based industries are, nonetheless, covered by this Determination.

Methods of measurement

The framework supporting the emissions estimation methods specified in the Determination reflects the approaches of the IPCC guidelines governing the estimation of national greenhouse gas inventories, as adopted by the Parties to the UN Framework Convention on Climate Change and its Kyoto Protocol.

The Determination provides four different classes of methods for the estimation of emissions for most emissions sources.

NGER Method 1: is the *National Greenhouse Accounts* default method and specifies the use of default emission factors in the estimation of emissions. This is the simplest method available and, in general, emissions may be estimated by reference to activity data such as fossil fuel consumption, evidenced by invoices, and the use of specified emission factors provided in the Determination.

NGER Method 2: is a facility-specific method using industry sampling and Australian or international standards to provide more accurate estimates of emissions at facility level. Method 2 enables corporations to undertake additional measurements – for example, the qualities of fuels

consumed at a particular facility – in order to gain more accurate estimates for emissions for that particular facility.

NGER Method 3: is a facility-specific method using Australian or international standards for both sampling and analysis of fuels and raw materials. Method 3 is very similar to Method 2, except that reporters must use Australian or equivalent documentary standards for sampling (of fuels or raw materials) as well as for the analysis of fuels.

NGER Method 4: direct monitoring of emission systems, either on a continuous or periodic basis. Rather than providing for the analysis of the chemical properties of inputs (or in some case, products), Method 4 aims to directly monitor greenhouse emissions arising from an activity. This approach can provide a higher level of accuracy in certain circumstances, depending on the type of emissions process; however, it is more likely to be more data intensive than other approaches.

As for Methods 2 and 3, there is a substantial body of documented procedures on monitoring practices and state and territory government regulatory experience that provide the principal sources of guidance for the establishment of such systems.

More generally, the *NGER (Measurement) Determination* draws on existing estimation practices wherever possible, including the use of data collected for commercial, taxation or other regulatory purposes, with the aim of maximising the use of readily validated data and minimising administrative burdens on reporters.

Consultation

A consultation draft of this Instrument was released for public comment on 22 April 2016. The Department received four submissions from stakeholders, which have resulted in minor technical changes to the Instrument.

ATTACHMENT A

Details of the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No. 1)*

Item 1 – Name of Determination

This item provides that the title of the Instrument is the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No. 1)*.

Item 2 – Commencement

This item provides that the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No. 1)* commences on 1 July 2016.

Item 3 – Authority

This item outlines that the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (the Determination) is made under section 10 of the *National Greenhouse and Energy Reporting Act 2007*.

Item 4 – Schedules

Schedule 1— Miscellaneous amendments

The explanations of amendments provided below are grouped by part and division within the Instrument. Individual amendment items are referenced to the amendment number as stated in the Instrument.

Chapter 3: Fugitive emissions

Item	NGER (Measurement) Determination Reference	Commentary
12	3.40A	Improves clarity by removing a duplicative definition for coal seam methane.

Chapter 4: Industrial processes emissions

Item	NGER (Measurement) Determination Reference	Commentary
13	4.66	Improves clarity by making clear that the carbonaceous inputs for which carbon content factors are listed in Schedule 3 of the Determination are not complete and that other inputs for steel making must be accounted for.
14	4.100	Correction of an outdated cross reference to the Regulations.

Chapter 5: Waste

Item	NGER (Measurement) Determination Reference	Commentary
15, 16	5.11(2), 5.11(3)	Correction of percentage values for each waste type input mix for MSW class II waste stream for a rounding error.

Chapter 6: Energy

Item	NGER (Measurement) Determination Reference	Commentary
17	6.4 (note 2)	Correction of reference to NGER Regulations.

Chapter 7—Scope 2 emissions

Provides methods for the determination of scope 2 emissions from the consumption of purchased electricity.

Part 6 Indirect (scope 2) emission factors from consumption of purchased electricity from grid

Item	Commentary
29	Annual update of scope 2 emission factors reflecting changes within the National Electricity Market in the last financial year.

Chapter 8: Assessment of uncertainty

Item	NGER (Measurement) Determination Reference	Commentary
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28.	1.3(1)(c), 1.3(1)(d), 1.3(2), 1.8, 8.3(1), 8.3(2), 8.4, 8.5(1), 8.5(2), 8.5 (3), 8.11(1), 8.12, 8.13, 8.14.	Minor editorial completions supporting the repeal of the <i>Clean Energy Act 2011</i> .

Schedule 2—legacy waste

This Schedule provides for the reinstatement of methods to support the estimation of emissions from legacy waste at landfills.

This guidance was removed in the *National Greenhouse and Energy Reporting Measurement Amendment Determination 2015 (No.1)* in support of the repeal of the *Clean Energy Act 2011*.

They are being reinstated in support of the introduction of the [National Greenhouse and Energy Reporting \(Safeguard Mechanism\) Rule 2015](#).

Chapter 1: General

Item	NGER (Measurement) Determination Reference	Commentary
1, 2.	1.8	Reinsertion of definitions to support legacy waste methods

Chapter 5: Waste

Item	NGER (Measurement) Determination Reference	Commentary
3 – 6.	5.2, 5.17AA, 5.17L, 5.22A, 5.22B, 5.22C, 5.22D, 5.22E, 5.22F, 5.22G, 5.22H, 5.22J, 5.22K, 5.22L, 5.22M.	Re-insertion of methods for the estimation of emissions from legacy waste from landfills. The methods are described in the <i>National Greenhouse and Energy Reporting Measurement Amendment Determination 2015 (No.1)</i> , which removed the guidance for the estimation of potential emissions from natural gas, and legacy waste for landfills - reflecting the repeal of the <i>Clean Energy Act 2011</i>

Schedule 3—carbon capture and storage

Schedule 3 provides amendments to complete NGER system (NGERS) guidance for the estimation of fugitive emissions from Carbon Capture and Storage (CCS) operations.

Part 3.4 – Carbon Capture and Storage – Fugitive Emissions

Item	NGER (Measurement) Determination Reference	Commentary
1, 2, 3.	1.3(1)(c), 1.8	Provides definitions to align methods with the <i>Offshore Petroleum and Greenhouse Gas Storage Act 2006</i> , and with state based CCS legislative instruments.
4 – 46, 48 – 53, 55 – 59.	1.11 1.19A 1.19B 1.19B(1) 1.19B(1)(a)	Adoption of term “greenhouse gas substance” in place of “carbon dioxide”. Recognises that the CCS stream will routinely include trace amounts of other greenhouse gases such as methane.

Item	NGER (Measurement) Determination Reference	Commentary
	1.19B(1)(b) 1.19B(2)(a) 1.19(2)(a)(i) 1.19B(2)(a)(ii) 1.19B(2)(a)(iii) 1.19B(2)(b) 1.19B(2)(b)(i) 1.19B(2)(b)(ii) 1.19B(2)(b)(iii) 1.19B(3) 1.19C 1.19C(a) 1.19C(b) 1.19D 1.19E 1.19E(1) 1.19E(2) 1.19E(2)(a) 1.19E(2)(b) 1.19E(3) 1.19E(4) 1.19E(5) 1.19E(6) 1.19E(6) 1.19F 1.19F(1) 1.19G 1.19H 1.19H(1) 1.19H(2) 1.19I 1.19I(2) 1.19I(3) Division 3.4.2 (heading) 3.89 3.90(1) 3.90(2) 3.90(3),	

Item	NGER (Measurement) Determination Reference	Commentary
	subdivision 3.4.2.2 (heading) 3.91 subdivision 3.4.2.2 (heading) 3.92	
47, 54.	1.19GA 1.19N	BBB provision on activity data standards moved.
60, 61, 62.	3.91 3.92	Provides an additional Method 2 for the estimation of fugitive emissions from the transport of supercritical CO ₂ captured for the purposes of permanent geological storage.
63.	3.93 3.94	Provides methods for the injection of “ <i>greenhouse gas substances</i> ”.
	3.95	Provides for the use of methods from <i>Section 5.7.1 of the API Compendium</i> for the estimation of fugitive emissions from deliberate releases associated with the injection component of CCS.
	3.96 3.97	Provides methods for the estimation of fugitive emissions (other than deliberate releases from process vents, system upsets and accidents) associated with the injection component of CCS. Mirrors existing provisions for natural gas production where carbon dioxide is often injected into reservoirs as part of the normal operational practice of gas extraction.
	3.98 3.100	3.99 Provides additional high level principles based approaches for the estimation of fugitive emissions associated with the long term geological storage of

Item	NGER (Measurement) Determination Reference	Commentary
		captured greenhouse gases.

Schedule 4— Application and transitional provisions

Item	NGER (Measurement) Determination Reference	Commentary
1.	9.1	Application and transitional provisions

STATEMENT OF COMPATIBILITY WITH HUMAN RIGHTS

Statement of Compatibility with Human Rights

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2016 (No. 1)

This Legislative Instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the Legislative Instrument

This Instrument amends the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (the Determination). The Determination is made under section 7B and subsection 10 of the *National Greenhouse and Energy Reporting Act 2007*, which provides for the Minister to determine methods, or criteria for methods, for the measurement of (a) greenhouse gas emissions, (b) the production of energy, (c) the consumption of energy.

Human rights implications

This Legislative Instrument does not engage any of the applicable rights or freedoms.

Conclusion

This Legislative Instrument is compatible with human rights as it does not raise any human rights issues.

Greg Hunt

Minister for the Environment