

EXPLANATORY STATEMENT

Issued by authority of the Minister for Energy and Emissions Reduction

National Greenhouse and Energy Reporting Act 2007

*National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update)
Determination 2019*

The *National Greenhouse and Energy Reporting Act 2007* (the Act) provides a framework for the reporting of emissions, energy production and consumption in Australia. It also provides for the Safeguard Mechanism to place limits on the net emissions of the largest facilities in Australia.

The *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (“the Determination”) 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. An overview of the Determination is provided below.

The purpose of the *National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019* (the Instrument) is to assist National Greenhouse and Energy Reporting (NGER) scheme reporters by introducing routine updates. The amendments:

- provide an additional method for estimating emissions from the distribution of natural gas using facility-specific factors determined or calculated in accordance with rules or procedures made by the Australian Energy Market Operator (AEMO);
- update emission factors used to estimate emissions resulting from the consumption of electricity purchased or lost from the grid (these are known as ‘scope 2 emissions’) – based on the latest available data.

The Instrument will commence on 1 July 2019 and apply to the 2019-20 financial year. It will affect NGER reports submitted by corporations in October 2020. Details of the amendments contained in the Instrument are provided below.

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

The *NGER (Measurement) Determination 2008* (“the Determination”) 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:

- the combustion of fuel for energy;
- the extraction, production, flaring, processing and distribution of fossil fuels and carbon capture and storage;

- industrial processes where a mineral, chemical or metal product is formed using a chemical reaction that generates greenhouse gases as a by-product as well as emissions of hydrofluorocarbons and sulphur hexafluoride resulting from their use by certain industries; and
- waste disposal – either in landfill, as management of wastewater or from waste incineration.

The most significant source of emissions in Australia is from fuel combustion, which accounts for over 70 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 the 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 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.

Overview of the *National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019*

Unaccounted for gas

Division 3.3.8 of the Determination provides methods for estimating fugitive emissions from facilities in which natural gas is distributed through a system of pipelines.

In addition to the existing Method 1 (section 3.80), in which State- or Territory-wide emissions factors are applied to estimate the percentage of unaccounted for gas in a facility, and Method 2 (3.81), under which reporters may estimate emissions on a facility-specific basis using factors provided for different types of equipment in the *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry (API Compendium)*, the Instrument introduces a new Method 3, providing for the use of facility-specific unaccounted for gas factors which are consistent with those calculated and used in relevant gas markets. This allows for greater accuracy in estimation of emissions from the facility.

Scope 2 emissions factors

The Instrument makes an annual update to scope 2 emission factors to reflect changes within the National Electricity Market, Northern Territory and South West Interconnected System in the last financial year.

Further details of the Instrument are outlined in [Attachment A](#).

The Instrument is a legislative instrument for the purposes of the *Legislation Act 2003*.

A Regulation Impact Statement was not required, based on advice from the Office of Best Practice Regulation (25174).

A statement of the Regulation's compatibility with human rights is set out in [Attachment B](#).

ATTACHMENT A

National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019

Section 1 – Name of Determination

This section provides that the title of the Instrument is the *National Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019*.

Section 2 – Commencement

This section provides for the amendments to commence on 1 July 2019.

Section 3 – Authority

This section outlines that the Determination falls under subsection 10(3) of the *National Greenhouse and Energy Reporting Act 2007*.

Section 4 – Schedules

The amendments to the Determination are outlined at Schedule 1.

Schedule 1 – Amendments

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

Determination Chapter 3: Fugitive Emissions

Part 3.3—Oil and natural gas—fugitive emissions

Item	NGER (Measurement) Determination Reference	Commentary
1.	Section 3.79- Available methods	Updates Section 3.79 to: <ul style="list-style-type: none">• reflect the addition of a new Method 3 for estimating fugitive emissions from natural gas distribution facilities,• provide that Method 3 may only be used where an unaccounted for gas percentage has already been calculated during the reporting year based on gas market rules or procedures applicable to the facility.

Item	NGER (Measurement) Determination Reference	Commentary
2.	New Section 3.81A- Method 3- natural gas distribution (other than emissions that are flared)	<p>Inserts a new Section 3.81A, providing a new Method 3 under which reporters may estimate fugitive emissions from natural gas distribution facilities using an unaccounted for gas percentage applied under relevant gas market rules or procedures applicable to the facility.</p> <p>Reporters will use the unaccounted for gas percentage for the relevant reporting year where it is available. If the percentage is not calculated for that financial year at the time of reporting, the percentage for the most recent 12 month period must be used. If the latter option applies, the reporter will be expected to explain which 12 month period has been used.</p> <p>The method is designed to allow networks to apply the number they use in the relevant gas market, but it is not intended that the relevant gas rules or procedures would be incorporated into the determination. Those detailed gas market rules and procedures are generally made by the Australian Energy Market Operator (AEMO) and are available on their website www.aemo.com.au.</p>

Determination Chapter 9: Application and transitional provisions

Item	NGER (Measurement) Determination Reference	Commentary
3.	Section 9.12- Amendments made by the National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019	Inserts a new Section 9.12 in Chapter 9 (Application and transitional provisions) providing that amendments made by the Instrument apply in relation to the financial year starting on 1 July 2019, and to later financial years.

Determination Schedule 1, Part 6 — Indirect (scope 2) emission factors from consumption of purchased electricity from grid

Item	NGER (Measurement) Determination	Commentary
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	Reference	
4.	Part 6 of Schedule 1.	Updates indirect (“scope 2”) emission factors (used to estimate emissions from consumption of electricity) to reflect changes within the National Electricity Market, Northern Territory and South West Interconnected System in the last financial year.

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 (2019 Update) Determination 2019

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

The *National Greenhouse and Energy Reporting (Measurement) Amendment (2019 Update) Determination 2019* makes minor amendments to the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (the Determination). The Determination is made under subsection 10(3) 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 human rights or freedoms.

Conclusion

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

The Hon Angus Taylor
Minister for Energy and Emissions Reduction