

## **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 2015 (No. 2)*

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 2015 (No.2)* (the Instrument) will amend the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* to update emissions factors for the combustion of fuel, including the incorporation of updated Global Warming Potentials (GWPs) adopted by the Parties to the UN Framework Convention on Climate Change and its Kyoto Protocol.

Schedule 1 of the instrument will commence on 1 July 2015 and apply to the 2015-16 financial year. It will affect NGER reports submitted by corporations in October 2016.

Schedule 2 of 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:

- 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 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 3 June 2015. 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 2015 (No. 2)***

#### **Item 1 – Name of Determination**

This item provides that the title of the Instrument is the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)*.

#### **Item 2 – Commencement**

This item provides that the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)* Schedule 1 commences on 1 July 2015, and the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)* Schedule 2 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 sections 7B and 10 of the *National Greenhouse and Energy Reporting Act 2007*.

#### **Item 4 – Schedules**

## Schedule 1—Amendments commencing 1 July 2015

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 1: General

#### *Part 1.1 - Preliminary*

Part 1.1 updates definitions.

| Item | NGER<br>(Measurement)<br>Determination<br>Reference | Commentary   |
|------|---|--|
| 1    | 1.8   | Refines the definition of <i>applicable State or Territory legislation</i> to support amendments to Part 3.2 |

### Chapter 3: Fugitive Emissions

#### *Part 3.2 Coal mining – fugitive emissions*

Part 3.2 updates technical guidance for the direct measurement of emissions from underground coal mines.

| Item             | NGER<br>(Measurement)<br>Determination<br>Reference | Commentary   |
|------------------|---|--|
| 2<br>3<br>4<br>5 | 3.6(2)<br>3.6(2)(b)<br>3.13                         | Provides refined guidance on the calibration requirements for periodic continuous monitoring of emissions released from the extraction of coal from an underground mine. |

**Part 3.3 Oil and natural gas – fugitive emissions**

Part 3.3 provides additional Method 2 guidance for the estimation of fugitive emissions associated with flaring gas with hydrocarbon concentrations significantly different to that described for Method 1.

| <b>Item</b>                | <b>NGER<br/>(Measurement)<br/>Determination<br/>Reference</b> | <b>Commentary</b>   |
|----------------------------|---|---|
| 6                          | 3.43(1)(b) and<br>(c)   | Provides for Method 2 for estimating emissions of methane and nitrous oxide released associated with oil or gas exploration (flared) emissions. |
| 7<br>8<br>9                | 3.45<br>3.45(2)<br>3.45                                       | Includes the Method 2 for estimating emissions of methane and nitrous oxide emissions.  |
| 10<br>11<br>12             | 3.51(1)(c) and<br>(c)<br>3.53<br>3.55                         | Provides for Method 2 for estimating emissions of methane and nitrous oxide released associated with crude oil production (flared).             |
| 13<br>14                   | 3.62(4)(b) and<br>(c)<br>3.68                                 | Provides for Method 2 for estimating emissions of methane and nitrous oxide released associated with crude oil refining.                        |
| 15<br>16<br>17<br>18<br>19 | 3.83 (3)(b) and<br>(c)<br>3.86                                | Provides for Method 2 for estimating emissions of methane and nitrous oxide released associated with natural gas production.                    |

## Chapter 7—Scope 2 emissions

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

| Item     | NGER<br>(Measurement)<br>Determination<br>Reference | Commentary   |
|----------|---|--|
| 20<br>21 | 7.1(2)<br>7.2(3)<br>7.3(3)                          | Clarifies that the Chapter also applies to a facility the operation of which is constituted by an electricity transmission network or distribution network that consumes electricity through electricity losses. |

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

| Item | Commentary  |
|------|---|
| 22   | Annual update of scope 2 emission factors reflecting changes within the National Electricity Market in the last financial year. |

## Schedule 2—Amendments commencing 1 July 2016

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 1: General

#### *Part 1.1 - Preliminary*

Part 1.1 updates definitions.

| Item   | NGER<br>(Measurement)<br>Determination<br>Reference | Commentary   |
|--------|---|--|
| 1<br>2 | 1.3(4)(d)<br>1.8                                    | Provides an additional definition for <i>biological treatment</i> , and refines the description of the categories of Scope 1 emissions to include other facilities that release emissions associated with waste. |

### Chapter 5: Waste

#### *Part 5.2 Solid waste disposal in land*

Part 5.2 aligns reporting obligations for composting facilities both within and outside of a landfill facility boundary.

| Item  | NGER<br>(Measurement)<br>Determination<br>Reference  | Commentary  |
|-------|--|---|
| 1 - 9 | 5.2, 5.3(1)<br>5.3(a) and (b)<br>5.3(1)(c)and (d)<br>5.22<br>5.22(1) and (2)<br>5.22AA<br>5.22 | Extends the coverage of methods for estimating emissions from composting operations to include all composting facilities that exceed the reporting threshold. |



### Schedule 3— Application and transitional

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 9

##### *Part 1.1 - Preliminary*

Part 1.1 updates definitions.

| <b>Item</b> | <b>NGER<br/>(Measurement)<br/>Determination<br/>Reference</b> | <b>Commentary</b>   |
|-------------|---|---|
| 1           | 9.3<br>9.4  | <p>Clarifies that amendments made by Schedules 1 to the <i>National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 1)</i> apply in relation to the financial year starting on 1 July 2015 and later financial years</p> <p>Clarifies that amendments made by Schedules 1 to the <i>National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)</i> apply in relation to the financial year starting on 1 July 2015 and later financial years</p> |
| 2           | 9.5   | <p>Clarifies amendments made by Schedule 2 to the <i>National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)</i> apply in relation to the financial year starting on 1 July 2016 and later financial years.</p>   |

## 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 2015 (No. 2)**

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**