# EXPLANATORY STATEMENT

Issued by the authority of the Minister for Resources, Energy and Tourism

Greenhouse and Energy Minimum Standards Act 2012

Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013

## Purpose

The Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013 (Determination) implemented a Council of Australian Governments (COAG) decision from March 2010 to regulate gas water heaters for minimum energy performance standards (MEPS). The Determination establishes minimum energy efficiency and product performance requirements, and associated requirements for conducting tests, for gas water heaters.

## Background

The *Greenhouse and Energy Minimum Standards Act 2012* (Act) established a national framework for regulating the energy efficiency of products supplied or used within Australia, implementing Australian Government and the COAG commitments to establish national legislation to regulate energy efficiency and labelling standards for appliances and other products. The national legislation permits the Australian Government to set mandatory minimum efficiency requirements for products, to drive greater energy efficiency for regulated products. The Act also allows the Australian Government to set nationally-consistent labelling requirements, to increase Australians' awareness of options to improve energy efficiency and reduce energy consumption, energy costs and greenhouse gas emissions. The national framework replaced seven state and territory legislative frameworks, harmonising the regulation of equipment energy efficiency.

Historically, MEPS and energy labelling requirements were set out in Australian or Australian/New Zealand Standards and incorporated by reference in regulations, which were usually made under the relevant state or territory electrical safety legislation. Over time the COAG Equipment Energy Efficiency Program (E3 Program) developed the practice of setting the requirements by reference to the relevant Australian or Australian/New Zealand Standards. This practice has been continued in this Determination.

Selected definitions and text are extracted in the Determination from the relevant Australian or Australian/New Zealand Standards. This is done with the intention of making it possible to determine if a product is covered (or excluded) by the GEMS Determination without having to refer to the relevant standard.

MEPS requirements, or energy use requirements, relate to requirements for the minimum allowable energy efficiency of a product. They provide an energy efficiency 'floor' for that product type, below which individual models of that product type cannot be sold. The level of the floor can be raised over time, providing a means of raising the average energy efficiency of the product type.

Energy labelling requirements primarily relate to requirements for the display of energy rating labels, such as those commonly seen on products including refrigerators, dishwashers and televisions, amongst others. Energy rating labels allow consumers to compare the energy consumption of similar products, and factor potential cost savings into their purchasing decision. For some products labelling requirements also relate to specific information that must be marked on the product itself or the box in which it is supplied. No energy labelling requirements are set in this Determination.

Other regulatory requirements possible under the Act include requirements relating to high efficiency levels, product performance, and the impact of the product on the environment or the health of human beings. Of these types, only product performance requirements are set in this Determination. Product performance requirements are intended to ensure that minimum efficiency requirements or a higher number of stars on an energy rating label are not achieved by reducing the effectiveness of the product in its primary function. An example of this is the setting of minimum requirements for thermal efficiency for gas water heaters.

After the COAG decision to regulate gas water heaters in March 2010, only two state jurisdictions, New South Wales and Queensland, implemented regulations for MEPS requirements for gas water heaters under the E3 Program. This meant that regulatory coverage for gas water heaters was not uniform across Australia before the commencement of the Act. This Determination ensures that the regulation of gas water heaters is consistent across all states and territories and that the regulation is consistent with the COAG decision. For this reason, it was considered important that the Determination commence on the day after it was registered on the Federal Register of Legislative Instruments, rather than imposing further delay. Section 34 of the Act provides that a GEMS determination comes into force 12 months after the day it is made, or if another day is specified in the determination, on that other day.

## Legislative basis

Under subsection 23(1) of the Act the Minister may, by legislative instrument, make a determination (a GEMS determination) that specifies one or more classes of products if the products in those classes use energy or affect the amount of energy used by other products. A GEMS determination is the vehicle by which energy efficiency requirements (GEMS level requirements), energy labelling requirements (GEMS labelling requirements) for classes of products and other requirements for a product class are established

Under section 25 of the Act the GEMS level requirements specified in a GEMS determination may be:

- requirements relating to one or more of the following:
  - the amount of energy used in operating products in relevant product classes;
  - the amount of greenhouse gases resulting from operating products in the relevant product class;
  - the effect of those products on the amount of energy used by operating other products; and

• requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements.

Under section 27 of the Act other requirements that may be specified in a GEMS determination are:

- requirements for products in the relevant product class to meet a specified level (the high efficiency level);
- requirements relating to the performance of products in the relevant product class;
- requirements relating to the impact of products in that product class on the environment or on the health of human beings;
- requirements for conducting tests in relation to products in the relevant product class in order to determine whether the products meet the specified requirements; and
- requirements of a kind specified in the regulations for the purposes of this paragraph.

## Consultation

The Australian Government conducted extensive consultation with the gas industry throughout the development of the regulatory approach to gas water heaters. Dialogue with key stakeholder groups about regulatory intervention started in 2002. As a result of this dialogue, a range of discussion and strategy papers were released and numbers of working groups were convened.

A Consultation Regulatory Impact Statement (**Consultation RIS**) on the regulation of gas water heaters was prepared in accordance with COAG best practice regulation requirements and released for public comment in August 2008. Submissions were received from the majority of manufacturers with a presence in the Australian market. Suppliers of storage water heaters objected strongly to the proposed MEPS level of 5 stars on a number of grounds, including the adverse effect on the competitive position of Australian manufacturers, on Australian manufacturing jobs, social equity, and the additional water that is used by instantaneous water heaters.

In response to these concerns, it was agreed that the recommended MEPS level would be 4 stars instead of 5 stars.

## **Regulatory Impact**

A comprehensive COAG Decision Regulatory Impact Statement (**Decision RIS**) was prepared for gas water heaters following the completion of the Consultation RIS process. The Decision RIS incorporated industry submissions and comments and reflected the modifications agreed to in consultation. The Consultation RIS was finalised in October 2009 and presented to the Ministerial Council on Energy (**MCE**) for approval in late 2009. The MCE agreed to adopt the recommended regulatory approach presented in the Decision RIS in March 2010.

## **Detailed description of the Determination**

Details of the Determination are set out at Attachment A.

## Statement of compatibility with human rights

A statement of compatibility with human rights for the purposes of Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011* is set out at Attachment B.

## Attachment A

# **Details of the Determination**

## Section 1 – Name of Determination

This section sets out the title of the Determination.

# Section 2 – Commencement

This section provides that the Determination commences the day after it is registered on the Federal Register of Legislative Instruments.

# Section 3 – Definitions

This section sets out definitions for key terms used in the Determination. The definitions include:

- definitions relating to the various Australian/New Zealand Standards by which the requirements of the Determination are specified;
- a definition of "IEC Standard", which is a standard published by, or on behalf of, the International Electrotechnical Commission; and
- a definition of "standard", which means an Australian Standard, an Australian/New Zealand Standard, an IEC Standard or any other equivalent document.

## Section 4 – Interpretation

Section 4 provides guidance for interpreting certain aspects of the Determination.

## Subsection 4(1)

The purpose of this subsection is to avoid any inconsistency in terminology between the Determination (and other elements of the GEMS legislation) and the standards referenced in section 3 of the Determination. It indicates that where a term used in the Determination is not defined in any part of the GEMS legislation, but is defined in a standard referenced in section 3, for the purposes of the Determination the term has the meaning set out in the applicable standard.

## Subsection 4(2)

Unless otherwise specified, the applicable version of a document incorporated by reference in a legislative instrument is the version that existed on the date the instrument came into force. This is made clear for standards specifically referenced in section 3 of the Determination. However, often these standards refer to other standards or documents which also contain requirements that must be applied to give effect to the Determination or a standard referred to in the Determination. The purpose of this subsection is to make clear that the applicable version of these further documents is also the version that existed on the day the Determination came into force.

## Section 5 – Specified product classes covered by the Determination

Section 5 sets out the scope of the Determination.

## Subsection 5(1)

This subsection provides that the Determination covers gas water heaters, in the product classes specified in subsection 5(2), that are:

- fired with natural gas (NG), liquefied petroleum gas (LPG) or simulated natural gas (SNG); and
- operate using natural draught, or fan assisted, combustion systems.

This reflects the scope of the regulations for this product type under the previous state and territory legislation, as it was set out in the Australian/New Zealand Standard AS/NZS 4552.2:2010.

## Subsection 5(2)

This subsection specifies two product classes for gas water heaters covered by the Determination, one for storage water heaters with specified characteristics, and one for instantaneous water heaters with specified characteristics.

The characteristics set out in the product classes reflect those set out in clauses 1.1 and 1.2 of AS/NZS 4552.2:2010.

## Subsection 5(3)

This subsection sets out the product classes that are not covered by the Determination.

Combination appliances (as defined in subsection 5(4)) are the only product class that is specified as not being covered by the Determination. This reflects the scope of the exclusions under the previous state and territory legislation.

## Subsection 5(4)

This subsection defines the terms "capacity", "central heating boiler", "combination appliance", "fan assisted combustion system", "heat output", "hydronic", "instantaneous water heater", "liquefied petroleum gas (LPG)", "natural gas (NG)", "nominal gas consumption", "simulated natural gas (SNG)", "storage water heater", and "water heater" for the purposes of section 5. These terms have the same meaning as in AS 4552:2005. The terms are included here to assist in ascertaining whether a product is covered by this Determination without the need to refer to the relevant standard.

# Section 6 – GEMS level requirements

Section 6 specifies GEMS level requirements for energy use for gas water heaters covered by the Determination, including requirements for conducting tests in order to demonstrate compliance with the energy use requirements, under section 25 of the Act.

## Subsection 6(1)

This subsection provides that the GEMS level requirements are those set out in clause 2.1 of AS/NZS 4552.2:2010 but excluding the words "or AS/NZS 4452.3 (when published)" that appear in that section of the standard.

The words "or AS/NZS 4452.3 (when published)" were included in clause 2.1 of AS/NZS 4552.2:2005 in anticipation of part 3 of the standard being published and providing an alternative method of testing for products within the scope of AS/NZS 4552.2:2005. They are excluded by the Determination because, at the date the Determination was made, AS/NZS 4552.3 had yet to be published.

## Subsection 6(2)

This subsection specifies that the requirements for conducting tests are those set out in clause 2.2 of AS/NZS 4552.2:2010 but excluding the words "or AS/NZS 4452.3 (when published)" that appear in that section of the standard.

The words "or AS/NZS 4452.3 (when published)" were included in clause 2.2 of AS/NZS 4552.2:2005 in anticipation of that later part of the standard being published and providing an alternative method of testing for products within the scope of AS/NZS 4552.2:2005. They are excluded by the Determination because, at the date the Determination was made, AS/NZS 4552.3 had yet to be published.

## Section 7 – GEMS labelling requirements

There are no GEMS labelling requirements for gas water heaters covered by the Determination.

# Section 8 – Other GEMS requirements

Section 8 specifies other GEMS requirements in relation to product performance for gas water heaters covered by the Determination, including requirements for conducting tests in order to demonstrate compliance with the product performance requirements, under section 27 of the Act.

These performance requirements are intended to prevent products entering the Australian market that are designed to meet GEMS requirements but are unfit for the product's intended purpose.

#### Subsection 8(1)

This subsection provides that the product performance requirements are those set out in clause 6.9 of AS 4552-2005 that relate to the minimum thermal efficiency requirement.

#### Subsection 8(2)

This subsection specifies that the requirements for conducting tests are those set out in Appendix B of AS 4552-2005 (as applicable).

A range of different test methods are set out in Appendix B of AS 4552.2005, some applicable to all products, others applicable only to products with a specific physical characteristic that the particular test method is designed to test. For example, the flame abnormality test (section B15) applies to all products, but the manual ignition test (section B17) only applies to products with burners that are ignited manually.

## Section 9 – Family of models

Section 28 of the Act provides that a GEMS determination must specify, for each product class covered by the determination, the circumstances in which two or more models in that product class are in the same family of models.

It was necessary to specify the characteristics for storage water heaters and instantaneous water heaters in two different subsections. Subsection 9(1) specifies the circumstances for storage water heaters, and subsection 9(2) specifies the circumstances for instantaneous water heaters.

The circumstances are largely the same for both product classes with one key difference — storage capacity is specified as a physical characteristic relevant to complying with the requirements in clauses 6, 7 or 8 of the Determination for storage water heaters. This specified circumstance is not relevant for instantaneous water heaters because they do not store water after heating.

#### Subsection 9(1)

This subsection specifies the family of models circumstances for two or more models of gas water heater in product class 1 covered by this Determination.

The specified circumstances are when the two or more models of gas water heater in product class 1 (a) are of a single brand, (b) rely on the same test report, (c) have the same physical characteristics that are relevant to complying with the GEMS level requirements and the other GEMS requirements, and (d) have the same claimed energy performance characteristics that are relevant to complying with those requirements.

#### Subsection 9(2)

This subsection specifies the family of models circumstances for two or more models of gas water heater in product class 2 covered by this Determination.

The specified circumstances are when the two or more models of gas water heater in product class 2 (a) are of a single brand, (b) rely on the same test report, (c) have the same physical characteristics that are relevant to complying with the GEMS level requirements and the other GEMS requirements, and (d) have the same claimed energy performance characteristics that are relevant to complying with those requirements.

## Section 10 – Product categories

Section 29 of the Act requires that a GEMS determination specify whether the products it covers are category A or category B products. Category B products are subject to higher penalties than category A products for certain offences under the Act, on the basis that category B products have a high impact on energy use or greenhouse gas production.

Section 10 specifies that gas water heaters covered by the Determination are category A products.

# Statement of Compatibility with Human Rights

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

Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013

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 Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013 prescribes matters relating to minimum energy efficiency requirements for gas water heaters under the Greenhouse and Energy Minimum Standards Act 2012. The Determination establishes requirements for energy use and product performance, including requirements for conducting tests in order to demonstrate compliance with those requirements. The Determination also sets out the circumstances in which two or more models in a product class may be a family of models, and establishes the applicable product category for the purposes of calculating certain penalties under the Act.

#### 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.

The Hon Gary Gray AO MP Minister for Resources, Energy and Tourism