



Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013¹

Greenhouse and Energy Minimum Standards Act 2012

I, GARY GRAY, Minister for Resources, Energy and Tourism, make this Determination under section 23 of the *Greenhouse and Energy Minimum Standards Act 2012*.

Dated 30 April 2013

Gary Gray
Minister for Resources, Energy and Tourism

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1 Name of Determination

This Determination is the *Greenhouse and Energy Minimum Standards (Gas Water Heaters) Determination 2013*.

2 Commencement

This Determination comes into force on the day after it is registered.

3 Definitions

In this Determination:

Act means the *Greenhouse and Energy Minimum Standards Act 2012*.

AS 4552-2005 means *Australian Standard 4552-2005—Gas fired water heaters for hot water supply and/or central heating*, as it existed on the date this Determination came into force.

Note: AS 4552-2005 is available from Standards Australia Limited.

AS/NZS 4552.2:2010 means *Australian/New Zealand Standard 4552.2:2010—Gas fired water heaters for hot water supply and/or central heating—Part 2: Minimum energy performance standards for gas water heaters*, as it existed the date this Determination came into force.

Note: AS/NZS 4552.2:2010 is available from Standards Australia Limited.

Australian/New Zealand Standard means a standard that is jointly published by Standards Australia Limited and Standards New Zealand, is applicable in both countries and denoted by the letters “AS/NZS” and identifying numbers and/or letters.

Australian Standard means a standard that is published by Standards Australia Limited denoted by the letters “AS” and identifying numbers and/or letters.

IEC Standard means a standard that is published by, or on behalf of, the International Electrotechnical Commission.

standard means an Australian Standard, an Australian/New Zealand Standard, an IEC Standard or any other equivalent document.

Note: Several other words and expressions used in this Determination have the meaning given by section 5 of the Act. For example:

- category A product
- covered by
- family of models
- GEMS
- GEMS labelling requirements
- GEMS level requirements
- model
- product classes

4 Interpretation

Applicable definitions of terms or phrases

- (1) If a term or phrase is not defined under the Act, the Regulations to the Act or in this Determination, but the term is defined in a standard mentioned specifically in section 3 of this Determination, the term or phrase is to be read for the purposes of this Determination as having the meaning of the term under the relevant standard.

Note: Notwithstanding this, for convenience to users, the key terms used to ascertain if a product is covered by this Determination are defined in this Determination.

Applicable version of documents incorporated into standards

- (2) For the purposes of this Determination the applicable version of any document, including a standard, that:
 - (a) is referred to in a standard under the heading 'Referenced Documents', or under an equivalent heading in a standard; and
 - (b) must be applied to give effect to this Determination or a standard referred to in this Determination,

is the version of the document, including a standard, that existed at the date this Determination came into force.

Note: For example section 2.1 of AS/NZS 4552.2:2010 provides that the MEPS testing requirements for gas water heaters shall be in accordance with AS 4552-2005. The applicable version of AS 4552-2005 is the version that existed at the date this Determination came into force.

5 Specified product classes covered by this Determination

- (1) This Determination covers water heaters that come within the product classes set out in subsection (2) and that:
 - (a) are fired with natural gas (NG), liquefied petroleum gas (LPG) or simulated natural gas (SNG); and
 - (b) operate using natural draught, or fan assisted, combustion systems.

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- (2) The product classes are as follows:

Product class	Products covered by class
1	Storage water heaters: (i) with a nominal gas consumption of equal to or less than 50 megajoules per hour; (ii) with a capacity of equal to or greater than 30 litres; or (iii) that are not certified only for installation indoors.
2	Instantaneous water heaters: (i) with a nominal gas consumption equal to or less than 250 megajoules per hour; or (ii) with a heat output of equal or greater than 13.1 kilowatts per hour.

- (3) For the purposes of section 23 (2) of the Act, this Determination does not cover combination appliances.

- (4) In this section:

capacity means the quantity of water contained within the storage vessel of a storage water heater.

Note: This is the same meaning as in subclause 1.2.16 of AS 4552-2005.

central heating boiler means an appliance that is designed to heat and supply water at a temperature not exceeding 99 degrees Celsius for hydronic heating purposes.

Note: This is the same meaning as in subclause 1.2.17 of AS 4552-2005.

combination appliance means an appliance that is designed to perform the functions of both a central heating boiler and a water heater, by means of two separate water circuits.

Note: This is the same meaning as in subclause 1.2.23 of AS 4552-2005.

fan assisted combustion system means a system within an appliance that is an integral part of the appliance and is a system that, by mechanical means, does either or both of the following:

- (a) draws or blows all or part of the combustion air; or
- (b) evacuates the products of combustion.

Note: This is the same meaning as in subclause 1.2.36 of AS 4552-2005.

heat output means the amount of heat transferred to the water per unit time under specified conditions.

Note: This is the same meaning as in subclause 1.2.54 of AS 4552-2005.

hydronic means a classification relating to a system of heating or cooling that involves the transfer of heat by circulation of a fluid (usually water) in a closed circuit which may or may not be vented.

Note: This is the same meaning as in subclause 1.2.56 of AS 4552-2005.

instantaneous water heater means a water heater or central heating boiler in which gas, except for any pilot flame, burns only when water is discharged from the outlet of the appliance.

Note: This is the same meaning as in subclause 1.2.59 of AS 4552-2005.

liquefied petroleum gas (LPG) means a gas composed predominantly of any of the following hydrocarbons, or any combination of them, in the vapour phase: propane; propene (propylene); butane; and butene (butylene).

Note: This is the same meaning as in subclause 1.2.52.5 of AS 4552-2005.

natural gas (NG) means a hydrocarbon gas composed predominantly of methane.

Note: This is the same meaning as in subclause 1.2.52.1 of AS 4552-2005.

nominal gas consumption means the gas consumption of a water heater as stated in the manufacturer's specifications, instructions and production information.

Note: This is the same meaning as in subclause 1.2.76.1 of AS 4552-2005.

simulated natural gas (SNG) means a gas comprising a mixture of liquefied petroleum gas (LPG) and air. When the liquefied petroleum gas (LPG) is propane, the gas must be in the approximate proportions of 55 per cent propane and 45 per cent air.

Note: This is the same meaning as in subclause 1.2.52.2 of AS 4552-2005.

storage water heater means a water heater that incorporates a thermally insulated container in which the water is heated and stored for subsequent use.

Note: This is the same meaning as in subclause 1.2.115 of AS 4552-2005.

water heater means an appliance that is designed to heat and supply water at a temperature not exceeding 99 degrees Celsius for drinking or sanitary purposes, or both drinking and sanitary purposes.

Note: This is the same meaning as in subclause 1.2.126 of AS 4552-2005.

6 GEMS level requirements

Energy use and greenhouse gas production

- (1) For the purposes of paragraphs 24 (1) (a) and 25 (a) of the Act, the specified energy use requirements are the requirements mentioned in section 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.

Note: AS/NZS 4552.2:2005 contained certain references in anticipation of a new version of the standard, AS/NZS 4552.3:2005, being published. That later version of the standard had not been published as at the date this Determination came into force, and, therefore, the references to the later version of the standard do not apply in conducting tests pursuant to this Determination.

Conducting tests

- (2) For the purposes of paragraphs 24 (1) (a) and 25 (b) of the Act, the specified requirements for conducting tests are the requirements mentioned in section 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.

Note: AS/NZS 4552.2:2005 contained certain references in anticipation of a new version of the standard, AS/NZS 4552.3:2005, being published. That later version of the standard had not been published as at the date this Determination came into force, and, therefore, the references to the later version of the standard do not apply in conducting tests pursuant to this Determination.

7 GEMS labelling requirements

There are no GEMS labelling requirements for products covered by this Determination.

8 Other GEMS requirements

Product performance

- (1) For the purposes of subsection 24 (2) and paragraph 27 (1) (b) of the Act, the specified requirements relating to the performance of products are the requirements mentioned in section 6.9 of AS 4552-2005 that relate to the minimum thermal efficiency requirement.

Conducting tests

- (2) For the purposes of subsection 24 (2) and paragraph 27 (1) (e) of the Act, the specified requirements for conducting tests in relation to paragraph 27 (1) (b) of the Act are the requirements mentioned in Appendix B of AS 4552-2005 (as applicable).

9 Families of models

Families of models – product class 1

- (1) For section 28 of the Act, the specified circumstances in which two or more models of products in product class 1 are in the same family of models, are when the models:
- (a) are of a single brand;

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- (b) rely on the same test report that sets out the results of testing conducted in compliance with section 6, 7 or 8 of this Determination;
 - (c) have the same physical characteristics that are relevant to complying with clauses 6, 7 and 8 of this Determination, including but not limited to:
 - (i) nominal gas consumption;
 - (ii) storage capacity;
 - (iii) installation type (ie indoor only, outdoor only or both);
 - (iv) provision for temperature adjustment (if applicable);
 - (v) provision for in-built water mixing (if applicable);
 - (vi) provision for solar in-line boosting (if applicable); and
 - (d) have the same claimed energy performance characteristics that are relevant to complying with clauses 6, 7 and 8 of this Determination, including but not limited to:
 - (i) average annual energy consumption; and
 - (ii) thermal efficiency.

Families of models – product class 2

- (2) For section 28 of the Act, the specified circumstances in which two or more models of products in product class 2 are in the same family of models, are when the models:
 - (a) are of a single brand;
 - (b) rely on the same test report that sets out the results of testing conducted in compliance with section 6, 7 or 8 of this Determination; and
 - (c) have the same physical characteristics that are relevant to complying with clauses 6, 7 and 8 of this Determination, including but not limited to:
 - (i) nominal gas consumption;
 - (ii) installation type (indoor only, outdoor only or both);
 - (iii) provision for temperature adjustment (if applicable);
 - (iv) provision for in-built water mixing (if applicable);
 - (v) provision for solar in-line boosting (if applicable); and
 - (d) have the same claimed energy performance characteristics that are relevant to complying with clauses 6, 7 and 8 of this Determination, including but not limited to:
 - (i) average annual energy consumption; and
 - (ii) thermal efficiency.

10 Product categories

For section 29 of the Act, the products covered by this Determination are category A products.

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See <http://www.frli.gov.au>.