

## 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 (Air Conditioners and Heat Pumps)  
Determination 2013*

### **Purpose**

The *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2013* (**Determination**) establishes minimum energy efficiency, energy labelling and high efficiency level requirements, and associated requirements for conducting tests, for air conditioners and heat pumps.

This Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2012* (F2012L02129).

### **Background**

The Act established a national framework for regulating the energy efficiency of products supplied or used within Australia, implementing Australian Government and the Council of Australian Governments (**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.

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 soil removal for clothes washers.

Under the Act the Minister has limited powers to vary existing GEMS determinations. For example section 35 of the Act prevents the Minister from varying an existing determination, by providing that section 33(3) of the *Acts Interpretation Act 1901* does not apply in relation to a GEMS determination.

In order for the Minister to revise any of the GEMS requirements specified in an existing determination, the Minister must first revoke the existing GEMS determination (see section 35 of the Act) and then make a replacement determination that specifies the new requirements and any relevant existing requirements from the revoked determination.

This Determination is a replacement determination. It regulates multi-split air conditioners and heat pumps within the scope of AS/NZS 3823.1.4 for the first time. It does this by calling up the requirements set out in AS/NZS 3823.2:2013. Many of the other components of this replacement Determination, including the definitions and testing requirements, remain the same as in the *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2012* (F2012L02129) (the revoked Determination), and so are reproduced in the same form in this Determination.

### **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 35 of the Act, the Minister may revoke a GEMS determination and issue a replacement GEMS determination. The revoked

determination ceases to be in force immediately before the replacement determination comes into force.

Under section 36 of the Act, a replacement determination must specify whether it affects the registration of models of GEMS products. Under subsection 36(2) of the Act, if a replacement determination does not specify that it affects a model's registration, the model is taken to be registered against the replacement determination. If a replacement determination specifies that it affects a model's registration, then under paragraph 48(2)(c) of the Act, the model's registration ceases to be in force from the time the replacement determination comes into force (or the beginning of the day a registration of the model against the replacement determination comes into force, whichever is the earlier).

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 26 of the Act the GEMS labelling requirements specified in a GEMS determination may be:

- requirements relating to the information that must be communicated in connection with supplying or offering to supply products in the relevant product class;
- requirements relating to the manner in which that information must be communicated; 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 has conducted extensive consultation with the air conditioner industry throughout the development of the regulatory approach to air conditioners and heat pumps for over ten years. Consultation was undertaken through discussion papers, stakeholder forums, steering committee meetings and stakeholder meetings.

In July 2009, COAG announced their intention to raise MEPS requirements by 10%, subject to an appropriate regulatory impact statement, from October 2011. In November 2009, this was communicated by letter to peak air conditioning industry associations along with the intention to include multi-split units in the new MEPS.

A COAG Consultation Regulatory Impact Statement (**Consultation RIS**) was released for public consultation in the second quarter of 2010. The Consultation RIS communicated the potential impacts, costs and benefits arising from the proposed introduction of more stringent Minimum Energy Performance Standards (MEPS) levels for air conditioners which were covered by existing State and Territory regulations. Comments from stakeholders were considered and a number of changes were agreed to address out-dated data, the stringency and timing of the MEPS implementation date, the impact of MEPS on particular categories of air conditioners and the introduction of MEPS for multi-split air conditioner units.

In February 2011, subsequent to the approval of the COAG Decision Regulatory Impact Statement (**Decision RIS**) and endorsement of the recommended regulatory option by the Ministerial Council on Energy (**MCE**), a peak industry body raised further concerns in relation to consultation, data quality, the impact of requiring physical tests for all products, and the impact on particular products of the proposed timing of implementation. Subsequent negotiations resulted in agreement to allow simulation testing in certain circumstances, a delay to the MEPS for one category of ducted air conditioner, a delay to the multi-split air conditioner MEPS until after the completion of suitable Australian/New Zealand Standards, and the creation of an Air Conditioner Advisory Committee made up of industry representatives to help facilitate more effective consultation.

Industry was further consulted in the process of completing AS/NZS 3823.2:2013 and the development of the Determination. An exposure draft of the Determination was released for comment in April 2013, and no substantive issues were raised.

## **Regulatory Impact**

A comprehensive Decision RIS was prepared for air conditioners and heat pumps 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 Decision RIS was presented to the MCE for consideration in late 2010, and the MCE agreed to adopt the recommended regulatory approach on 10 December 2010 . An addendum to the Decision RIS, reflecting the modifications agreed to after the original MCE endorsement (discussed above), was approved by the MCE on 8 September 2011.

### **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.

## **Details of the Determination**

### **Section 1 – Name of Determination**

This section sets out the title of the Determination.

### **Section 2 – Commencement, Revocation and Replacement**

Section 35 of the Act provides that the Minister may revoke a GEMS determination and issue a replacement GEMS determination. The revoked determination ceases to be in force immediately before the replacement determination comes into force.

This section provides that the Determination comes into force on 1 April 2014. This Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Air Conditioner and Heat Pump) Determination 2012* (F2012L02129).

### **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;
- definitions of “ducted air conditioner” and “ducted heat pump”, which are given the same meaning as in Australian/New Zealand Standard AS/NZS 3823.1.2:2012;
- definitions of “non-ducted air conditioner” and “non-ducted heat pump”, which are given the same meaning as in Australian/New Zealand Standard AS/NZS 3823.1.1:2012;
- a definition of “multi-split system” which is given the same meaning as in Australian/New Zealand Standard AS/NZS 3823.2:2013.
- definitions of other related terms, which are given the same meaning as in Australian/New Zealand Standard AS/NZS 3823.2:2011;
- a definition of “CIE Standard”, which is a standard that is published by, or on behalf of, the International Commission on Illumination;
- 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)

The standards referred to in the Determination themselves refer to other documents that must be applied to give effect to the Determination. The purpose of this subsection is to specify which version of such a document, if referred to in a standard under the heading “Referenced Documents” (or an equivalent heading), is the applicable version of the document for the purposes of the Determination.

Where a relevant document is defined in section 3 of this Determination and the definition specifies a date of effect, the applicable version of the document for the purposes of the Determination is the version that existed at that specified date. Otherwise, the applicable version of the document is the version that existed on the date this Determination comes into force.

In this Determination two standards have been defined in section 3 with a date specified other than the date the instrument came into force – AS/NZS 3823.1.1:1998 with a specified date of 24 February 2006, and AS/NZS 3823.1.2:2001 with a specified date of 18 October 2010. Therefore, the applicable versions of these standards are the versions that existed on 24 February 2006 and 18 October 2010 respectively (the dates the most recent amendments to each standard was published). These standards were superseded by AS/NZS 3823.1.1:2012 and AS/NZS 3823.1.2:2012 respectively, which were published on 11 May 2012. The Determination allows registrants the option of using test methods set out in the superseded standards as alternatives to test methods in the current standards until 30 April 2014.

From 1 May 2014, however, references to AS/NZS 3823.1.1 and AS/NZS 3823.1.2 are to AS/NZS 3823.1.1:2012 and AS/NZS 3823.1.2:2012 respectively. It was not possible for the applicable version of AS/NZS 3823.1.1:1998 and AS/NZS 3823.1.2:2001 to be the versions that existed on the date the Determination was made, as these standards had been superseded by the 2012 versions. For all other documents incorporated by reference in accordance with this subsection, the application version is the date this Determination comes into force.

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

Section 5 sets out the scope of the Determination with respect to the class of products that it covers.

### Subsection 5(1)

Subsection 5(1) provides that the Determination covers air conditioners and heat pumps of the vapour compression type with a rated cooling capacity of 65 kilowatts or less, in the product classes set out at subsection 5(2).

This reflects the scope specified in the Australian/New Zealand Standard AS/NZS 3823.2:2013 (*Performance of electrical appliances – air conditioners and heat pumps. Part 2: Energy labelling and minimum energy performance standards (MEPS) requirements*).

### Subsection 5(2)

Subsection 5(2) specifies the product classes that are covered by the Determination. This subsection establishes 14 product classes for air conditioners and heat pumps covered by the Determination, based on the rated cooling capacity of the product, whether the product is ducted or non-ducted, whether the product is unitary or a split system, and if it has a water-cooled condenser or is a water-to-air or brine-to-air heat pump. Product classes 11 and 12 incorporate multi-split systems that have the specified characteristics. In this instance, the specified characteristics refer to products of a certain size. For instance, product class 11 incorporates all configurations in the size class 19-39kW (i.e. multi-splits, single-splits, ducted, unitary). Product class 12 incorporates all configurations in the size class 39-65 kW. Since products in either of these classes are rare, these products were grouped together by size, rather than size and configuration as with the other product classes.

### Subsection 5(3)

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

- close control air conditioners and liquid-chilling packages (these products are subject to requirements under other GEMS determinations);
- evaporative coolers or any other cooling systems that are not of the vapour compression type;
- ground-water-sourced heat pumps or ground-loop-sourced heat pumps;
- unbalanced air conditioners and spot coolers;
- air conditioners powered by mains electricity specifically designed and sold only for installation in end-use mobile applications of caravans, mobile homes, camper vans, boats and rail cars;
- products that solely deliver conditioned outdoor air to an indoor conditioned space; and

Some products not covered by this Determination may be covered by other GEMS determinations.

### Subsection 5(4)

This subsection defines the terms “brine-to-air heat pump”, “close-control air conditioner”, “ground loop sourced heat-pump”, “ground water sourced heat-pump”,

liquid-chilling package”, “multi-split system”, “solar-boosted air conditioner”, “spot cooler”, “unbalanced air conditioner”, “unitary air conditioner” and “water-to-air heat pump” for the purposes of section 5. These terms are given the same meaning as they have in the standards referenced in section 3. 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 air conditioners and heat pumps 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. These requirements replace the GEMS level requirements for energy use for air conditioners and heat pumps in the *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2012* (F2012L02129) (the revoked Determination), which incorporated the energy use requirements in AS/NZS 3823.2:2011 by reference.

### Subsection 6(1)

This subsection provides that the GEMS level requirements in relation to energy use are those set out in clause 3.2 of AS/NZS 3823.2:2013.

### Subsection 6(2)

This subsection specifies that the requirements for conducting tests are those set out in clauses 3.3 to 3.8, 3.10 and 3.11 of AS/NZS 3823.2:2013.

### Subsection 6(3)

This subsection specifies, for the purposes of subsection 6(2), that:

- until 30 April 2014, references to AS/NZS 3823.1.1 in AS/NZ 3823.2:2013 can be read as references to either AS/NZS 3823.1.1:1998 or AS/NZS 3823.1.1:2012; and
- until 30 April 2014, references to AS/NZS 3823.1.2 in AS/NZ 3823.2:2013 can be read as references to either AS/NZS 3823.1.2:2001 or AS/NZS 3823.1.2:2012.

This has the effect that registrants have the option to use the relevant test method from either the current or the superseded test standard. However, from 1 May 2014 registrants will be required to use the test method from the current test standard only.

## **Section 7 – GEMS labelling requirements**

Section 7 specifies GEMS labelling requirements for air conditioners and heat pumps covered by the Determination, including requirements for conducting tests in order to demonstrate compliance with the energy labelling requirements, under section 26 of the Act. These requirements replace the GEMS labelling requirements for air conditioners and heat pumps in the *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2012* (F2012L02129) (the revoked

Determination), which incorporated the energy labelling requirements in AS/NZS 3823.2:2011 by reference.

#### Subsection 7(1)

This subsection provides that the GEMS labelling requirements for non-ducted, single-phase air conditioners and heat pumps (single-phase products in product classes 1 to 5, and non-ducted, single-phase products in product classes 11 and 12) are those set out in section 2 and 5 of AS/NZS 3823.2:2013.

#### Subsection 7(2)

This subsection specifies, subject to subsection 7(3), that air conditioners and heat pumps otherwise covered by subsection 7(1) are excluded from the requirements set out in that subsection if they are (a) designed for non-domestic applications, (b) not on display for sale through retail outlets, and (c) not promoted in any catalogue or advertising material that could be interpreted as suitable for some residential applications.

The intent of this subsection is to prevent air conditioners and heat pumps designed for commercial or industrial applications, but which otherwise fall within the range of products described in subsection 7(1), from being captured by the energy labelling requirements of subsection 7(1). Energy rating labels are generally not considered an effective tool for influencing purchasing decisions where products are not sold through retail outlets.

#### Subsection 7(3)

This subsection has the effect that if an air conditioner or heat pump otherwise excluded by subsection 7(2) displays an energy label, it must comply with the requirements set out in section 2 and clause 3.9 of AS/NZS 3823.2:2013.

#### Subsection 7(4)

This subsection specifies that if a ducted, single phase air conditioner or heat pump (ducted, single-phase products in product classes 6, 7, 11 and 12), or a three-phase air conditioner or heat pump (three-phase products in product classes 1 to 7, 11 and 12), displays an energy label, the GEMS labelling requirements are those set out in section 2 and clause 3.9 of AS/NZS 3823.2:2013.

#### Subsection 7(5)

This subsection specifies that multi-split systems (product classes 8 to 10 and the other specified product classes covered by the Determination that are multi-split systems) must not display an energy label. Multi-split systems come in a variety of possible indoor and outdoor unit combinations which would make accurately labelling a product difficult. In addition, it would be possible for more than one label to be applicable for these units: one showing a small output when configured as a small single split unit and another indicating a very large output when part of a large multi-split system. This could result in confusion for consumers, and consequently, labelling

is not practical for this product type. For this reason, multi-split systems are excluded from any labelling requirements.

#### Subsection 7(6)

This subsection specifies that air conditioners with water cooled condensers, water-to-air heat pumps and brine-to-air heat pumps (product classes 13 to 14) must not display an energy label. These products are exempt from labelling requirements because the current test method for them specified in AS/NZS 3823.2:2013 takes into account different parameters compared to other regulated products, making direct comparisons between the different types of products difficult and potentially confusing for consumers.

#### Subsection 7(7)

The requirements for conducting tests for are those set out in section 2, clauses 3.3 to 3.8, 3.10, 3.11 and section 4 of AS/NZS 3823.2:2013.

#### Subsection 7(8)

This subsection specifies that for the purposes of subsection 7(7), that:

- until 30 April 2014, references to AS/NZS 3823.1.1 in AS/NZ 3823.2:2013 can be read as references to either AS/NZS 3823.1.1:1998 or AS/NZS 3823.1.1:2012; and
- until 30 April 2014, references to AS/NZS 3823.1.2 in AS/NZ 3823.2:2013 can be read as references to either AS/NZS 3823.1.2:2001 or AS/NZS 3823.1.2:2012.

This has the effect that registrants have the option to use the relevant test method from either the current or the superseded test standard. However, from 1 May 2014 registrants will be required to use the test method from the current test standard only.

### **Section 8 – Other GEMS requirements**

There are no other GEMS requirements for air conditioners and heat pumps covered by the Determination.

### **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.

This section specifies that the family of models circumstances for air conditioners and heat pumps in a single product class covered by this Determination are those set out in subclause 1.6.8 of AS/NZS 3823.2:2013. This replaces the requirements in the *Greenhouse and Energy Minimum Standards (Air Conditioners and Heat Pumps) Determination 2012* (F2012L02129) (the revoked Determination) which referenced subclause 1.6.10 of AS/NZS 3823.2:2011.

## **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 air conditioners and heat pumps covered by the Determination are category A products.

## **Section 11 – Registrations affected by this Determination**

Section 36 of the Act provides that if a replacement determination does not specify that it affects a model's registration, the model is taken to be registered against the replacement determination.

This section specifies that the Determination does not affect the registration of any model registered against the revoked determination, the *Greenhouse and Energy Minimum Standards (Air Conditioner and Heat Pump) Determination 2012*. Consequently, all models registered under the revoked determination are considered to be registered against the replacement determination.

## **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 (Air Conditioners and Heat Pumps) 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 (Air Conditioners and Heat Pumps) Determination 2013* prescribes matters relating to minimum energy efficiency and energy labelling requirements for air conditioners and heat pumps under the *Greenhouse and Energy Minimum Standards Act 2012*. The Determination establishes requirements for energy use and energy labelling, 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**