

EXPLANATORY STATEMENT

Issued by the authority of the Minister for the Environment and Energy

Greenhouse and Energy Minimum Standards Act 2012

Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2017

Purpose and Operation

The *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2017* (the Determination) establishes minimum energy efficiency, energy labelling and product performance requirements, as well as associated requirements for conducting tests, for self-ballasted compact fluorescent lamps for general lighting services (self-ballasted compact fluorescent lamps).

This Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2012* (revoked Determination).

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 the Council of Australian Governments' (COAG) commitment to establish national legislation to regulate energy efficiency and labelling standards for appliances and other products. The Act permits the Australian Government to set mandatory minimum efficiency requirements, to drive greater energy efficiency for products that are regulated. 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, costs, and greenhouse gas emissions. The national framework harmonises the regulation of equipment energy efficiency by replacing seven individual state and territory legislative frameworks.

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 Determination without having to refer to the relevant standard. The standards referenced in the Determination are available to purchase from Standards Australia, through its exclusive licensee SAI Global. The Australian Government envisages that the parties most likely to wish to access the referenced documents are members of industry whose products are covered by the Determination. Those parties can readily purchase the standards online at the SAI Global website. If a member of the regulated community or the general public was interested in accessing the standards referenced in the Determination without purchasing them, they could access them at the National

and State Libraries, and a range of public libraries, universities, and other education and training providers.

Minimum Energy Performance Standards (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 (including those subject to this Determination) 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 lamp lifetime.

This Determination is a replacement determination. It makes three substantive changes from the revoked Determination. These changes relate to:

1. Revised requirements for the maximum amount of mercury that may be contained in a self-ballasted compact fluorescent lamps, including a reduction in the allowable mercury content for products of less than 30 watts, to harmonise Australia’s requirements with movements in other major markets internationally.
2. Clearer requirements for how the mercury content must be marked on lamp packaging, to ensure greater consistency of practice across the industry.
3. Revisions to testing requirements relating to mercury content, to include a reference to a necessary IEC standard that was incorrectly omitted from the previous requirements, in circumstances where a supplier chooses to use the allowed international test method as an alternative to the test method from the Australian/New Zealand Standard.

Many of the other components of this replacement Determination, including the definitions and testing requirements, remain the same as in the revoked Determination, and so are reproduced in the same form in this Determination.

Authority

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.

Section 35 of the Act allows a Minister to make replacement determinations through revoking the previous determination and making a new determination to replace the revoked determination. The new determination can specify the new requirements and retain any relevant existing requirements from the revoked 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 Department of the Environment and Energy liaised with industry representatives and the New Zealand Energy Efficiency and Conservation Authority in regard to the proposed changes to mercury level requirements to inform its impact assessment. Further, the Department publically consulted on the proposal to reduce mercury levels in the Incandescent, Halogen and Compact Fluorescent Lamps Product Profile (released November 2014) and Commercial Lighting Product Profile (released July 2015).

A consultation paper specifically addressing the mercury content issue, titled *‘Proposal to reduce fluorescent lamp mercury levels in Australia’* was released for public comment on 30 September 2016, with feedback invited from interested parties. The consultation paper included proposals for revised mercury content limits, and exposure drafts of replacement GEMS determinations for both self-ballasted compact fluorescent lamps and double-capped fluorescent lamps. The closing date for submissions was 28 October 2016. No substantive concerns were raised by stakeholders in response to the consultation paper, and consequently the changes made in the Determination reflect the proposals that were put forward in the consultation paper.

Regulatory Impact

The regulatory proposals encapsulated by this Determination were managed outside of the regulatory impact statement process, with the approval of the Office of Best Practice Regulation, on the basis that it was anticipated the proposed change would have only a minor impact on industry and consumers.

Details of the Determination

Section 1 – Name of Determination

This section sets out the title of the Determination.

Section 2 – Commencement, Revocation and Replacement

This section provides that the Determination commences six months after the day it is registered.

It also provides that this Determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Self-ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2012*.

Section 3 – Definitions

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

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 this 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 self-ballasted compact fluorescent lamps, as defined in section 3, in the product classes set out in subsection 5(2), that are ordinarily supplied and used for general lighting services. The product classes are the same as in the revoked Determination.

Subsection 5(2)

Section 11 of the Act provides that a determination must specify one or more product classes that it covers. This subsection specifies that the self-ballasted compact fluorescent lamps covered by the Determination form a single product class.

Subsection 5(3)

This subsection sets out product classes that are not covered by the Determination. These are lamps for use in certain special purpose lighting applications, and cold-cathode lamps (which are self-ballasted, but do not generate light through fluorescence). This reflects the product classes excluded in the revoked Determination.

Section 6 – GEMS level requirements

Section 6 specifies GEMS level requirements for energy use for self-ballasted compact fluorescent lamps 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 clauses 4.2 and 4.3 of AS/NZS 4847.2:2010 in relation to efficacy (including luminous flux).

The relevant parameters in clause 4.2 of AS/NZS 4847.2:2010 are set out in rows 3 to 5 of Table 1 in that clause.

Subsection 6(2)

This subsection specifies that the requirements for conducting tests are those set out in clauses 4.1 and 4.7 of AS/NZS 4847.1:2010.

Section 7 – GEMS labelling requirements

Section 7 specifies GEMS labelling requirements for self-ballasted compact fluorescent lamps covered by the Determination under section 26 of the Act.

Subsection 7(1)

This subsection provides that the GEMS labelling requirements are those set out in clause 4.4 of AS/NZS 4847.2:2010, which concern information that must be marked on the packaging of the product in relation to light output, wattage, lamp lifetime and mercury content.

However, the marking requirements relating to mercury content from clause 4.4 of AS/NZS 4847.2:2010 are replaced with the requirements specified in paragraph (a) of this subsection, in order to provide clearer guidance to suppliers and ensure greater consistency of practice in the industry.

Subsection 7(2)

This subsection specifies that the requirements for conducting tests for products in all product classes are those set out in section 4 of AS/NZS 4847.1:2010.

Section 8 – Other GEMS requirements

Section 8 specifies other GEMS requirements, in relation to both product performance and impact on environment and health, for self-ballasted compact fluorescent lamps covered by the Determination, including requirements for conducting tests in order to demonstrate compliance with these requirements, under section 27 of the Act.

These 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 or pose a health or environmental threat.

Subsection 8(1)

This subsection provides that the product performance requirements are the requirements set out in clauses 4.2 and 4.3 of AS/NZS 4847.2:2010, except those relating to efficacy (including luminous flux)(which are covered by the GEMS level requirements in subsection 6(1)), and maximum mercury content (which are covered in subsection 8(2)).

The specific requirements specified are in relation to the following parameters:

- Starting Time;
- Run-up Time;
- Low Temperature Starting;
- True Power Factor;
- Colour Appearance and Colour Rendering Index;
- Switching Withstand;
- Lamp Life and Premature Lamp Failure Rate;
- Lumen Maintenance;
- Light Distribution; and
- Harmonics and Electromagnetic Compatibility.

Subsection 8(2)

This subsection provides that the requirements relating to the impact on the environment or health of human beings are that the maximum quantity of mercury contained the product must not exceed the specified limits, which are 5 mg for products 30 watts and over, and 2.5 mg for products less than 30 watts.

Subsection 8(3)

This subsection specifies that the requirements for conducting tests, in relation to the product performance requirements, are those set out in clause 4.1 and section 5 of AS/NZS 4847.1:2010, and the following clauses of AS/NZS 4847.1:2010 in relation to specific performance requirements:

- 4.2 (Starting Time);
- 4.3 (Run-up Time);
- 4.4 (Low Temperature Starting);
- 4.6 (True Power Factor);
- 4.8 (Colour Appearance and Colour Rendering Index);
- 4.9 (Switching Withstand);
- 4.10 (Lamp Life and Premature Lamp Failure Rate);
- 4.11 (Lumen Maintenance);
- 4.12 (Light Distribution); and
- 4.13 (Harmonics and Electromagnetic Compatibility).

Subsection 8(4)

This subsection specifies that the requirements for conducting tests, regarding the requirements relating to the impact on the environment or health of human beings, are those relating to maximum mercury content set out in section 5 of AS/NZS 4847.1:2010, and either the test method set out in AS/NZS 4782.3:2014 for determining the quantity of mercury present in a fluorescent lamp, or the equivalent international test method set out in IEC 62321-4 and IEC 62554 (operating together).

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.

Subsection 9(1)

This subsection specifies the circumstances in which two or more models of self-ballasted compact fluorescent lamps from a single product class covered by this Determination may be in the same family of models. This subsection operates subject to subsection 9(2).

The specified circumstances are when the models (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, the GEMS labelling requirements and

the other GEMS requirements, and (d) have the same claimed energy performance characteristics that are relevant to complying with those requirements. The effect of these specified circumstances is to limit the physical differences that are allowed between models that may be registered in the same family of models.

An example of physical differences that might be allowed between two or more models with the same energy performance in order for them to be registered in the same family of models is different cap types (for example, bayonet cap or edison screw) or sizes.

Subsection 9(2)

This subsection has the effect that for the purposes of subsection (1) a family of models may consist of no more than four models.

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 self-ballasted compact fluorescent lamps covered by the Determination are category A products. This is unchanged from the revoked Determination.

Section 11 – Registrations affected by this Determination

Section 36 of the Act requires that a GEMS replacement determination must specify whether it affects the registration of: all models, specified models, or no models, of GEMS products that were covered by the revoked Determination.

This section provides that the registration of models made under the revoked Determination specified in Schedule 1 of the Determination are affected. The effect of this is that the specified models are no longer registered against a GEMS determination.

Schedule 1

Schedule 1 lists the models that are specified for the purpose of section 11.

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 (Self Ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2017

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 (Self Ballasted Compact Fluorescent Lamps for General Lighting Services) Determination 2017* prescribes matters relating to minimum energy efficiency and energy labelling requirements for incandescent lamps under the *Greenhouse and Energy Minimum Standards Act 2012*. The Determination establishes requirements for energy use, energy labelling 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 Josh Frydenberg MP
Minister for the Environment and Energy**