

## **EXPLANATORY STATEMENT**

Issued by the authority of the Assistant Minister for Climate Change and Energy

*Greenhouse and Energy Minimum Standards Act 2012*

*Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2024*

### **Purpose and Operation**

The *Greenhouse and Energy Minimum Standards Act 2012* (the Act) establishes a national framework for regulating the energy efficiency and labelling standards of appliances and equipment supplied or used within Australia. This national legislation allows the Australian Government to set mandatory minimum efficiency requirements for certain products, supporting the move towards greater energy efficiency. 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. Other regulatory requirements possible under the Act include product performance and the effect of the product on the environment or human health.

The *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2024* (the determination) establishes minimum energy efficiency, labelling and product performance requirements, as well as associated requirements for conducting tests for incandescent lamps for general lighting services. It increases the minimum energy efficiency requirements and includes a limited grandfathering period to phase out certain inefficient lighting products.

This determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2016* (revoked determination).

The substantive changes to the revoked determination are:

1. Adjustments to the scope:
  - a. Increased range of lamps to be covered by the determination, with the scope defined by cap (base) type and the rated voltage of the lamp.
  - b. Increased range of incandescent lamps to be covered by the determination to include those with a lamp filament made of carbonised material.
  - c. Updated exclusions in the standard. For example, lamps that are specified for aircraft and aircraft navigation are excluded (based on their requirement to adhere to another standard) as more efficient alternatives are not available.
  - d. Where there is not currently a suitable, efficient replacement, but this is anticipated in the future, for example for G9 capsule lamps, the scope may be expanded at a later stage to include these.

2. Removal of exclusions for the following:
  - a. Automotive lights, as these products are not within scope.
  - b. Lamps intended for traffic signals, as halogen and incandescent versions are no longer supplied, and many of these lights have been converted to LEDs or have caps outside the scope of this determination.
  - c. Lamps intended for sea navigation – as those within scope are either replaceable with LED lamps or can be registered as extra low voltage (11 V to 13 V).
  - d. Reinforced construction lamps (rough use or vibration lamps), as they are replaceable by LED lamps.
  - e. Coloured and crown reflector lamps, as they are replaceable by LED lamps.
3. Increased minimum efficacy level for mains voltage incandescent lamps within scope which is intended to phase-out the supply of these lamps.
4. Revised scope for 11-13V halogen lamps which continue to be subject to a minimum efficacy level which the more efficient models within scope can achieve. Suppliers will need to register these lamps for supply in Australia and meet the MEPS specified.
5. Inclusion of guidance on lamp tests report format.

## **Background**

A key driver for this determination is that on 20 April 2018, the former Council of Australian Governments (COAG) Energy Council agreed to further improve lighting energy efficiency regulation by phasing out inefficient incandescent lamps in Australia and introducing minimum standards for LED lamps in Australia and New Zealand, aligned with EU Ecodesign lighting efficiency regulations.

The timing for introduction of the new regulation was agreed to align with the EU regulatory process. Finalisation of the EU regulation was delayed by 12 months (published in the Official Journal on 5 December 2019 to come into effect in September 2021).

Following availability of the EU regulation, work commenced on the development of a draft test standard for LED lighting (AS/NZS 5341) and a revised MEPS standard for incandescent and halogen lighting (AS 4934-2 – Australia only), through a joint trans-Tasman Standards Australia process. Both were published in March 2021.

## **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), 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 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 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.

### **Incorporated material and copyright**

- The determination references Australian/New Zealand test and performance standards. A list of the Australian/New Zealand standards referred to or incorporated by reference in the determination is included in section 4. The standards can be purchased from Standards Australia Ltd. Commercial users who have determined that they are likely to be covered by the determination (which is possible from reading the determination in isolation) would be expected to purchase the referenced standards in order to comply with the determination.
- Standards Australia also provides non-commercial access to Australian Standards - for personal, domestic or household use through their Reader Room which is accessible through <https://readerroom.standards.org.au/>
- Other interested parties may be able to access the Australian/New Zealand standards without cost through the National Library of Australia, including by interlibrary loans.
- The Skills National Cabinet Reform Committee is working to ensure greater access to standards. Standards Australia Ltd is also working on improving access to Australian and Australian/New Zealand standards.
- The determination also includes material from:
  - European Commission regulations, which are copyright European Commission.
  - International Electrical Commission (IEC) Standards, which are copyright IEC.
  - Commission Internationale de L'Eclairage (CIE), International Commission on Illumination, Standards, which are copyright CIE.
- At the time this determination was made, the texts of instruments mentioned in this section were available as follows:
  - AS and AS/NZS standards—at [www.standards.org.au](http://www.standards.org.au);

- CIE standards—from the Commission Internationale de L'Eclairage (International Commission on Illumination) at [www.cie.co.at](http://www.cie.co.at);
  - IEC standards—from the International Electrotechnical Commission at <https://webstore.iec.ch/>;
  - DASA instruments—at <https://dasa.defence.gov.au>;
  - Commonwealth regulations and instruments made under them—at [www.legislation.gov.au](http://www.legislation.gov.au).
- This determination contains a copyright notice that clarifies the permitted use of the instrument by those seeking to comply with their obligations under it.

## Consultation

Extensive consultations were undertaken prior to developing this determination. Commencing in 2016 a Consultation Regulatory Impact Statement was released which set out the case for government intervention, the associated costs, benefits and the Australian Standard AS 4934.2.2021 *Incandescent lamps for general lighting services Part 2: Minimum Energy Performance Standards (MEPS) requirements*.

Energy Ministers then considered the valuable stakeholder feedback, costs and benefits for industry and the community in a Decision Regulation Impact Statement in 2018 (Decision RIS).

The Decision RIS defined the majority of items in scope with additional items for research and consultation in the standards development process. Products were excluded or omitted where it was determined that there was no suitable more efficient replacement product available. In some circumstances, suppliers of products within scope may need to apply for an exemption. For example, an exemption may be required where a more efficient replacement product is unavailable for a specific use but, due to similarity with general lighting products, it has been impractical to define for exclusion on the basis of attributes alone.

Some exclusions have been removed following consultation with industry advising that it was no longer required. In addition, the scope of some items, such as extra low voltage halogen lamps, were narrowed to  $\geq 11V$  to  $\leq 13V$  to reduce the need for further exclusions.

Since the decision was made by Energy Ministers in 2018, the Australian and New Zealand Government agencies tasked with the introduction of new minimum standards have consulted further on the technical details of the proposed MEPS for GLS and LED lamps. A technical working group was established with key industry stakeholders and others. This group actively helped to shape the draft regulations to ensure the draft regulations are streamlined and deliver the intended policy outcomes. Significant steps have also been taken by government to streamline the regulatory approach and reduce the administrative burden on industry.

A draft of the determination was made available for public comment between 15 December 2022 and 15 March 2023. Comments received from a range of stakeholders were taken into consideration during the completion of drafting. Most

stakeholders supported the increase in MEPS levels for incandescent/halogens. Submissions were published on the Department's consultation hub on 10 July 2023.

### **Regulatory Impact**

A comprehensive Decision RIS (for COAG) was prepared as part of the process of developing the determination. In April 2018, COAG Energy Council Ministers agreed on the preferred option in the Decision RIS.

The Office of Best Practice Regulation (now the Office of Impact Analysis) assessed the RIS as meeting the former Council of Australian Governments' best practice regulation requirements.

The Decision RIS considered costs and benefits to businesses, consumers, government and the environment.

### **Statement of Compatibility with Human Rights**

In accordance with subsection 15J(2) of the Legislation Act, as the determination is not a disallowable instrument, a statement of compatibility prepared under subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* is not required.

# Details of the Determination

## Part 1 – Preliminary

### Section 1 – Name

This section sets out the title of the determination.

### Section 2 – Commencement

This section provides that the determination commences and comes into force on the day specified in column 2 of the table.

### Section 3 – Authority

This section describes the provisions that authorise the making of this determination which are sections 23 and 35 of the *Greenhouse and Energy Minimum Standards Act 2012*.

### Section 4 – Schedule 3

This section empowers Schedule 3, which repeals the instrument being replaced. It deals with how any instruments are amended or repealed or any other item in Schedule 3 has effect according to its terms. Schedule 3 includes the *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2016*.

### Section 5 – This instrument revokes and replaces the old determination

This section provides that this determination revokes and replaces the *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2016*.

### Section 6 – Definitions – standards and other instruments referred to in this determination

This section sets out definitions for the various standards and other instruments referred to in the determination.

### Section 7 – Definitions – other expressions used in this instrument

This section sets out definitions of other expressions used for key terms in the determination.

### Section 8 – Families of models

This section sets out the requirements for a particular product class and the number of models in the family. For the purposes of subsection (1) (b) the family must not contain more than 8 models.

### Section 9 – Product Category

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 9 specifies that incandescent lamps covered by the determination are category A products. This is unchanged from the revoked determination.

### **Section 10 – Limited Grandfathering**

This section sets out the grandfathering period for products in the table at section 13 of the determination, and already imported into Australia on the day this determination comes into force.

This determination allows a limited grandfathering period of 5 years for such products that begins on the day this determination comes into force.

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

This section clarifies the status of products which are already registered against the *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2016*.

## **Part 2 – Product covered by this instrument**

### **Section 12– Purpose of Part**

This section describes the purpose of this Part, i.e. to define the classes of products that are covered by this determination and the classes of products that are not covered.

### **Section 13 – Classes of products that are covered by this instrument**

This section describes types of incandescent lamps that are covered by this determination.

Products are categorised into two product classes as described at the AS 4934.2:2021 and described with their rated voltages and cap types.

Two product classes defined are;

Class 1 – products with rated voltage > 140 V a.c. or d.c. with specified cap types

Class 2 – products with rated voltage between 11 V and 13 V a.c. or d.c. including both values with specified cap types.

### **Section 14 – Classes of products that are not covered by this instrument**

This section specifies the classes of products that are not covered by this determination. These are set out in Schedule 2.



## **Part 3 – GEMS level requirements**

### **Section 15– Purpose of Part**

This section provides that the purpose of this Part is to set out GEMS level requirements for the purposes of section 25 of the Act.

### **Section 16 – GEMS level requirements**

This section specifies GEMS level requirements, in relation to product performance, for incandescent lamps covered by the determination.

These performance requirements are intended to prevent non-conforming products entering the Australian market and remaining after the limited grandfathering period.

### **Section 17 – Testing requirements**

This section sets out the testing requirements for the products and how the test results must be presented.

Subsection 17(1) specifies product tests must be conducted in accordance with the requirements mentioned in section 2 of the AS/NZS 4934.1:2014. There is no change from the previous determination.

Subsection 17(2) specifies the contents of the test report must contain the applicable information mentioned in the Appendix A of AS 4934.2:2021.

Subsection 17(3) specifies the test measurements must only occur following the required duration for aging.

Subsection 17 (4) specifies the minimum sample size for lamp testing, which is 10 units, the same as that of the previous determination.

## **Part 4 – GEMS labelling requirements**

### **Section 18 – Purpose of Part**

This section sets out the purpose of Part 4, which is to specify labelling requirements in accordance with section 26 of the Act.

### **Section 19 – GEMS labelling requirements**

This section specifies the GEMS labelling requirements for products in all product classes. These requirements concern the information that must be marked on the packaging of the product, in relation to light output, wattage and median lamp life.

The requirements allow for tolerances to allow for small variations in performance.

## **Section 20 – Testing requirements**

This section specifies that testing of products in product class 1 and product class 2 against the GEMS labelling requirements specified in section 19, must be conducted in accordance with the requirements in section 2 of AS/NZS 4934.1:2014.

## **Section 21 – Impact of replacement determination**

This section provides a mechanism, in the event that this determination is replaced in the future, to allow a transitional labelling provision to be specified in that replacement determination (the new determination) with the effect that complying with its requirements will be taken to be compliance with the labelling requirements of this determination. This is to prevent the situation arising, in circumstances where a registrant chooses to register to the new determination between the time it is made and when it comes into force (as allowed by section 44 of the Act), of a product needing to comply with the labelling requirements of both determinations.

## **Part 5 – Other requirements**

### **Section 22 – Purpose of Part**

This section states that the purpose of Part 5 is to specify ‘other’ requirements for an incandescent lamp in a product class covered by the determination for the purposes of section 27 of the Act – specifically, performance, health and related testing requirements.

### **Section 23 – Other requirements**

Section 23 defines specific requirements that products in product class 1 and product class 2 need to be met in relation to lumen maintenance factor and minimum median lamp life. In addition, products in product class 2 must satisfy maximum wattage requirements mentioned in clause 2.6 of AS 4934.2:2021.

### **Section 24 – Testing requirements**

This section specifies the testing requirements and minimum sample sizes for conducting tests for products in both product classes 1 and 2. This section also specifies that the lamps that fail prior to 75% of the rated median life must not be included in the mean lumen maintenance factor.

### **Schedule 1 – Registrations affected by this instrument**

This Schedule, read with s 11 of the determination, lists registrations under the revoked 2016 determination affected by the determination.

### **Schedule 2 – Products not covered by this instrument**

This schedule outlines product classes not covered by the instrument. The product classes are aircraft lamps, aeronautical ground lights and other incandescent lamps such as high temperature lamps, infrared heat lamps and low power decorative lamps with specified characteristics.

### **Schedule 3 – Repeals**

Schedule 3 repeals the *Greenhouse and Energy Minimum Standards (Incandescent Lamps for General Lighting Services) Determination 2016*.

## Attachment A

### Details of the exemptions from disallowance and sunseting in the Legislation Act 2003

#### *Source of exemptions*

Legislative instruments made under the *Greenhouse and Energy Minimum Standards Act 2012* (the GEMS Act) (excluding regulations) are exempt from disallowance under subsection 44(1) of the *Legislation Act 2003* (the Legislation Act), and from sunseting under subsection 54(1) of the Legislation Act.

Subsections 44(1) and 54(1) of the Legislation Act relevantly provide that instruments are not subject to disallowance and sunseting where the enabling legislation (not being the *Corporations Act 2001*) facilitates the establishment or operation of an intergovernmental scheme involving the Commonwealth and one or more States and Territories, and authorises the instrument to be made for the purposes of that scheme.

The GEMS Act creates a national framework for product energy efficiency in Australia (the GEMS Scheme) and underpins the Equipment Energy Efficiency (E3) Program. The E3 program is an initiative of the Australian, state, self-governing territory, and New Zealand Governments. The GEMS Scheme is an intergovernmental scheme, given that:

- it is governed by the Inter-governmental Agreement for the GEMS Legislative Scheme
- it is jointly funded, and
- key legislative instruments under the GEMS Scheme require consent from participating jurisdictions before they can be made or revoked (see sections 33 and 35 of the GEMS Act).

Legislative instruments made under the GEMS Act are made for the purposes of this intergovernmental scheme. Therefore, such legislative instruments are exempt from sunseting and disallowance.

#### *Justification for exemptions*

Through the E3 program, the Australian Government works with states and self-governing territories and the New Zealand Government:

- to identify appliances and other products which are appropriate for regulation
- to consult with industry stakeholders and agree to requirements based on technical and product-specific considerations, and
- to set mandatory minimum energy efficiency requirements for these products, as well as consistent labelling and other requirements.

In this context, the exemptions from disallowance and sunseting have the effect that, where the intergovernmental scheme has agreed to introduce specific regulatory requirements (including with participating jurisdictions' consent to the key

requirements of GEMS determinations), the Commonwealth Parliament cannot then override that agreement. The exemptions therefore promote confidence in the E3 program and encourage ongoing, cooperative participation from jurisdictions.

As well as implementing an intergovernmental scheme, these exemptions are justified on the bases that:

- instruments made under the GEMS Act:
  - are based on technical and scientific evidence about products' energy use and appropriate test standards, and
  - affect commercial certainty where manufacturers and importers need to adapt to new regulatory requirements, and
- the objects of the GEMS Act include to give effect to certain obligations that Australia has under particular international conventions.

In view of their detailed scientific and technical content, GEMS determinations and associated legislative instruments are confined in the matters that they deal with, and so do not deal with broad matters of policy or with politically contentious issues. The exemptions ensure that the Commonwealth Parliament cannot override the consideration given to these matters through expert and stakeholder consultation, and the collaborative E3 program.