

# IEA Solid State Lighting Annex - Australia

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### **Acknowledgement of Country**

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge First Nations Peoples as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living culture and pay respects to their Elders past, present and emerging.

### **Outline**

 Energy policies and legislative developments since end March 2023

- Status of proposed lighting regulations
- Other priority lighting activities



# **Policy Update**

### A recap of Policy drivers – lighting initiatives

- Lowering cost of living pressures
- National Energy Performance Strategy
- Greenhouse and Energy minimum standards
- Building codes
- Global context Minamata Convention



# Reform of the Greenhouse and Energy Minimum Standards Act 2012

Greenhouse and Energy Minimum Standards (Administrative Changes) Bill 2023 was passed Parliament on 11 September 2023 and received Royal Assent on 20 September. The amended Act is now in effect.

Of particular interest to lighting -

Product classes, Grandfathering, deemed compliance

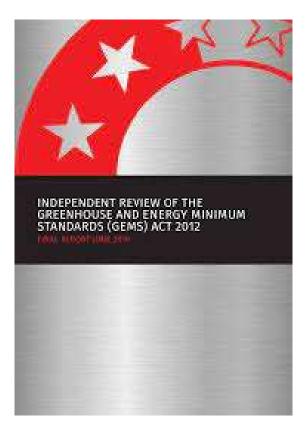
### **2019 Independent Review of GEMS Act**

The GEMS Act 2012 promotes the development and adoption of energy-efficient appliances and equipment by setting Minimum Energy Performance Standards and requiring products to display an Energy Rating Label.

The **2019 Independent Review of the GEMS Act** concluded that the GEMS Act is achieving its purpose.

However, reform is required to modernise and expand the GEMS Act.

The Department is working to progress reform of the GEMS Act in **two stages**, guided by the recommendations from the review.



# **Stage One: GEMS Amendment Act 2023**

The amendments provide more flexibility for more energy efficient products to be available in the Australian market by:

- Reducing unnecessary administrative burden
- Streamlining processes for those regulated by the GEMS Act
- Reducing suppliers' need to seek exemptions

### Specific amendments in GEMS Act 2023

- Product classes
- Customised or bespoke products
- Grandfathering of products
- Enabling timely and more targeted exemptions
- Other requirements

- Deemed compliance
- Delayed payment of fees
- GEMS Regulator



# **Stage Two: GEMS Reform**

The second stage of GEMS Reform is consideration of the broader reform.

- This will involve extensive stakeholder consultation, including a strong focus on engagement with industry.
- A public consultation paper is under development.
- The paper will seek feedback on a range of options to modernise and expand the GEMS Act to cover industrial, commercial and other sector products.



# Minamata Convention on Mercury (COP5)

- The Minamata Convention is an international treaty that seeks to protect human health and the environment from human-caused emissions and releases of mercury and mercury compounds. The Australian Government ratified the Convention on 7 December 2021.
- The Department of Climate Change, Energy, the Environment and Water is leading the Australian delegation to the Fifth Conference of the Parties to the Minamata Convention on Mercury (COP5), taking place in Geneva, Switzerland from 30 October to 3 November 2023.
- Outcomes of COP5 could have implications for the fluorescent lamps currently regulated under GEMS.

### Status of Proposed Lighting Regulations

Proposals to introduce new minimum standards for LEDs and continue to phase out inefficient lighting

### E3 Program: Minimum Energy Performance Standards

**MEPS** specify the minimum level of energy performance products must meet or exceed before they can be offered for sale or used for commercial purposes.

Lighting is a priority area for action under the Greenhouse and Energy Minimum Standards Act

### MEPS are an important policy lever to meet net zero:

- effective way to increase the energy efficiency of products
- manufacturers are given appropriate signals to increase product efficiency
- Provide a minimum standard for companies to go above and beyond
- For consumers, MEPS mean products available in the market use less energy and have lower running costs over their lifetime

### **Using MEPS: Proposed Lighting Regulations**

### **Australia**

- Incandescent and halogen lamps
  - ☐ Looking to widen the scope of and increase MEPS
- LED lamps introduce MEPS
  - □Align with Commission Regulation (EU) including 2019/20, Laying down ecodesign requirements for light sources and separate control gears 2019 L315/209

### **Using MEPS: Journey to date**











**WE ARE HERE** 





2018 Ministerial Decision

Informed by Consultation RIS (2016)

#### EU 2019-2021

Commission Regulation (EU) 2019/20, Laying down ecodesign requirements for light sources and separate control gears 2019 L 315/209

In effect from 1 September 2021

#### Standards updated or developed 2020-2021

Standards available from April 2021: AS 4934.2:2021, Incandescent Lamps for General Lighting Services Part2: Energy performance and marking requirements

AS/NZS
5341:2021: LED lamps

- Test methods –
Energy and functional
performance

# Targeted consultation 2020-2022

**Technical industry advice** – suppliers retailers

Specialist uses (aviation, marine, defence, medical, appliances, nuclear science, pets, coral

### Public consultation process

Consider the Draft Determinations

Determination Finalised in consideration of feedback Transition Period 12 months

Grandfathering

### Feedback Received from the Public Consultation Process

- The vast majority of received submissions were supportive of the phase out of inefficient lights and the introduction of MEPS for LED's
- 60% of submissions were from international organisations
- Some concerns about LED impact on human health
- Concerns about lack of progress on phase out of fluorescents (tubes and CFL's)
- Need to provide updated key lighting data for decision makers
- LED MEPS despite strong support, some dissenting voices were raised.
  - ☐ Industry concerned about reduced innovation in lighting technologies due to regulatory costs, in particular costs associated with compliance and administration

#### Feedback on draft determination

#### **Currently considering:**

#### **Determination**

- increasing the number of models in families
- need for a tolerance level on performance before a new model needs to be registered in a family.
- removing glass bulb designation requirements from technical parameters in family registrations.

#### **Registration System**

- Education on how bulk uploads can be made
- Voluntary/optional provision of electrical safety
- Voluntary provision of test reports.

# Other priority lighting activities

25/10/2023

### **Lighting Testing Room:**

- Update data of LED lamps available in the Australian market
- previous information dated back to 2018-2021
- advice will include the expected impact of the minimum standards on current LED lamps stock available for purchase by Australian consumers.

# **Lighting Testing Room**





### Lighting: additional market information

### **2023 Lighting Market Context Report**

- Since 2018 Decision, changes have occurred in the lighting market:
  - ☐ LED lighting has increased in popularity
  - ☐ The way lighting is purchased has changed
  - ☐ Other countries have moved to regulate lighting
  - ☐ The price of electricity has increased and the greenhouse gas intensity of electricity has changed
- Report will also include the non-quantifiable risks associated with not applying MEPS to LEDs

### **Internal Departmental Restructure**

- As of 1 July 2023, Lighting became a dedicated team
- As of 1 July 2023, Martin Squire became the GEMS Regulator/Branch Head of Energy Security, Crisis Response and GEMS.
- Martin Squire will be attending the 32<sup>nd</sup> 4E Energy
   Efficient End-use Equipment International Energy
   Agency Technology Collaboration Programme Executive
   Council and Annex meetings in November 2023 in New
   Zealand

