LIGHTING - Minimum Energy Performance

The Equipment Energy Efficiency Program (E3) currently regulates a range of lighting related products under the Greenhouse and Energy Minimum Standards Act including:

- linear fluorescent lamps and ballasts
- compact fluorescent lamps
- halogen and incandescent lamps, and
- ELVC converters for halogen lamps

Products subject to energy efficiency regulations must be registered and comply with the Greenhouse and Energy Minimum Standards Act before being sold in Australia. For more information visit www.energyrating.gov.au

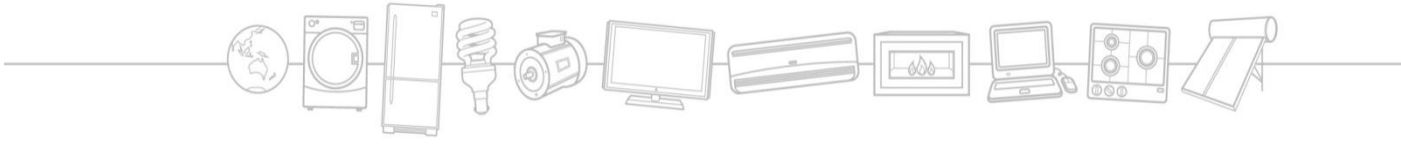
Since the phase-out of tungsten filament lamps in 2009 the average national energy saving through the move to efficient lighting has been around 2.4 terawatt-hours of electricity each year (equivalent to the total annual electricity consumption of 400,000 homes). The saving for an average household is about $70 per annum on their electricity bill with a cumulative national savings of an estimated $5.5 billion from 2009.

New Lighting Proposals

- In November 2016, E3 released the Consultation Lighting Regulation Impact Statement (RIS), which considered proposals to further improve the energy efficiency of residential and commercial lighting in Australia and New Zealand.
- The report identified four options for achieving large energy and cost savings (electricity and replacement) to support wider government policy to reduce energy and emissions. Options included:
    - Introduce MEPS for LED lamps and integrated luminaires
    - Introduce MEPS for non-integrated commercial luminaires
    - Increase incandescent and halogen MEPS (Australia only) to remove inefficient lamps
    - Introduce labelling for LEDs primarily used in the residential sector
- After considering stakeholder feedback, E3 is further investigating the phase-out of halogen and incandescent lamps and the introduction of MEPS for LEDs.

Minimum Energy Performance Standards (MEPS) for LEDs

- A draft MEPS has been developed in consultation with a technical working group of stakeholders from lighting and control supply, government programs and test laboratories, and was first issued for stakeholder comment in July 2016 and again as part of the draft RIS in November 2016.
- The intention at this stage is to focus on LED lamps and downlight replacement luminaires, with further investigation to be carried out before deciding on LED MEPS on other categories of luminaires (e.g. commercial and industrial).



MEPS levels and test requirements

- The MEPS levels are largely derived from the International Energy Agency 4E Solid State Lighting Annex Product Quality and Performance Tiers.
- The test requirements reference relevant international standards by the International Commission on Illumination (CIE), International Electrotechnical Commission (IEC), and regional standards such as the Illuminating Engineering Society of North America.
- Product test data will be required for product registration, however, it is proposed that third party accredited testing will not be required. Where the use of module, LED package or driver test data is allowed, this must be from an accredited (but not necessarily third party) laboratory.

Next Steps

- The Department will conduct further consultation and analysis, and then release a supplementary paper on a revised scope for broad consultation, prior to progressing a Decision Regulation Impact Statement.

Do you require more information?

Lighting Consultation RIS: www.energyrating.gov.au/consultation/consultation-ris-lighting

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