

Illuminating Engineering Society of Australia and New Zealand Limited ABN: 99 100 686 039 Secretariat: P.O. Box 576 Crows Nest, NSW, 1585 AUSTRALIA Telephone: +61 2 9431 8663 Facsimilie: +61 2 9431 8677 Email: <u>secretariat@iesanz.org</u> www.iesanz.org

Lighting and Communications Appliance Energy Efficiency Branch, Energy Division Department of the Environment and Energy GPO Box 787 CANBERRA, ACT 2601

SUBJECT: LIGHTING CONSULTATION REGULATION IMPACT STATEMENT

Date: 2nd March 2017

To whom it may concern,

The Illuminating Engineering Society of Australia and New Zealand Ltd (IESANZ) is an organisation with Australia and New Zealand and has been established since the 1930's and we have over 800 members.

The objectives of the IESANZ Ltd are as follows:

- To encourage, promote and preserve high standards of professional integrity and ethics amongst people active in the field of lighting
- To develop policies to promote the highest quality standards in lighting and to advocate and represent the views of members active in the field of lighting.
- To liaise with related organisations and government on matters of common interest
- To lead the development of National lighting standards
- To provide a forum for the exchange of information, experiences and opinions in matters of common and particular interest to members.
- To establish lighting education standards and to set, approve and maintain standards for the delivery of lighting education and to maintain a Continuing Professional Development program.
- To encourage and support special interest groups within the field of lighting
- To encourage research and development in lighting and lighting standards and to facilitate dissemination of information on lighting matters.
- To support and promote the societal interests of the lighting community and to encourage participation by individuals and companies through membership of the Society.
- To develop international links with similar organizations

As a Society we welcome the opportunity to make a submission in relation to the **Lighting Consultation Regulation Impact Statement** - *Regulatory reform opportunities and improving energy efficiency outcomes – November 2016.*

We have consulted widely across all our membership base and this submission collates some of the main issues raised by our members and while we appreciate the focus that MEPS has with energy, our role primarily role involves the issue of light.

We recognise other industry associations may also raise detailed concerns or issues and provided those submissions meet with our societal objectives, we as a society would support those concerns in principal.

The IES Lighting Society welcomes initiatives that improve the reliability and quality of lighting sources and generally we support the LED MEPS for Lamps with some specific issues that need to been given consideration.

We do have some concerns relating to Integrated Commercial Luminaires and some of the proposed timings and we hope these considerations can be strongly considered.

If you require any specific comment relating to this submission, please do not hesitate to contact us on +61 2 9431 8663 or <u>adam.carey@iesanz.org</u>.

Best regards

Adam in

Adam Carey Director Standards and Advocacy

Introduction:

While we appreciate the Department has specific concerns and questions relating to the regulatory impact, our submission highlights the main concerns we have assessed with some specific examples that should be considered. Our selected answers to your specific questions are following.

TIMING OF PROPOSED MEPS

Product Scope	2018	2019	2020	2021	2022	2023
Lamp Non Directional	65 lm/W		85 lm/W			100 lm/W
Lamp Directional	65 lm/W		85 lm/W			100 lm/W
Lamp Linear	100 lm/W		110 lm/W			120 lm/W
Luminaire Small Directional	65 lm/W		85 lm/W			100 lm/W
Luminaire Small Non Directional		65 lm/W		85 lm/W		100 lm/W
Luminaire Planar etc		90 lm/W		110 lm/W		120 lm/W
Luminaire Large			110 lm/W			120 lm/W

Table 7: Timeline for LED MEPS and Efficacy Levels (coloured boxes indicate MEPS commencement)

The challenge with this timescale is that lighting designs are often prepared two years in advance of construction therefore a project that would need to be compliant with Part J6 of the Building Code of Australia designed in 2019 may need to be redesigned in 2021 when the project begins construction as the products designed with may not be available two years later.

AVAILABILITY OF CERTAIN LAMP TYPES

One lamp type that has been used extensively throughout Australian homes is the 150 watt R7s lamp that is used to illuminate backyards right across Australia. There is currently no LED replacement for this lamp type. The luminaire this lamp is often used is pictured as follows:



The cost to replace an outdoor fixture because a lamp is not available may be a significant cost for the general public to consider.

CRI AND MEPS

We would however agree that for the residential market that an improvement in the performance of LED Lamps is warranted and therefore if the measure of CRI supports an improvement in overall quality.

Anecdotally IESANZ members involved heavily in the residential sector have fielded numerous phone calls where clients are removing poor quality LED lamps installed as part of a State Government energy saving initiative to be replaced with halogen lamps. These members have indicated a preference to maintain the propose draft CRI at 80.

REGISTERING OF LUMINAIRES

There exists a level of confusion from our Members relating to the registration of luminaires. The regulatory cost to the taxpayer may need to be reconsidered depending on the assumptions of input luminaires requiring registration and the expansion of companies involved in distributing luminaires.

CONSIDERATION OF ADDITIONAL EXCLUSIONS – ARTISTIC LUMINAIRES

Contained within Attachment H is a statement that appears ambiguous and may imply that small artisan manufacturers may have to seek photometric quantification for their products.

Note: a photometric quantification of this definition is under investigation for small (residential) decorative luminaires and large (non-residential) decorative luminaires.

Some of the artisan luminaire manufacturers that Australia currently has produce decorative luminaires for both residential and non-residential quantities. A photometric quantification may have a significant economic impact to this sector of the lighting industry.

It would be impractical for many luminaires put forward for IESANZ Ltd Luminaire Design awards to have a photometric quantification as many of these luminaires serve both as an artistic creation and a form of light in many commercial foyers and entrances.

Some pictures are as follows:



Images courtesy of Jan Flook Lighting

ANSWERS TO SPECIFIC QUESTIONS

We have estimated that 10,200 lamp and LED luminaire product types would be covered by the proposed LED MEPS over a 10 year period. Do you agree with this product estimate, noting the LED product scope, exemptions and proposed definition of family of models in Attachment H? If not please provide a revised estimate with supporting evidence.

IES Response:

This estimation depends on the number of estimated lighting suppliers that are currently in the market. It should be noted that many luminaire distributers distribute multiple brands through their trading entities and our answer below in relation to our IESANZ Corporate Membership may go some way providing some context of the market. It should be assumed by the Department that not all companies that distribute luminaires are members of the Lighting Council.

We have estimated that 600 traditional commercial luminaires, being supplied by 40 entities, would be covered by the proposed Commercial Luminaire MEPS. Do you agree with this supplier and product estimate, referencing the proposed definition of family of models in Attachment H? If not please provide a revised estimate with supporting evidence.

IES Response:

The IESANZ suggests that this number is vastly underestimated as our Society has over 91 Corporate Memberships from our own membership database. Many of these corporate entities supply commercial luminaires into the marketplace. Many of those suppliers distribute multiple and very well-known international luminaire manufacturers which many impact the estimates the department has in relation traditional commercial luminaires. We estimate conservatively that these entities could distribute up to on average 5 international brands per entity, therefore a significant underestimation.

What, if any, unintended outcomes might arise from implementing the policy options? Please explain and give examples if possible.

IES Response:

The issue surrounding Commercial Luminaires is that these types of products are used in all key construction projects regulated by the Building Code of Australia, using lighting designed by qualified lighting designers and competent persons. Part of that Building Code - Part J6 regulates energy density in watts/m² for commercial lighting.

Applying a set of one-size fits all approach to commercial lighting may result in unnecessary complications involved not only in low-grade commercial buildings but also significant iconic commercial projects. If approved, the regulation for LED and Commercial Luminaire MEPS is planned to commence in January 2018, with the determination and test standard to be published six months prior. Noting that existing stock will still be able to be sold after that date, do you consider that this timing is sufficient to allow time for industry to implement this change?

IES Response

We feel based on the sheer volume of manufactures underestimated that further work be undertaken with lighting distributers who might be members of the IESANZ Ltd who currently are not members of the Lighting Council to understand the full impact of this regulatory change.

If you consider that timing of proposed regulatory change is inadequate, can you give us details on alternative ways and means that you could comply with regulations.

IES Response

The Building Code of Australia sets significant restrictions in relation to energy density for lighting commercial applications.

The Department should consider further liaison with the Building Codes of Australia to understand what auditing processes are already in place to ensure that commercial lighting designs are being installed in projects to ensure that minimum energy densities are being adhered to.

Further consideration might be given to ensure qualified members of both IESANZ Ltd and IALD as detailed in the "**The Federal Government through the Carbon Credits** (Carbon Farming Initiative – Commercial and Public Lighting) Methodology Determination 2015" might be expanded to ensure that commercial projects requiring replacements are reviewed by our qualified members to ensure there are some qualifications for these commercial projects being design and the resulting energy efficiency targets required.

SUMMARY

If the Department wishes specific answers to technical questions then we as an industry group can provide assistance as required.

While we applaud the intentions of the Department to improve the quality of LED Lamp sources at the residential end of the market, we hold some reservations when the regulation conflicts with other existing legislative provisions to ensure that both lighting designs deliver quality, comfortable and beautiful working environments, art galleries and public spaces and deliver these lighting solutions in an energy efficient manner.