

# **LIGHTING COUNCIL AUSTRALIA**

## **ENERGY SAVINGS SCHEME RULE CHANGE**

### **Consultation Paper and Draft Rule**

#### **INTRODUCTION**

Lighting Council Australia is the peak body for Australia's lighting industry. The Council represents manufacturers and suppliers of luminaires, control gear, lamps and associated technologies.

Lighting Council Australia supports amending the NSW Energy Savings Scheme Rules. We have addressed the specific questions raised in the Consultation Paper and make recommendations in other areas.

As a general comment, Lighting Council Australia supports the proposals as they will strengthen the requirements around lighting upgrades and provide greater certainty that energy savings and improved lighting conditions are occurring.

#### **COMMENTS ON CONSULTATION PAPER**

The Consultation Paper requested responses on a number of specific questions. Our responses follow:

- 1. To simplify when a National Australian Built Environment Rating System (NABERS) rating is determined to be completed for the purposes of creation of Energy Savings Certificates**

Lighting Council has no comment.

- 2. To include hotels and motels in the definition of 'commercial premises' under the Commercial Lighting Energy Savings Formula.**

Lighting Council supports this proposal as a logical extension of the scheme since hotels and motels do have high energy usage over long periods of time.

- 3. To include the requirement that lighting levels after upgrades in Commercial buildings must be 'fit for purpose'.**

Lighting Council strongly supports this proposal. Many offers of energy efficient equipment focus on the dollar saving rather than savings with an equal or better lighting outcome. Lighting Council would support further change to ensure, via audits, that upgraded energy efficiency projects also achieve quality in lighting.

- 4. To treat the use of T5 adaptors in the same way as lamp replacements and limit the allowable Nominal Lamp Lifetimes to 30,000 hours.**

Lighting Council supports this change with the following comment. A consistent definition of lamp life should be included in the rules. We use end of life as 10% failure point for fluorescent and 30% lumen depreciation for LED (LM70). Other definitions are used often to obtain a better lamp life such as 50% failure point, 50% lumen reduction etc.

If the ESS defined this more closely it would prevent differing claims from different vendors. Please refer our detailed comment below.

- 5. To remove tungsten incandescent lamps from the Commercial Lighting Energy Savings Formula.**

Lighting Council supports this proposal.

- 6. Expand the definition of 'Site' to allow energy savings activities at locations where there are multiple or no direct electricity meters or logging devices, such as street lighting, traffic signals and network loss reduction equipment.**

Lighting Council supports this proposal.

- 7. To expand the definition of 'Energy Saver' to clearly allow network loss reduction activities.**

Lighting Council supports this proposal.

- 8. To remove sales as an eligible lighting replacement activity where that activity requires an electrician.**

Lighting Council supports this proposal.

#### **ADDITIONAL COMMENTS**

Lighting Council Australia makes the following additional recommendations:

1. Table 9 - Amend the sections in the snapshot below to reflect Fact Sheet 4 by making laboratory test reports from an accredited laboratory a requirement, not an alternative to a product or manufacturer's specification sheet

LED, induction lighting or other Emerging Technology	Proponent shall apply to the Scheme Administrator in advance for LCP value, and supply product specification sheets or laboratory test reports. Control gear losses shall be included in the LCP.
<p><b>Notes:</b></p> <p>If the EEI is not marked on a magnetic ballast, it is assumed to be C. If the EEI is not marked on an electronic ballast, it is assumed to be A3.</p> <p>Evidence of LCP should take the form of manufacturer specification sheets or independent testing at the discretion of the Scheme Administrator.</p> <p>Different LCP values, to those outlined in this table, can be sought from the Scheme Administrator <u>in advance</u>, accompanied by product specification sheets or test reports.</p>	

## 2. Table 10 - Asset lifetime.

a. Define nominal lamp lifetime for fluorescent and LED tubes. Lighting Council proposes that this be:

- i. Fluorescent – Lamp life as defined in the manufacturer’s catalogues or specification sheet (usually 10% depreciation).
- ii. LED - 30,000 hours as proposed. This is the point that most LED tubes will have depreciated in light output by 30%.

Explanation - As lamp life contributes to the formula for calculating ESCs there needs to be a simple but robust definition to avoid excessive lamp life claims based on different criteria such as 30% lumen depreciation (LED), or 20% lumen depreciation (fluorescent). Most reputable manufacturers of fluorescent tubes use the definition above in their catalogues as do most reputable LED manufacturers when referring to "useful" life, noting that LED may operate for much longer hours but with declining usable light output.

b. Notes section of Table 9:

Recommendation -If the replacement lamp can be easily replaced with a higher power lamp, the asset lifetimes of lamp and control gear may be treated separately. The asset lifetime of the lamp is to be calculated according to the provisions for a lamp only replacement. If an LED or T5 adapter is used existing luminaire control gear must be permanently disabled and the luminaire labelled accordingly.

Explanation - T5 adapters and LED tubes contain their own control gear and if used in conjunction with disabling the old control gear in the luminaire, they properly fit the definition of replacing lamp and control gear. Since it will not be obvious that the luminaire has been modified internally, a label is required to ensure no attempt is made to change the product back to T8 fluorescent.

## **Emergency lighting**

All emergency lighting and exit signs, whether they appear to be on or off will be consuming some energy to maintain the battery charging system at peak capability. There are a variety of lamp types and charger systems. Some are considerably more efficient than others. Lighting Council proposes that an energy efficient emergency lighting equipment model be developed.

There are two distinct applications. Emergency lighting which are predominantly linear T8 or T5 fluorescent based, and exit signs which are increasingly using LEDs. In both product applications the battery charger system is the standby energy consuming device being considered. The common traditional single rate charger is a simple device that always draws the same power. Modern smart charger systems are also available. These can reduce the power consumption to maintain the system to 2% of the simple single rate charge device.

## **Residential strata common areas**

Lighting Council believes there is a significant omission from the Scheme that precludes residential strata common areas from being accorded the same treatment as commercial strata buildings. Lighting Council contends that these common areas are nearly identical in use to those in commercial premises and should be included as eligible for ESCs under the Scheme.

Lighting Council Australia is prepared to assist the Department with further explanation on lamp assets and depreciation aspects discussed above.

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