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Department of Environment, Land, Water and Planning
VEET Scheme Policy Team
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Commercial Lighting Issues Paper

Lighting Council Australia (LCA) welcomes the opportunity to comment on the *Victorian Energy Upgrades Commercial Lighting Issues Paper* (Issues Paper).

LCA's response to the *Issues Paper* is based on substantial consultation with the lighting luminaire and lamp supply industry through our Member network. LCA Members supply around 80% of all lighting equipment in Australia in the residential, commercial, industrial and public lighting markets.

LCA welcomes the development and publication of the *Issues Paper* as the Victorian Energy Upgrades Scheme.

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Background

Government schemes such as the Victorian VEET Scheme aim to improve incentives around the upgrading of inefficient electrical equipment. The Victorian Government's aim in relation to the lighting industry ought to be to foster a long-term, sustainable, and energy efficiency lighting market, however the main focus of the scheme to date has been creating incentives for lighting upgrades.

LCA understands that the Victorian Government is seeking broad, qualitative information regarding the VEET market. This process is being managed by the Department of Environment, Land, Water and Planning VEET Scheme Policy Team (Policy Team).

This issues paper consultation is the first of a multi-step process. Based on the outcome of this consultation, policymakers will decide whether a discount factor should apply to the creation of VEET certificates due to commercial lighting projects.

LCA understands that a discount factor would reduce the number of certificates able to be created due to a particular commercial lighting upgrade. For instance, a discount factor of zero has been applied to the insulation method meaning that insulation upgrades are no longer able to claim VEET certificates. Discount factors are a mechanism by which policymakers can focus operator behaviour in relation to particular areas of the VEET scheme and lighting market.

A longer-term measure could be a change to the regulations to remove lighting from the VEET Scheme and comments in response to this issues paper may feed into a review of the regulations that will take place in 2018.

Lighting Council Australia's response

Summary

LCA calls for the reduction of VEET certificates to a zero value; that is, certificates should not be available to APs on the basis of the installation of commercial lighting equipment.

Left to its own accord, the market will provide policymakers with the desired policy outcomes around environmental sustainability and energy consumption. This is because developments within the last five years have fundamentally changed both the type and the cost of products available.

LCA Members were closely consulted in the preparation of this response. Members report frustration with a number of aspects of the VEET Scheme, including the unintended consequence of the creation of a burgeoning industry of unsafe and unscrupulous lighting operators; slow and unresponsive administration of the scheme particularly around approvals; and heavy distortions (i.e. free giveaway products) caused by the VEET scheme due to emphasis on particular lighting activities in different periods.

LCA considers that the business as usual case has shifted so significantly and the unintended consequences and other distortions caused by the scheme to be so profound that the Policy Team should fundamentally reconsider its approach. LCA acknowledges that the overall framework of the Scheme might be useful in achieving policy objectives in other industries, however, LCA advocates for the reduction of VEET certificate values to zero; effectively leaving the lighting market to operate as it would absent any government subsidies.

Detailed response

LCA considers that there is no need for an incentive scheme for lighting upgrades.

There has been considerable change in the lighting market over the past five years; and the range of products available on the market today is markedly different from those available in 2008 when the *Victorian Energy Efficiency Target Regulations* were first introduced.

To illustrate these changes, in the last five years:

- LED products have come down in price by around 60 per cent;
- LED products have increased in efficacy by between 50 per cent (for quality LED luminaires with low colour temperature, high colour rendering index and low glare features) and 100 per cent (for higher CCT, CRI around 70 and higher glare luminaires);
- LED products are now suitable for almost all lighting applications with the exception of special purpose lamps (e.g. high temperature oven lamps);
- The vast majority of lighting suppliers are now focused on supplying LED products. Replacement products including fluorescent lamps are being withdrawn from the market as the cost of producing these products is increasing due to reduced component and manufacturer availability. This situation will further drive the business as usual case toward LED products; and
- Quality fittings, coupled with correct installation, reduce lighting maintenance costs by 50-95 per cent. Increased end-user awareness on the demand side of the market means that the vast majority of new and retro-fit activities have turned towards energy efficient LED lighting products.

Additional relevant changes have also affected the market for lighting equipment:

- Energy prices have increased by around 50 per cent leading installation owners to seek out more energy efficient products. Lighting products are relatively quick and easy to upgrade;
- Lighting upgrade funding opportunities are growing through bank investment schemes including various ownership models from low risk bank ownership through to higher return installation owned lighting products;
- Incandescent and halogen products will likely disappear from the market in 2019 (downlight lamps) and 2020 (GLS lamps) due to interventions at the Federal level.

The Commonwealth Government Equipment Energy Efficiency (E3) program will remove from the market a great number of inefficient alternatives to LED lamps and luminaires, fluorescent lamps, and high intensity discharge (HID) lamps. These remaining technologies are considerably more efficient than filament lamp technologies; and

- The National Construction Code (NCC) is under review and will likely significantly increase the stringency of the maximum illumination power density figures allowed under the NCC 2019 edition. This will have the effect of driving the NCC market business as usual case wholly to LED products as it is possible under current proposals that only LED products would be able to comply. This would have a further flow on effect of raising the cost of non-LED products and further drive these products out of the general lighting market.

Policymakers should also be aware of the unintended negative consequences of the VEET scheme in its current form:

- Government incentive schemes skew market operator behaviour. There is an incentive to install high glare, low colour rendering index (CRI) and high correlated colour temperature (CCT) products. Installation owners would likely achieve better lighting outcomes without the schemes. Importantly, glare is not being measured before or after an upgrade and the VEET scheme does not consider product failure rates over time.
- Incentive schemes that heavily discount or create effective “product giveaways” change behaviour on the demand side of the market. Installation owners have less incentive to question the quality of the products proposed by unscrupulous market participants. The imprimatur of the VEET Scheme has the effect of endorsing all products used and installations completed regardless of the products used, applications and lighting outcomes.
- Incentive schemes create a market for fly-by-night operators that have no commitment to creating a long-term, sustainable business presence in the lighting market.
- Legitimate market participants—such as LCA Members—are negatively affected by the operations of market participants who are responding simply to a short-term distortion created by a government incentive scheme. Long-term market participants create jobs, meaningful and long-term economic activity, and provide a quality service to the public.

- Feedback received by the LCA indicates that the VEET upgrade market has lately become skewed towards mainly industrial high-bay and low-bay luminaire upgrades. Currently low quality outcomes are being achieved in this market area because the VEET scheme has the effect of incentivising the replacement of traditional high-bay luminaires with cheap troffers and LED tubes, rather than quality LED high-bay luminaires.
- The use of incentives in the VEET Scheme may have the effect of overstating the actual environmental performance of the scheme, as the use of lower quality equipment undermines the environmental benefits intended.

The lighting market in Australia already faces a critical challenge through the presence of non-compliant products that present the community with very real risks of electrical shock, poor performance, and fire hazards. Legitimate market participants face increasingly high compliance costs; further driving the price wedge between legitimate participants committed to manufacturing, supplying and installing quality products and unscrupulous operators who have their goods and services appear ever-cheaper in comparison. LCA has reported the possibility of reporting of the VEET scheme to the Essential Services Commission but, to our knowledge, no action has been taken.

Policymakers should be acutely aware of failed government schemes that bear some resemblance to the VEET Scheme. The Home Insulation Program (HIP) had the effect of heavily distorting an existing industry by creating incentives for unscrupulous operators. The Royal Commission into the Home Insulation Program found that there was a perceived break in the chain of accountability around responsibility. Policymakers should be concerned not only with the number of upgrades or the volume and value of lighting installations, but also the quality and safety of those installations, as well as the long-run effects of short-term interventions. Under the VEET Scheme, many of the agent-principal problems of the building and construction industry are exacerbated, as those installing lighting equipment have incentives to cut costs while end-users are rarely able to intercede.

Accordingly, LCA considers that the business as usual case has changed significantly and that the rationale for the policy position reflected in the Schedule 34 to the VEET Scheme has disappeared.

LCA acknowledges that policymakers find aspects of the VEET Scheme framework useful to achieve policy objectives in other target areas, and as a result proposes that the framework remain unchanged but for a full discounting of VEET certificates in relation to commercial lighting upgrades.

LCA considers that the focus of any government incentive scheme to upgrade lighting should now be on consumer and electrician education regarding choosing and installing suitable LED products.

While LCA publishes guidance material aimed at educating consumers and electrical contractors about how to avoid poor quality and non-complying LED products, LCA considers that the Victorian Government is uniquely well-placed to combine an education program into a broader strategy that more strongly emphasises its regulatory, compliance and enforcement roles.

Specific questions

1. How does the mix of lighting types, as presented in Figure 1, compare to your experiences in the business and non-residential sector?

Based on consultation with Members, LCA considers that the use of downlights is understated in Figure 1 by approximately 100 per cent and non-office linear fluorescents is overstated by approximately 20 per cent.

2. How do the combinations of baseline and upgrade lamp powers depicted in Figure 2 compare to your experiences in lighting upgrades?

LCA considers that the view presented by Figure 2 may be misleading as upgrade lamp power (LCP, W) should not be greater than baseline lamp power (NLP,W) as is the case at the lower end of the baseline scale. The graph is titled '*One-for-one high-bay and floodlight lamp replacements*' leading us to believe that the information in the graph is incorrect or illegitimate installations have occurred.

LCA Members note that the VEET scheme has had the effect of incentivising the production, import and installation of less bright units in order to maximise the rebate available. We question the quality of the lighting outcome achieved when a 400W high intensity discharge luminaire (lumen output above 30,000 lm) is replaced by a 100W LED product (lumen output generally less than 15,000 lm).

Members also say that the effect of free or heavily discounted units has distorted consumer demand, with poorly suited replacement products being installed in lieu of more appropriate lighting equipment.

3. Have you experienced any difficulties upgrading, or seeking to upgrade, particular types of lighting equipment? Please consider the following aspects in your response

a. sales leads, marketing and provision of quotes

LCA Members note that the fluctuating nature of the VEET certificates adds uncertainty and complications for industry and consumers. This is compounded by delays in the approvals process for major projects.

b. age and types of pre-existing equipment

LCA Members report that unscrupulous operators intentionally classify all replaced equipment as having the highest power consumption of any unit on site in order to maximise benefits under the scheme.

c. technological issues associated with pre-existing and replacement equipment

LCA Members report that the VEET Scheme has the effect of incentivising owners to use low-quality equipment used to replace pre-existing equipment. Also, any re-wiring of existing equipment is often considered a barrier to upgrade.

d. receptiveness of different sectors and businesses to undertaking a lighting upgrade.

LCA considers that there are sufficient incentives for the residential, commercial and industrial markets to meet the policy objectives of the VEET Scheme. These include the availability of higher quality products, lower product costs and higher energy prices.

LCA Members also report that industrial market participants are being aggressively targeted by unscrupulous lighting industry participants, causing damage to legitimate operators and undermining public confidence in the lighting industry and LED products.

4. What effect does a low VEEC trading price have on your participation in Victorian Energy Upgrades? Have you had any experience with unmet demand for eligible activities?

The high administration and compliance costs associated with the VEET scheme combined with a low certificate trading price means there is little to no incentive to participate in the VEET scheme when undertaking lighting upgrades. However, this does not affect the rate at

which LCA members are undertaking commercial lighting upgrades and this business continues regardless of the VEET scheme.

5. Tell us about your experience and challenges encountered when participating, or seeking to participate, in Victorian Energy Upgrades

LCA Member feedback relating to the administration of the VEET scheme is not positive.

Members note that there was a significant delay in product approvals compared to other jurisdictions. Other Members report that there were inconsistencies in the approvals processes and that the operational team responsible for approvals was considerably understaffed or generally slow to respond.

The key concern of LCA Members, however, continues to be rorting of the scheme and the creation of an unsustainable market for unscrupulous operators. As raised previously, LCA notes that an unintended consequence of the VEET Scheme in recent years has been the rise of the new market operators who are not interested in being long-term market participants supplying quality products to the community, rather focussing their efforts on taking advantage of government rebates to the fullest extent.

This is not a matter that can be easily remediated within the VEET Scheme framework.

Where policymakers create direct subsidies in an established market with high compliance costs for legitimate operators (and, as a corollary, lower costs for corner-cutting operators), where goods and services are being provided within a market with agent-principal problems and information asymmetries, rorting and poor policy outcomes should be expected.

Suggested way forward

LCA estimates the value of economic activity in the lighting industry to be around \$400 million in Victoria. The lighting industry is sustainable, creates local jobs, manufactures domestically, and provides goods and services required by all Australians. The VEET Scheme is an unhelpful intervention into this legitimate market.

Moreover, LCA considers that there are real questions about whether the stated policy aims of the VEET Scheme have been met. As stated previously, the Scheme has created incentives for low quality installations and encouraged a focus on installations that maximise the certificate value. This problem is exacerbated by an absence of independent energy audits of installations. In short, it is unclear whether the anticipated benefits of the subsidy program will materialise because there is an absence of validation that new installations are high quality.

Again, LCA considers that the Victorian Government would achieve more sustainable and effective policy outcomes by shifting emphasis away from VEET Scheme subsidies towards compliance, enforcement, and education.

Yours sincerely,

David Crossley



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