

Incentive schemes for public lighting upgrades

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KEY POINTS:

Energy efficiency incentive schemes are available across Australia to encourage the uptake of energy efficient public lighting.

- Individual schemes vary significantly in their detail but can provide financial incentives of roughly 5-20% of the capital cost of public lighting upgrades depending on the scheme.
- Most schemes have experienced significant pricing volatility over recent years and are subject to reasonably frequent rule changes.
- Given the relative complexity of these schemes, changing rules and the detailed administrative requirements, it is usually best for public lighting customers to engage the services of a specialist certificate provider.

There are a number of incentive schemes of relevance to public lighting upgrades available around Australia. Generally, funding can only be sought under one scheme as each precludes also claiming from the others. The schemes can be summarised as follows:

Commonwealth Emissions Reduction Fund

In 2014, the Commonwealth allocated over \$2.5 billion for an [Emissions Reduction Fund](#) (ERF) and in early 2019 announced an additional \$2 billion in funding. The fund regularly purchases the lowest cost abatement available from the market in an auction process. The commodity created and purchased by the Fund is called an Australian Carbon Credit Unit (ACCU).

There are a number of eligible emission reduction methods under the ERF including one for [Commercial and Public Lighting](#). This method provides public lighting customers with an incentive to proactively reduce emissions from public lighting and from traffic signals. ACCUs, which are created progressively over the first seven years of a project, can be sold to generate income.

For Queensland, Western Australia, the Northern Territory and Tasmania where no jurisdiction-specific energy savings scheme exists, the ERF represents an opportunity to recoup some project costs though funding is generally at a lower level than for schemes in other jurisdictions.

NSW Energy Saving Scheme

The NSW Energy Savings Scheme (ESS) is a NSW Government initiative that seeks to reduce energy consumption in NSW by creating financial incentives for organisations to invest in energy saving projects including public lighting.

The Energy Savings Scheme Rule was first launched in 2009 and allows an organisation to become or to nominate an Accredited Certificate Provider (ACP) to administer participation in the scheme on their behalf.

In 2016, a separate ESS [methodology for public lighting](#) projects was created. The Public Lighting Method can be used to calculate energy savings from a lighting upgrade of roads, public spaces or traffic signals. It applies to all public lighting owned or maintained by NSW distribution utilities and NSW Roads and Maritime Services (RMS). Other commercial lighting methods under the ESS may apply to public lighting directly owned by councils and other bodies.

Some of the key scheme requirements are that to qualify:

- Replacement lighting must meet a variety of ESS and electricity distributor or RMS requirements as well as demonstrate compliance with relevant AS/NZS standards.
- An accreditation under the ESS must be in place prior to a replacement program commencing as the scheme is not retrospective.
- A variety of detailed and auditable record keeping requirements apply.
- Lighting equipment removed or replaced during a lighting upgrade must be disposed of appropriately (see SLSC Briefing: Lamp & Luminaire Recycling).

Under the ESS Public Lighting Method, certificates equivalent to 12 years of energy savings are created as a one-time activity up-front. Certificates can then be sold to 3rd parties (typically electricity retailers who have an obligation to relinquish certificates to the scheme regulatory each year in proportion to their electricity sales).

Overall, ESS certificates might be expected to cover 10 – 20 % of the capital cost of a lighting upgrade based on the past few years of spot pricing. However, ESS certificate pricing can be highly volatile.

Victorian Energy Upgrades Program

Formerly the Victorian Energy Efficiency Target (VEET), the Victorian Energy Upgrades (VEU) Program is a Victorian Government initiative which promotes and encourages the uptake of energy efficient technology, including public lighting. The VEU was [launched](#) in December 2018.

Public lighting upgrades are those undertaken in a public open space for lighting that is owned by an electricity distribution company, a council or a responsible road authority. Under this scheme, public lighting does not include traffic signals or sport field lighting. There is a separate [method](#) covering public lighting projects.

As in NSW, lighting equipment and lighting design must meet a number of scheme requirements, an accreditation must be in place prior to a lighting replacement program, a variety of detailed and auditable record keeping requirements apply and lighting equipment being removed must be disposed of appropriately (see SLSC Briefing: Lamp & Luminaire Recycling).

Under the VEU Public Lighting Method, certificates equivalent to 10 years of energy savings are created as a one-time activity up-front. Certificates can then be sold to 3rd parties (typically electricity retailers who have an obligation to relinquish certificates to the scheme regulatory each year in proportion to their electricity sales).

As with the NSW ESS scheme, VEU certificates might be expected to cover 10 – 20 % of the capital cost of a lighting upgrade based on the past few years of pricing. However, certificate pricing can be highly volatile.

South Australian Retailer Energy Efficiency Scheme

The Retailer Energy Efficiency Scheme (REES) is a South Australian government initiative which promotes and encourages the uptake of energy efficient technology, including public lighting. It was launched in 2015 and supersedes a previous scheme.

Public lighting upgrades are included under the [Commercial Lighting Upgrade method](#) which recognises aspects of the NSW and Victorian schemes. Under the Commercial Lighting Upgrade method, upgrades to lighting for roads and public spaces as well as traffic signals are recognised.

As in the NSW and Victorian schemes, lighting equipment and lighting design must meet a number of scheme requirements, an accreditation must be in place prior to a lighting replacement program, a variety of detailed and auditable record keeping requirements apply and lighting equipment being removed must be disposed of appropriately (see SLSC Briefing: Lamp & Luminaire Recycling).

ACT Energy Efficiency Improvement Scheme

The ACT Government introduced the Energy Efficiency Improvement Scheme (EEIS) in 2013. It places a requirement on electricity retailers to achieve energy savings. The scheme does not currently include public lighting upgrades as an [eligible activity](#).

MORE READING:

1. Australian Government Emissions Reduction Fund [Commercial and Public Lighting Method](#)
2. New South Wales Government ESS [Public Lighting Method](#)
3. Victorian VEU [Public Lighting Upgrades Method](#)
4. SA Government REES [Commercial Lighting Upgrade Method](#)
5. ACT [Energy Efficiency Improvement Scheme](#)
6. [Trading in energy efficiency in Australia: What are the lessons learnt so far?](#), CEEM, UNSW