



# 1200 BUILDINGS PROJECT ADVICE SHEET

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## Energy Saver Incentive for commercial lighting

Victorian Energy Efficiency Target (VEET)

Upgrading lighting to improve energy efficiency supports the attraction and retention of tenants and can improve staff productivity, which saves dollars. In addition, well-designed lighting improves the look, feel and amenity of commercial spaces.

Energy Saver Incentive is designed to make energy efficient lighting upgrades more affordable while contributing to greenhouse gas emissions reductions.

**The information provided in this advice sheet pertains to Schedule 34 Commercial Lighting.**

## About Energy Saver Incentive

### What is the Energy Saver Incentive?

Energy Saver Incentive offers discounts to building owners and tenants when replacing old lighting with accredited high efficiency lighting products.

Energy Saver Incentive (ESI) is a Victorian Government program that aims to make energy efficiency more affordable for Victorian businesses, helping to reduce energy costs.

The program gives access to discounts to Victorian businesses for the installation of selected energy saving products and equipment. To be eligible in the program, energy saving products need to be approved by the Essential Services Commission (ESI administrator) in accordance with relevant ESI regulations.

Each tonne of lifetime carbon reduced through energy efficiency improvements is equal to one Victorian Energy Efficiency Certificate (VEEC). Activities that achieve larger carbon reductions yield more certificates and bigger discounts. The size of the incentive will depend on the number of certificates generated and the current market price for certificates.

**For more information on the Energy Saver Incentive visit [www.veet.vic.gov.au](http://www.veet.vic.gov.au)**

### What buildings are eligible for lighting upgrades under the program

Schedule 34 Commercial Lighting applies to commercial (non-residential) buildings in Victoria including:

- commercial services
- accommodation and hospitality
- retail
- manufacturing
- education
- wholesale
- financial services.

## About Energy Saver Incentive

### Creating certificates and accessing related benefits

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Certificates are valued on market based principles and the price fluctuates according to supply and demand. Historically, certificate prices have fluctuated between \$7 and \$45.

The number of certificates created by a certain prescribed activity depends on the amount of carbon abated by the activity. The abatement for the commercial lighting measure is calculated by estimating the lifetime energy savings which will result from installing the energy efficient product.

Calculating the certificates generated by installing high efficiency lighting is dependent on the manufacturer's rated hours and the lumen output of the bulb.

Only Accredited Persons (APs) are able to create certificates within the Energy Saver Incentive (ESI). To access the benefits of the ESI a business must engage an AP to

1. Scope lighting retrofit potential
2. Generate an opportunity report listing potential upgrade options
3. Undertake retrofit works
4. Generate Victorian Energy Efficiency Certificates (VEECs).

To claim the subsidy you will need to provide proof of purchase and complete an Assignment Form provided to you by your AP.

### Lighting product availability

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The ESI stipulates minimum requirements regarding the performance of commercial lighting technology. Please contact an accredited AP who will be aware of these requirements.

### Lighting installers - finding the right advice

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The City of Melbourne's 1200 Buildings Program website contains a list of selected APs that provide lighting upgrade services.

Go to [www.1200Buildings.com.au](http://www.1200Buildings.com.au)

For a complete list of APs accredited to provide lighting upgrades under the scheme go to the Essential Services Commission website for more details.

Go to [Essential Services Commission](http://Essential Services Commission)

- **Always remember to use a registered Accredited Person (AP).**
- **Ensure you complete the Assignment Form once the installation is complete.**
- **Remember the dollar value of certificates will fluctuate based on market price.**

## Lighting retrofitting

### About lighting upgrades

In most commercial buildings lighting accounts for 20 to 30 per cent of total electricity consumption and in many cases lighting solutions can be highly inefficient, costing owners and tenants more in higher utility bills and less productive working environments. By improving lighting design and by using energy efficient and ESC approved lighting technology, better solutions resulting in lower costs and greater amenity can be achieved.

Specifically, savings can be delivered through lighting technology upgrades involving new and efficient ballast and transformer technology. Occupancy sensors can reduce the amount of time lighting is switched on and this can save energy and reduce heat load resulting in less demand for air conditioning, which also saves money.

The table below provides indicative guidance on some available lighting options.

Current Lighting	Upgradable lighting options
<ul style="list-style-type: none"><li>- 400W Metal Halide</li><li>- High Intensity Discharge (HID)</li><li>- High Bays (Mercury Vapour, High Pressure Sodium, Metal Halide)</li></ul>	<ul style="list-style-type: none"><li>- High Efficiency T5 Linear Fluorescents</li><li>- High Power Compact Fluorescent Lamps (CFL)</li><li>- LEDs</li></ul>
<ul style="list-style-type: none"><li>- T8 Linear Fluorescent Lamps</li></ul>	<ul style="list-style-type: none"><li>- T5 Linear Fluorescent Lamps, LEDs</li></ul>
<ul style="list-style-type: none"><li>- Halogen Downlights</li></ul>	<ul style="list-style-type: none"><li>- LED Downlights</li></ul>

## Lighting retrofitting

### When to replace lighting

Consider installing energy efficient lighting:

- as part of a preventive maintenance or energy conservation program
- when major modifications are made to facilities or processes
- When trying to attract new tenants or to assist in retaining existing tenants.

You will need to secure the services of a lighting specialist who will advise on the current efficiency of your lighting system. Ask your AP to assess your current lighting configuration to determine appropriate lighting levels, amenity and efficiency. Make sure you select an experienced lighting professional and ask for references.

A good AP will deliver the following:

- a detailed plan of your current energy use, lux levels, lighting configuration
- an opportunity report with recommendations for effective upgrade including
  - energy and greenhouse gas emissions savings
  - proposed lighting design
  - dollar saving and payback period
  - technologies to be installed
- Details of the installer. Make sure they are an electrician
- Potential generation of Victorian Energy Efficiency Certificates (VEECs).

## Lighting retrofitting

### What is best practice?

Good lighting projects should deliver greater energy efficiency and adequate illumination. Illuminance levels differ depending on the primary use of space.

Current lighting technologies can achieve required illuminance for office spaces as low as five watts per square meter. Offices in Melbourne currently average 12 watts per square meter\* Seven watts is considered excellent performance while 15 watts and above leaves much room for improvement.

(w/m <sup>2</sup> )	Performance
7	Excellent
7-10	Good
10-15	Median
15+	Poor

#### Lighting Power Density Performance Bands

For a 1000m<sup>2</sup> tenancy, reducing energy use from 12 down to five watts per square metre would save **\$3,787** in electricity payments every year<sup>o</sup>

- \* Based on information publically available under Commercial Building Disclosure the average w/m<sup>2</sup> of all current BEECS in the municipality of Melbourne is 12.3.
- <sup>o</sup> Based on operating hours between 8:00am-6:00pm, five days per week with average electricity tariff of 20 cents per kilowatt hour.

## Resources and links

For more information visit [www.veet.vic.gov.au](http://www.veet.vic.gov.au)

- > [Prescribed Activities](#)
- > [Product Register](#)
- > [Accredited Person Register](#)
- > [VEEC Calculator](#)

Dollar value of certificates is indicative only, based on an example market price of \$18. As the ESI is a market based scheme, prices can vary greatly. Your AP will be able to provide up-to-date information on the indicative incentive available at the time of installation.

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