# Energy Efficient Communities Program Community Energy Efficiency and Solar Grants 2020

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This information is to help you manage risks arising from Energy Efficient Community projects. It also offers guidance to help communities get the best possible energy savings.

This information does not form part of the eligibility requirements for this grant opportunity. Some requirements from the guidelinesare re-stated again here, to provide further explanation only. For all information directly relating to eligibility and application requirements, you should refer to the grant opportunity guidelines.

## PV Systems

We encourage you to choose suppliers and installers that participate in the Solar Panel Validation (SPV) initiative. SPV aims to protect consumers and industry from fraud by making it easy to confirm that solar panels are genuine products that are backed by manufacturer warranties, meet Australian standards, and are eligible for small-scale technology certificates. SPV is currently optional but may become mandatory for all solar panel installations in the future.

## Air-conditioners

### How can I make sure the new unit will meet my heating and cooling needs?

When you purchase a new air-conditioner, the most important step is to select a suitably sized unit.

Unlike other products such as televisions, where size differences are obvious, air-conditioners that look similar can have very different heating and cooling capabilities.

You should ask your supplier to do a heat load assessment to right-size your new unit: don’t just assume that you need a like-for-like replacement. Oversized units are typically less energy efficient and will cost more upfront. Undersized units may struggle to keep the space comfortable. (However, even if your existing unit is undersized you **must not** use your EEC grant to replace your existing AC unit with a unit that is significantly larger. This is because the EEC equipment must use less energy than the equipment it is replacing.)

Right-sizing looks at the:

* local climate
* size of the air conditioned space
* window size and configuration, including any skylights.
* shading
* materials of the walls, roof, floor
* heat from people and equipment in the space and
* ventilation needs.

A simple right-sizing tool can be found at AIRAH FAIRAIR, <http://www.fairair.com.au>. This tool is useful if you have a smaller naturally ventilated building that isn’t too densely filled with people or equipment. If your situation is more complex, talk to your supplier.

### How can I choose a unit that will still work in winter?

In areas where winter temperatures are regularly below 5 degrees Celsius, you should choose a unit that can cope with the cold. Some models can’t heat effectively when it’s cold outside. We recommend that you ask for a unit that has been tested and performs adequately under cold conditions, with “H2 performance data” for 2 degrees Celsius or “H3 performance data” for minus 7 degrees Celsius. Units without H2 or H3 performance data are less likely to work well in the cold.

### What Standards apply for my AC unit installation?

There are several Australian Standards that specify good design and installation practices for air conditioning systems. You can’t assume that these Standards will be followed if you don’t specify them. You should specify that your AC unit installation will comply with relevant parts of the following standards:

* AS/NZS 1668.2 2012 *The use of ventilation and air conditioning in buildings, Part 2: Mechanical ventilation in buildings*
* AS/NZS 5141: 2018 *Residential heating and cooling systems - Minimum applications and requirements for energy efficiency, performance and comfort criteria*
* AS/NZS 5149.1: 2016 *Refrigerating systems and heat pumps - Safety and environmental requirements Definitions, classification and selection criteria*

### How can I choose an efficient air conditioning unit?

When it comes to energy efficiency, there is a wide range of performance across the air-conditioners available on the market. While most modern air-conditioners are likely to be more efficient than an old unit that you’re replacing, you’ll miss out on some energy bill savings if you choose a unit that only just meets the current standards.

If you’re buying a small air-conditioner similar to the kind used in homes, you can compare the stars on the Energy Rating Label to choose an efficient appliance. Find out more about the labels [here](http://energyrating.gov.au/products/space-heating-and-cooling/air-conditioners).

Some larger three-phase and ducted air conditioners units don’t carry an Energy Rating Label. We encourage you to ask your supplier to help you choose an efficient unit in this category.

## Lighting upgrades

### How can I make sure I get safe, high-quality lighting equipment that meets my needs?

It is highly recommended that you seek advice from a lighting specialist before selecting replacement lighting products. For example, you could look for a supplier who is a member of the Illuminating Engineering Society (IES) at an appropriate grade. An IES Technician will be able to help with many projects, but if the project is more complex you may need an IES Registered Lighting Practitioner or IES Member.

Getting good design advice is particularly important if you plan to install new light fittings, as the light distribution pattern may be quite different than your current fittings. A lighting specialist will help you to manage and avoid a number of risks including:

* That the replacement installation is poorly suited to your needs or results in inappropriate light levels or glare, which can cause headaches, eyestrain and a variety of other health problems. Ask your lighting specialist to demonstrate that the installation will comply with relevant Australian Standards for lighting performance and quality, e.g.
  + AS/NZS 1680 *Interior and workplace lighting*
  + AS 2560 *Sports lighting*
  + AS 4282 *Control of the obtrusive effects of outdoor lighting*
  + AS/NZS 1158 *Lighting for roads and public spaces*
* That the replacement products are unsafe or of poor quality. Even if a lighting product is carrying the Regulatory Compliance Mark, this is not a guarantee that the product meets all relevant safety requirements.
* That the products offer sub-optimal energy savings. Not all LEDs are the same and even the way that the efficiency data is quoted may not be consistent from product to product.
* That the replacement products will be incompatible with retained equipment, such as the fitting housing or dimmers or transformers used with halogen fittings. These issues could cause the LED to flicker or create other safety and performance issues. Some more information on compatibility issues specifically affecting halogen downlight replacements is provided [here](https://www.lightingcouncil.com.au/wp-content/uploads/2018/05/Replacing-MR16-Halogen-Lamps-with-LEDs.pdf).
* That automatic lighting control equipment is poorly specified or configured. Poor automatic controls can actually increase the energy consumption compared with manually controlled lighting.

### How can “retailer obligations schemes” affect my EEC lighting upgrade application?

In certain parts of Australia, the cost of a lighting upgrade can be affected by a “retailer obligation scheme”. These schemes are the:

* NSW Energy Savings Scheme
* Victorian Energy Upgrades Program
* SA Retailer Energy Efficiency Scheme
* ACT Energy Efficiency Improvement Scheme

Under the schemes, financial incentives are created that make it cheaper to complete a lighting upgrade, as well as some other kinds of energy efficiency projects. The incentive may appear as a discount or a rebate, or it may be built into the quoted price.

For an EEC project you must ensure that your project price does not allow for any financial incentives offered under these retailer obligations. You should ask your supplier about this. If you accept a quote that includes a discount, rebate or any other benefit from incentives based on a “retailer obligation scheme”, you may end up out of pocket for the value of the incentive.

This restriction has been applied because the Energy Efficient Communities Program aims to fund additional energy savings that would not happen in the ordinary course of events.

## Energy Audits

### What is an Energy Audit?

An energy audit can give you independent advice about how and where your facility is using energy, and how to prioritise opportunities to save energy use and costs.

### Do I need an energy audit before I can apply for a grant to replace equipment?

No. You can submit a grant application for any item of eligible expenditure - such as an energy efficient lighting upgrade, a split system air conditioning replacement, a new solar hot system or heat pump, or a PV system and batteries – without first completing an energy audit.

### What type of energy audit should I get?

Three types of Energy Audit are defined in the AS/NZS 3598 series:

* Type 1 – Basic Audit. A Type 1 audit is likely to be all that’s needed for most community groups with small energy budgets and limited funds to implement the findings of the audit.

A Type 1 audit compares the site’s energy performance and costs against industry benchmarks and quantifies low-cost energy savings opportunities using rules of thumb or accepted industry values. The audit also provides an overview of more expensive or more complex savings opportunities for further investigation.

* Type 2 – Detailed audit. A Type 2 audit might be warranted for community organisations with larger or more specialised facilities or that need a more detailed investigation to support a larger investment. A detailed energy audit that provides a comprehensive analysis of how your facility uses energy and prioritises the savings and the costs to implement.
* Type 3 – Precision subsystem audit. A type 3 audit typically involves in-depth onsite monitoring and analysis of a subsystem such as the HVAC or a production process. Few community organisations would need a Type 3 energy audit.

### How can I find an energy auditor?

There is no accreditation system for energy auditors in Australia so look for an audit provider with experience and qualifications covering the kinds of energy uses in your building and your sector. Specify to your potential provider that the audit must comply with AS/NZS 3598. Ask your auditor to disclose any conflicts of interest that could affect the audit, such as commercial interests in the products or services they recommend.

### If I receive a grant for an energy audit, can I apply for a further grant to implement the recommendations of the audit?

No. Applicants can only receive one grant per site under the EEC program.

You will need to secure other funding to implement the findings from your energy audit. However, if you are confident that replacing lighting or air conditioning is a high-priority for your site, you can apply for a grant that covers this expense as well as the cost of the energy audit, up to a maximum of $12,500 per site.

### Can my grant application cover an energy audit plus other eligible expenditure?

Yes, as long as all the expenditure is for the same site and you’re applying for no more than $12,500 total.

## What other resources can help community organisations to save energy?

You can find energy efficiency information at [energy.gov.au](https://www.energy.gov.au/business/small-medium-businesses/industries/social-and-community-services) that’s tailored for education facilities, sports clubs, or places of worship. You can also find general community sector energy efficiency info on the following websites:

<https://www.acoss.org.au/the-give-grid/>

<https://3eproject.org.au/> - for Cultural and Linguistically Diverse Communities

<http://www.magsq.com.au/cms/page.asp?ID=8055> – for museums and galleries