

HUME CITY COUNCIL

SOLAR POWER AND YOU

Installing solar at home can significantly reduce your household's environmental impact and help you save money on your electricity bills. Solar Victoria (solar.vic.gov.au) found that typical households can save up to \$890 per year on their electricity bills when they install solar panels.

What is solar and how does it work?

A solar photovoltaic (PV) system, also referred to as solar panels or solar power, generates renewable electricity by converting energy from the sun. The electricity generated by the solar PV system is delivered directly to your home.

Grid connection

A grid-connected solar PV system means that, if your system is producing more electricity than you need, excess electricity will be exported to the grid and the feed-in tariff will be credited to your bill. A feed-in tariff is the amount credited to your energy bill to fairly compensate people for the excess power they export to the electricity grid. For more information, visit energy.vic.gov.au/renewable-energy/victorian-feed-in-tariff

Your house will draw electricity from the grid at night and when your solar PV system cannot generate enough electricity to meet your consumption.

Grid-connected solar PV systems are currently the most practical and affordable option for home solar. In the city, grid connection is recommended even if you decide to install batteries. Off-grid battery systems are more expensive and require regular maintenance. They are usually only used in remote areas.

Is solar right for you?

Your patterns of electricity use

Installing solar PV systems provide most financial benefit to households that use electricity during the middle of the day, when the most solar energy is generated.

The solar feed-in tariff is generally less than the cost of purchasing electricity from your retailer, so it is better financially to create solar electricity when you need to use it. If you're not home much during the day, you may also be able to shift electricity use to during the day by using timers on appliances (such as washing machines, dishwashers, etc). Solar can still be financially worthwhile for households that are not home during the day.

Trees, shading and orientation

Solar PV systems should ideally be in full sun for most of the day. South-facing roofs are usually not suitable for solar as they don't get as much sun. If there is significant shading on your east-, north- and west-facing roof aspects, installing a solar PV system may not always be feasible.

Please note, existing trees in public areas cannot be pruned or removed for the purpose of solar panels. It is illegal to remove, prune or damage trees in public areas including nature strips, and penalties do apply.

Removing your own trees for improved solar access requires careful consideration. Trees provide many environmental benefits and shade from trees can reduce indoor temperatures by 6–12°C in summer – helping to reduce the amount of energy required to cool your home. Council encourages you to get advice from reputable solar installers and to consider your options.



Discounts and rebates

The Victorian Solar Homes Program is offering generous rebates for solar PV systems. Interest-free loans are available up to the same amount as the rebate. For some systems with standard installation requirements, no upfront cost will be required from households eligible for the rebate and loan. Find out more at solar.vic.gov.au

The Australian Government's Small-Scale Renewable Energy Scheme also applies a discount to the purchase price of solar systems based on the amount of energy they are expected to produce. Installers factor this discount into their quotes.

Ready to go solar?

To make it even easier for Hume households to consider installing solar, Council has partnered with the Yarra Energy Foundation (YEF) to deliver the Hume Household Solar Roll-out. YEF have gone through a competitive process to appoint an accredited solar provider, Green Home Green Planet, who are offering competitive good quality solar installations for Hume residents. See humesolarprogram.org.au

As with any major purchase, you may want to obtain more than one quote before proceeding. Your solar provider must be accredited with the Clean Energy Council to access government discounts and support. Find out more at cleanenergycouncil.org.au/find-an-installer

Choose your system size

Solar companies can help you to determine what size solar PV system you need. In general, it makes sense to install the largest system that your budget allows. Each 1kW of solar installation in Melbourne averages over the year around 3.6kWh production per day (so a 4kW system would average 14.4kWh per day, with production higher in summer and lower in winter). Check your electricity bill to see your household's average kWh usage per day. Solar PV systems of 4kW capacity are a popular option.

Making your home more energy efficient will also reduce your energy bills and may reduce the size of the solar PV systems that you select. Council provides information on energy efficiency actions that you can do at hume.vic.gov.au/energyefficiency

Green Home Green Planet also offer lighting upgrades to energy efficient LED lights. These are subsidised through the Victorian Energy Saver program. Register your interest at humesolarprogram.org.au to find out more.

Contact your electricity retailer

You should contact your electricity retailer and distributor before commencing your solar PV system installation. The Clean Energy Council's *Guide to Installing Solar for Households* contains a comprehensive list of questions to ask your electricity retailer and distributor (see page 9), including querying any changes to your peak/off peak electricity rates, any required smart meter upgrades and obtaining approval for grid connection. Visit cleanenergycouncil.org.au/consumers/buying-solar

For more information, contact the Sustainable Environment department on 9205 2200.

