

# Darebin Solar Saver Special Charge Program

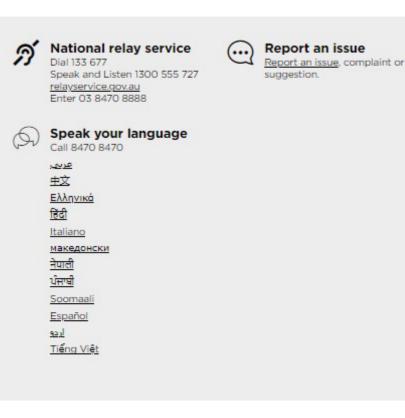
**Homeowners** 

Thank you for your interest in Darebin Council's Solar Saver Special Charge Program!

This document answers the most common questions that residents have about our program. If you are interested in Council's Solar Saver Special Charge Program, please read through this document carefully so you understand all the steps and processes involved.

If you still have questions, please contact the Solar Saver team from Monday to Friday, 9am-5.00pm.

Phone:	03 8470 8888
Email:	solar@darebin.vic.gov.au
Web:	<u>darebin.vic.gov.au</u>





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# Glossary

**Distributor** = the company that distributes energy and maintains the powerlines and poles that carry your electricity. There are three in Darebin: AusNet, Jemena and CitiPower.

**FIT = Feed-In Tariff =** the money you are paid when you feed excess energy back into the grid.

**Inverter** = the machine that changes the energy collected by your panels into energy you can use in your house.

kW(hr) = kilowatt (hour) = unit of measure for electricity use (per hour).

**NMI** = National Meter Identifier = the unique number of your home or business for electricity billing. You can find your NMI on any electricity bill.

**Pitch** = angle (of your roof) – this affects your solar panels because they need to be at a certain angle to the sun to be most efficient (can be adjusted using special mounts).

**Solar PV =** (Solar) Photo Voltaic (Panels) = Solar Panels.

**Retailer =** the company that sells you electricity (eg Origin, AGL, TruEnergy, Powershop, Energy Australia etc).

**Smart Meter** = the device that records your electricity use. This is how your power company (retailer) knows how much to charge you. It also tells them how much energy you are putting back into the grid.

**Special Charge Scheme =** this allows Council to buy your solar system upfront and for you to pay back the cost over time. Council will send you a special charge notice, which is separate from, but similar to your rates notice. You need to pay the amount on your special charge notice by the due date. You can elect to make quarterly, or annual payments over the period of the loan, which is 10 years. You can also pay out the loan in full at any time.



# General information on the Solar Saver program

# What are the differences between the Special Charge Program and Bulk Buy Program?

Special Charge	Bulk Buy
Open to eligible Darebin homeowners and renters who meet specific criteria. Please note that there are limited positions for this program.	All Darebin homeowners, renters, organisations, and businesses are eligible.
Solar systems take longer to be installed via the Special Charge program as a Special Charge needs to be raised to cover the cost of your system. This process is done in batches and can take between $3 - 9$ months.	Installation is faster. Once you have arranged with the supplier you can get your system installed.
You are eligible for the Small-scale Technology Certificate (STC), which is applied at the point of sale.	You are eligible for the Small-scale Technology Certificate (STC), which is applied at the point of sale.
You may be eligible for a State Government rebate (\$1,400 <sup>1</sup> ) through Solar Victoria.	You may be eligible for a State Government rebate (\$1,400 <sup>1</sup> ) AND an interest free Ioan (\$1,400 <sup>1</sup> ) through Solar Victoria.
You don't pay GST.	Includes GST.
Council pays the upfront cost of the system, which is capped at \$10,000. You pay it back over 10 years, interest free. The cap applies after all rebates and excludes GST.	You pay the upfront cost of the system including GST.
There is a 5% processing fee which has been introduced to recover a portion of the costs of delivering the Solar Saver program, enabling us to offer solar to more Darebin residents	
A range of system sizes are available. Batteries are not included	A range of system sizes are available.
	Batteries are not included You have access to a range of other products and
Choices are limited to set packages at set prices. Batteries are not included.	brands. Basic systems have fixed prices, any additions will need to be quoted. Batteries are not included <sup>2</sup>

<sup>1</sup> Solar Victoria rebates are subject to change.

<sup>2</sup> Batteries can be quoted by the installer and installed during the PV Solar installation. Please note that they are NOT part of



the Solar Saver Program. Battery components have not gone through Council's procurement process and will NOT be audited.

# **Benefits of installing solar through Darebin Council**

The Solar Saver Special Charge program aims to help Darebin households who may find it difficult to install solar power. Here are some of the program's benefits:

- 1. <u>We cover the upfront cost</u>
  - We pay the upfront cost (\$10,000 cap) of your solar system and installation fees. You then pay it back in quarterly repayments over 10 years through a special charge notice, interest free. The amount you save on your bill will be higher than your quarterly rates repayment<sup>3</sup>. A 5% processing fee is also included in your Special Charge. This fee recovers a portion of the costs of delivering the Solar Saver program, enabling us to offer solar to more Darebin residents.
  - You are saving on your power bills as you pay back for the system, leaving you better off overall.
- 2. <u>We have a trusted solar installer</u>
  - Council has carried out a competitive tendering process to find reliable providers who offer quality and value for money.
  - We guarantee 10-year product and installation warranties. The solar panels come with a 25-year performance warranty.
  - The installers use best-practice safety measures.
  - The installers are trustworthy and will not sell you anything you don't need.
  - For our Solar Saver Special Charge customers, the installers will perform a site visit first to ensure the right system is designed for your home.
- 3. We have audited the quality of the systems
  - You don't need to understand all the technical details to choose the right product.
  - We ensure high quality and efficiency standards for the products in the Solar Saver program, and the installers will help you choose the right panel system size for your roof and for your needs.
- 4. <u>We have audited the price of the systems</u>
  - Council's tendering process ensures good value for money for our community.
  - We will give you an estimate of how much you could save. Most households save between \$100 and \$1,400 a year, even after making repayments. The more electric appliances you have the greater savings you will enjoy.
  - If your savings are low, we will inform you so you can make the best choice for your needs.

### How do we choose the installer and equipment?

- Price
- Quality
- Previous experience includes company and key personnel
- Project Management Capability



Capacity to deliver

<sup>3</sup> These numbers are based on estimate and Council does not ensure savings.

- Customer Service
- Social and environmental policies
- Local presence

### Can I get the Federal Government rebate?

Small-scale Technology Certificate (STC) discounts are available to all and are applied for by the installer. You will be able to see this discount on your quote.

### Can I also get the State Government rebate?

All Victorians can apply for the State Government Solar Homes rebate as a point-of-sale reduction to the total cost of your solar system.

To check your eligibility or for more information, please visit <u>solar.vic.gov.au.</u>

Solar panel rebates are available up to \$1,400 (as of September 2024).

Please note that this changes from time to time. Keep up to date by visiting solar.vic.gov.au.

# How do I get solar through the Special Charge Program?

### Who can apply?

#### You can apply if:

- Your household meets our eligibility criteria see below.
- Your property is in Darebin.
- You are the property owner OR you are a renter but have permission from the owner.
- You are up to date with your Darebin Council Rates Payments and do not have an existing Solar Saver Special Charge.

#### You must also meet one of the following criteria:

- You have a Health Care Card, Pensioner Concession Card, Federal Concession Card or Veterans' Affairs Gold Card
- Your combined property owner(s)'s income is less than \$160,000 (based on the last 2 year's Tax notice of assessment)
- You're receiving JobSeeker payments through Centrelink



- You are Aboriginal or Torres Strait Islander
- You're a recently resettled asylum seeker or refugee (in the last 10 years)
- You live with a disability
- You are an older person reliant on Commonwealth support
- You are an International student.

Please note that we will request evidence for your answers. This ensures we are providing maximum access for our priority groups.

### How do I apply?

- Register on our website darebin.vic.gov.au/solar or over the phone 8470 8888
- Participation is voluntary and obligation-free. You need to register if you want to participate in the Special Charge Program.
- By registering, you will *probably* be offered a quotation for a solar system. However Council **cannot guarantee** your solar panel installation through our program as this depends on the suitability of your property and availability.
- You can withdraw at any time before your system is installed. If you withdraw 5 days before the date of install you will be charged a call out fee.

### What are my next steps?

- Step 1. **Register:** Register your interest in the Special Charge Program online or over the phone. You must provide photos of your switchboard, smart meter and a copy of a recent electricity bill.
- Step 2. Site visit: After you register, we will pass your details to our solar installer who will arrange a site visit and give you a quotation. The site visit is to ensure your property is suitable for a solar installation. Be sure to inform the solar company of your preferences regarding system size, roof location, or access issues. If your property is within a Heritage Overlay, and the proposed solar panels are likely to be visible from the street or public park, then you may need to apply for a Planning permit.
- Step 3. Quotation: Your quotation is obligation-free, and can only allow specified products. If you would like other products, you will need to withdraw from the Special Charge program and apply through the Bulk buy program. For the Bulk Buy program you will need to pay for your solar install upfront. If you decide to not take up the Special Charge Program, please let us know and we will withdraw your request. It can take up to 2 weeks to receive your quote.
- Step 4. **Signing the agreement with Council:** If you accept the quotation, Council will send you a Home Owner agreement based on that quote. If you choose to accept the offer, you will sign this agreement with Council to pay off the system through the Special Charge



scheme.

- Step 5. **Special Charge process:** Council needs to raise a Special Charge and have it approved. Once approved, The installer will contact you to organize your installation. This whole process can take up between 3 months to 9 months.
- Step 6. **Installation:** The supplier will contact you to arrange a suitable time to install your system.
- Step 7. **Post installation documentation:** Once your system has been installed, the Service Provider will provide you with documentation on warranties, electrical certifications, manuals and connection diagrams. This can take up to 3 weeks.
- Step 8. **Grid connection:** After the installation, the solar company will contact your Electricity Distributor (CitiPower, Jemena or AusNet) to submit the request for your solar system to be connected to the grid. Your retailer should then contact you to finalise this process, which can take between four to eight weeks. If you don't hear from them, please contact them directly to ensure your grid connection is completed. If this step doesn't happen you will miss out on getting paid for any excess solar energy you export back to the grid.
- Step 9. Repayments: Your details are given to Council's Revenue Services team, who will collect your repayments. They will send out a special charge notice quarterly, around the time you receive your rates notice. You can elect to pay off your Solar Saver Special Charge in quarterly or annual instalments. You can also pay out your loan in full at any time.
- Step 10. Make the most of it! We will stay in touch to make sure you know how to get the most out of your system. If there are any problems with your system, please in the first instance contact the supplier. If they are not able to resolve your issue, please feel free to contact us.

### What if I change my mind?

Participation in our Special Charge Solar Saver program is completely voluntary - there is no obligation for you to go ahead with a solar installation.

If you need to withdraw for any reason, you can do so, even after you have agreed to the quote or signed the Home Owner agreement with Council. If your system has not yet been installed, you can simply inform us in writing and we will withdraw you from the Special Charge Program.

If you change your mind within 5 days of the install date – you may be charged a call out fee.

### When will my system be installed?

The process from registration to installation may take between 3 to 12 months.

How long the entire process takes will depend on when you signed up, which stage the project is at, and how much demand there is. Your solar installer will keep you informed of your progress and will



work with you to ensure that the installation process runs smoothly when it starts.

Usually, the installation can be completed in a single day, or two days for larger systems. After installation, it may take 4-8 weeks for your retailer to connect your system to the grid. The installer will submit this request on your behalf once your system has been installed. Your retailer should then contact you to finalise this process. If you don't hear from them, please contact them to ensure your grid connection is completed. If this step doesn't happen you will miss out on getting paid for any excess solar energy you export back to the grid.

## Why does it take so long to get a Solar Saver Special Charge Program installation?

The Special Charge Program requires a Special Charge to be raised. There are several formal processes as per the Local Government Act to do this. This process can take up to several months.

### Will I need a permit? What about heritage status?

You do not need a planning permit to install solar unless you are in a heritage area or your property is a listed heritage building. Even if you are in a heritage area, you usually won't need a permit if your panels are not visible from the street or a public park. Generally, only about 5-10% of Darebin applicants need a permit. You will need to submit a planning permit if you reside in a heritage overlay area and want to proceed with an installation. Go to www.darebin.vic.gov.au/planning or contact Darebin's Planning team on 8470 8850 if you require assistance.

### What happens if I sell my house?

The Special Charge is applied to the property and not the property owner. If you sell your property, the remaining amount is attached as a Section 32 to the title of the property. When your property is sold, any remaining repayments to Council will be taken out of the proceeds of the sale, like any other rates or charges you owe to Council.

You must inform Council if you have sold your property and have installed Solar through the Special Charge scheme.

# Details of your solar installation

### What size solar system will I need?

The solar installer will talk to you about suitable systems that fit on your roof and best meet your needs.



Currently we offer systems between 2.64kW to 10.56kW which suit most homes.

### What are the technical details of these systems?

These change from time to time, please reach out to the Solar Saver team to know more.

### Who will install the systems?

This changes from time to time, please reach out to the Solar Saver team to know more.

### Where are the panels and inverters made?

Council's tender specifications ensures that both panels and inverters are affordable and of high quality. Panels are sourced from Tier 1 manufacturers (the highest level in the Bloomberg ranking system), and inverters must meet the highest efficiency standards.

### Warranty: How long will it last?

For all current installs – the following products will be used and warranties apply (if you had your solar pv system installed before June 2023 – then you will have different products and different warranties). Please check the documentation provided by your installer:

#### Solar panels:

• 25 Year Product Warranty

Trina Solar warrants that PV Modules when they are installed on the rooftops shall be free from defects in materials and workmanship under normal application, use and service conditions during a period of 25 years.

• 30 Year Performance Warranty

Trina Solar further warrants that if, within 30 years after the Warranty Start Date, the First-year degradation 1% and annual degradation at 0.4% after that

#### **Additional Benefits**

- Designed to last. Dual Glass Design means increased durability and less prone to micro-cracks compared to mono facial designs.
- Better Operation. P Type panel with wider operating range compared to previous generation of panels 40°C to +85°C. Will keep producing in the depths of winter or the peak of summer.

#### Inverter:

10-year product warranty
 Sungrow warrants that the Inverters will be free from defects in materials and
 workmanship for a period of ten years from the date of installation of the Inverter.

#### Mounting gear:



• **10 year limited Product Warranty, 5 year limited Finish Warranty** Clenergy Technology Co., Ltd. warrants to the original purchaser of product(s) that it manufactures at the original installation site that the Product shall be free from defects in material and workmanship for a period of ten years, except for the anodised finish, which finish shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of five years.

#### Installation:

#### • 10-year workmanship Warranty

EnviroGroup offers a 10-year workmanship installation warranty for its grid connected PV systems. EnviroGroup is not responsible for grid/retailer related issues.

This warranty does not include site internet or WiFi connection to devices or software. A servicing fee will apply for fixing internet connectivity issues including faulty modem, connections or reset passwords etc.

In the event of genuine installation failure or component failure, EnviroGroup will attend to the service as soon as practicable. EnviroGroup and the Customer are subject to product supplier exclusions. We do not provide after-hours emergency hours service capability.

The workmanship (10 yrs.) or 'operation and performance' (5 yrs.) warranties do not include non-essential servicing, panel cleaning or external impacts such as damage, unauthorised alterations, or changes to installation, warranty work & environmental conditions. If the callout does not relate to installation failure or component failure, a service fee may be charged.<sup>4</sup>

If you want to make a warranty claim you must not alter or remove any equipment installed as part of your Solar Saver installation until you have contacted your installer and provided them with an opportunity to inspect the equipment and respond to your complaint. Altering and removing equipment prior to doing this will void your warranty.

If you feel your warranty claim is not resolved with your installer after they have inspected equipment and responded to you, please inform us.

### What about insurance?

We recommend that you check with your insurance provider to ensure that your panels are insured in case something happens that is not within the terms of the warranty, especially while you are still paying them back.

Many insurance providers consider permanent fixtures like solar panels to be part of your building, so they include them in their home insurance policies. But you should always check the policy documents just to be sure.



<sup>4</sup> For more information on the Solar Panel Product Warranty, Solar Panel Performance Warranty and the Inverter Product Warranty please see the manufacturers data sheet on the last page of your quote. For more information on the Mounting Gear Product Warranty please contact your Solar Installer. For more information on EnviroGroup's Workmanship Warranty please see the Terms and Conditions on your Quote or contact your Solar Installer for more information.

### How much will it cost?

Remember that if you participate in the Special Charge Program, Council pays the upfront cost (\$10,000 cap) and you pay it back over 10 years (or sooner if you prefer), interest free. A 5% processing fee is also included in your Special Charge amount. This fee recovers a portion of the costs of delivering the Solar Saver program, enabling us to offer solar to more Darebin residents.

From 1/10/24 all solar installations require that a Smart Consumption/Energy meter will need to be installed in your switchboard with your solar switch. This smart consumption meter manages the electricity you export back to the grid (if export limits apply) and monitors the solar generated electricity you consume in your home. Installation of the Smart Consumption meter costs ~ \$400. This cost is included in your special charge amount.

The only upfront expense for most households is the meter reconfiguration cost which your energy retailer will charge you. This process enables you to be paid for the electricity you send back to the grid. The fee is usually between \$50-150. It will be added to your next electricity bill after connection to the grid is finalised. Follow up with your retailer to make sure this happens and ask them for your actual fee.

The exact cost of your solar system depends on:

- The size of your system
- The type of roof and property you have. There are extra charges for:
  - o Double storey properties
  - Steep roofs
  - Properties needing extra equipment or specific access methods such as scaffolding, scissor lifts, etc.
  - o Tilt frames for flat roofs and brackets for tiled roofs
  - Split arrays when panels cannot all fit on one section of the roof and must be split across more than one
  - $\circ \quad \text{Tiled roofs} \\$
  - Unconventional roof types
  - o Optimisers if your roof has some shading or the configuration is split
  - Three-phase power.
- If your switchboard needs to be upgraded or replaced to safely accommodate a solar system, this can cost an additional \$1400 \$2000 (cost is higher if you have ceramic switchboard). You can arrange for this yourself, or you can include it in your Special Charge.
  - 0



- Potential additional costs outside of the Solar Program include:
  - Installing a smart meter if you don't have one. You will need to arrange this with your grid distributor(Jemena, Ausnet or CitiPower). If you don't do this – you won't be able to export your excess solar electricity to the grid and be paid for it.
  - Consolidating your meters if you have two or more of them. This could cost you around \$500. If you are in this situation, and the installer is required to attend a truck appointment (if it's a physical consolidation), this attendance cost only, can be added to your Special Charge.
- If your house needs to be rewired to safely install solar, you will need to pay for this. You should ask the electrician for an assessment and a quote before installation as rewiring can be very costly.
- If your property needs repairs or asbestos removal to accommodate solar, you will need to arrange and pay for this yourself.
- If your roof needs to be fixed to install solar safely, you will need to pay for this. You should a ask a qualified roofer for an assessment and quote before installation.
- If your property has a tile roof, you must have at least 20-30 spare tiles available on the day of installation. The installer will use these tiles to replace any damaged tiles during the installation. If you don't have spare tiles, and do not know where to get them, talk to your installer.

The solar provider will give you a quotation after they visit and assess your property. They will check if any of the above upgrades apply to your property and if required, they will explain them to you and it will also be reflected in your quote.

### What is the 5% processing fee?

As part of the 24 June 2024 resolution Darebin Council introduced a 5% processing fee for Solar Saver Special Charge customers. This processing fee is equal to 5% of the value of the product/s you (if you are a Solar Saver Special Charge customer) are having installed through the Special Charge scheme. It will be repaid as part of the total Solar Saver interest free Special Charge amount. Repayments will be made over 10 years, in annual, or quarterly instalments. The Special Charge can also be paid out as a lump sum at any time within the 10 years. This small fee will recover some of the costs of delivering the Solar Saver Special Charge program, helping us offer this program to more Darebin residents.

### How do I pay my system off over time?

Council pays the upfront cost and you pay your system off over time. After your system is installed, Council will send you a quarterly Special Charge notice, separate to your quarterly rates notice. You pay off your system via this charge over 10 years, or earlier if you wish. You won't be charged interest, and the savings you make on your electricity bill will usually more than cover



these Special Charge payments.

### How much money will I save?

Your quote will include an estimate of the savings you will enjoy from your system. Most people will save between \$100 - \$1,400 per year. The exact amount will be different for each participant and depends on:

- The size of the solar panel system you choose larger systems usually result in bigger savings.
- How many electric appliances you have and how much electricity you use and what time of day you use it. You save more when you use the power that your system makes during the day, instead of exporting it to the grid.
- How much you pay for your electricity. Use the Energy Compare website to ensure you are on the best rates by visiting www.compare.energy.vic.gov.au.
- Your feed-in tariff. This is the price you are paid when you export power to the grid. The minimum flat rate feed-in-tariff (FiT) is 3.9c/kWh. Your electricity retailer needs to organise for you to be paid this feed in tariff. The solar installer passes the relevant paperwork onto them at the time of installation. Your retailer should then contact you. If you haven't heard from them, please follow up to ensure you will not miss out on being paid for the solar power you export back to the grid.

#### Important note on savings:

Your power bill will not show you how much money you have saved by using your own solar power, it only shows how much electricity you exported and sold back to the grid, plus how much you bought from the grid. This means that most of your savings are not seen on your bill because you simply use the power from your solar system in your house while you are generating it. This reduces how much electricity you need to buy in from the grid. You should see a significant drop in your electricity bills. Your inverter records how much power you produce overall and will give you a live reading of your current power output.

Producing your own solar power is like growing your own veggies. It means you need to buy less groceries, and you could sell the extra. But your groceries bill will only show how much you sold back to the grocer, not how many veggies you grew and ate yourself.

### What is the feed-in-tariff? What will I see on my bills?

When your solar system makes more electricity than you are using in your home, excess power may be able to be exported to the grid and you can get credits on your bill for this exported energy.

From November 2024 you need to have internet connection to ensure the maximum amount of your excess solar can be exported. If you don't have internet connection the following export limits will



apply (at any point in time) for these Electricity Distributors: Jemena: 0.5kW; Ausnet 1.5kW; Citipower: 0kW (no export allowed); United: 0kW (no export allowed).

It is rare for people to export so much that their bill goes below zero, but in theory it is possible, and your retailer would have to pay you the difference (or probably give you a credit for a future bill).

How much you are credited for the electricity you export to the grid is called the 'feed-in-tariff' (FiT). To find out the current feed-in-tariff rates, see: <u>Minimum feed-in tariff | Essential Services</u> <u>Commission</u> Different electricity retailers can offer different feed-in-tariff rates. Use the Energy Compare website to ensure you are on the best rates by visiting <u>www.compare.energy.vic.gov.au</u>.

The power made by your solar system will always be used in your home before it is exported to the grid. This is always the best business case and saves you the most money. If you don't see much export, do not worry, this means you are using most of the energy in your home.

Even with internet connection, your Electricity Distributor at times may limit your ability to export electricity to the grid, if there is already excess energy in the grid. Your installer will handle your network approval and will advise you if limits are likely to apply.

# **General information about solar power**

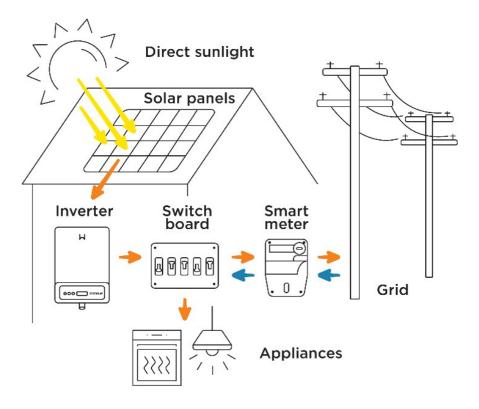
### Why go solar?

- By making your own solar power, you will save on your electricity bills.
- By installing clean, renewable energy, you help keep our air clean and our climate safe.

### How does solar power work?

- Solar panels turn energy from sunlight into direct current (DC) electricity, and the inverter then changes the DC electricity into alternating current (AC), which is used in your house or exported to the grid.
- Whenever you make more solar power than you use at home, the balance is exported (sold) to the grid.
- Your smart meter records electricity that is exported and imported to and from the grid, and you get credited on your bill for the electricity you export to the grid.
- The amount you are paid for your electricity exports is called the *feed-in tariff*.
- Usually, you pay more for what you import than what you export. This means that the more your daily power usage happens during the day (when your solar is producing electricity), the more financial benefit you will get from solar.





## How do I get the most benefit from my system?

Getting the most benefit out of your solar system isn't hard work. It just needs small behavioural changes.

The power your system makes during the day is best used during the day to ensure the greatest \$ savings on your bill.

Here are some tips to help you get the most benefit from your system:

- Charge mobiles, laptops and other devices during daylight hours and unplug them in the evening
- Turn on or set a timer for your dishwasher, washing machine and dryer to run during the day (most have a delayed start function of about 2 hours). Dishwashers and washing machines can be packed the night before.
- Use your split system to pre-heat and cool your home during daylight hours using inbuilt timers and switch it off when the sun goes down. Remember to set to temperatures that don't make your appliances work too hard. For cooling set it to 26 and for heating set it to 20.
- Install a heat pump hot water system and set it on a timer to come on between 10 am
  2 pm soaking up your excess solar
- Use a slow cooker



- Look for appliances with rechargeable batteries
- Consider upgrading to efficient electrical appliances when your old ones stop working
- Switch from gas appliances to electric appliances when you can. Darebin's Solar Saver program has expanded to help you upgrade to heat pump hot water systems and split systems.

Visit www.darebin.vic.gov.au/solar for more information

For more tips, visit the links below:

https://www.solar.vic.gov.au/how-get-most-out-solar

https://www.solar.vic.gov.au/helpful-hints-your-solar-pv-system

SEC - How to go electric (secvictoria.com.au)

### Is my roof suitable for solar? Which orientation is best?

When you apply, the solar provider will first do a desktop assessment using satellite imagery to see if solar is suitable for your roof.

While due North generally gives you the maximum solar energy production, West and East facing solar panels are also good and can offer very good economic returns. Here are some tips:

- **North-facing panels** are the most efficient installation and have maximum generation between 10am and 2pm.
- **East-facing panels** are most efficient for those at home during morning hours and have maximum generation between 9am and 1pm.
- West-facing panels are most efficient for those at home during afternoon hours and have maximum generation between 12pm and 4pm. West facing solar panels can pay you a higher feed-in tariff if you are on a time varying feed-in tariff rate.

The angle of your solar panels will be the same as your roof (unless your roof is flat). The optimum angle is 20–25 degrees, but a little more or less is not a problem. If you have a flat roof, an adjustable tilt frame can be used to bring the panels up to the optimal angle.

### Should I switch my appliances to electric instead of gas?

In short, yes. For homes with gas, your solar cannot offset your gas consumption. Changing from gas to electricity is an example of fuel switching.

In the future, choosing efficient all-electric appliances instead of gas-fired hot water, heating, and cooking is a great idea. The economics of efficient solar all-electric homes means there are no gas bills to pay, and you're making the most of your solar system. Some of your efficient electric appliances like heat pump hot water systems can also act as a thermal battery for you, storing excess solar during the day and making this energy available as hot water 24 hours a day. To enable this you need to set your heat pump hot water timer to come on between 10 am - 2 pm



each day, or the time you are generally exporting most solar.

To read more on this, please visit: <u>https://environmentvictoria.org.au/our-</u> <u>campaigns/safe-</u> <u>climate/getting-off-gas-what-you-can-do-at-home/</u>

### Will there be a lot of changes to my home?

No. Solar PV systems are usually installed with minimal changes to the house. The frames for the solar panels are built on your existing roof, and the cables are put inside the roof and walls when possible. On a flat roof, a special kind of mounting called a tilt-frame is needed, which will add to the cost but will not impact your roof.

For a tiled roof, some of the tiles will be removed, brackets attached to the rafters in the roof, and then the tiles will be put back. Please have some spare roof tiles available during installation because old tiles can easily break during installation. The recommendation is to buy 20-30 roof tiles before installation day. For a tin roof it is easier to install solar, because the panels are fixed directly on the roof.

Every roof material is fine for solar, except for slate. Because slate is so fragile, most installers won't work on it.

### Are there any reasons why I cannot get solar?

Yes, unfortunately solar does not work for all properties. Some of the possible problems are:

- If your roof does not have enough bright open space to fit our smallest solar system, then we cannot install a system for you.
- If your house wiring is not up to standard, you will need to have this fixed before solar can be installed.
- If your switchboard is not up to standard to accommodate solar power safely this will need to be changed before the installation can continue. This can be expensive and you may need to pay for it (but not up-front), so you need to decide if it is worth the benefit and price.
- If asbestos is in your house and/or your switchboard, the installer may not carry out the necessary works. You will need to pay for asbestos removal before installation.
- If you are in a heritage area, and if your system can be seen from the street or a public park, you will need to apply for a planning permit. If you do not get the permit, we cannot continue with the installation.
- If your roof is made from decramastic roof sheets, the installer may not be able to do the necessary works. Decramastic roof sheets is a kind of pressed metal roof sheeting that looks like roof tiles.
- If your roof is very difficult to access safely then the installer may not be able to do the necessary works.



• If we think that your financial benefits may be very low, we will let you know so you can make a better decision for yourself.

### Can my smart meter be used with solar power?

Yes, all smart meters can be used with rooftop solar systems. Smart meters track how much power you use from the electricity grid (import) and how much is sent back to the grid from your panels (export).

When your solar system is installed, your Electricity Distributor Network (CitiPower, Jemena or AusNet) will reprogram your meter so that the smart meter knows you have a solar system. There will be a small, one-off fee for this service – usually between \$50-100, which will be added to your next electricity bill. Your electricity provider will contact you to organise this smart meter reprograming, or meter reconfiguration. If you haven't heard from them, please contact them to ensure you don't miss out on being paid for the solar power you send back to the grid. If you would like to know more about this fee, please talk to us.

If you don't have a smart meter yet, you will need to get this before the solar system can be installed.

### What about batteries?

Many people are interested in batteries; but batteries are not yet as financially beneficial as solar panels alone. For this reason, Council recommends that you install solar power now, so you can start getting the benefits, instead of waiting for battery prices to become lower.

Batteries are not included in the Program, but if you choose to buy your own separately, the solar systems that are available through our program allow for batteries to be retrofitted. To find out more about batteries, visit <u>https://www.solar.vic.gov.au/solar-battery-buyers-guide</u>.

Efficient electric appliances like heat pump hot water systems can also act as a thermal battery for you, storing excess solar during the day and making this energy available as hot water 24 hours a day. To enable this you need to set your heat pump hot water timer to come on between 10 am - 2 pm each day, or the time you are generally exporting most solar.

If your house is well sealed and insulated you can also use efficient reverse cycle air conditioners (split systems) to soak up excess solar during the day and pre-heat, or pre-cool your house for you.