

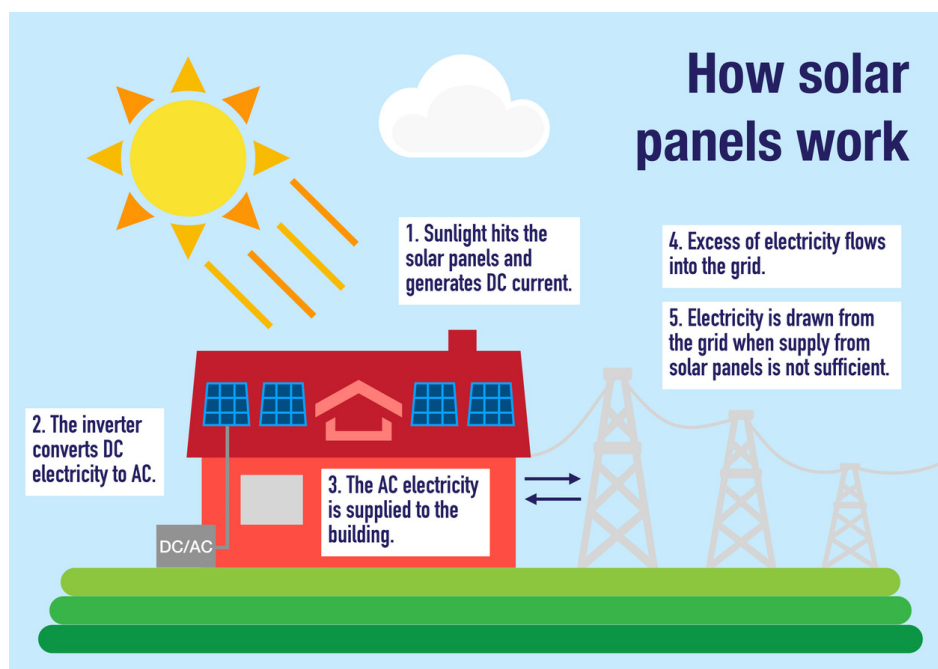
Fact Sheet: SOLAR POWER

Solar power. We know that panels on our roof convert our glorious sunshine into power for our homes, but how does it work? Will they last long enough to be worthwhile? Will they really help you save money? In our sunny corner of WA solar is a great way to reduce emissions and keep your bills down - read on to find out how!

5 things to know about solar power

How do solar panels work?

Our sun releases tiny energy packets called photons, Every hour, enough photons impact our planet to generate enough solar energy to theoretically satisfy global energy needs for an entire year. These energy packets are transformed into DC current via photovoltaic (PV) roof panels. The DC current is converted to AC via an inverter so it can be used by household appliances.



How does solar energy save me money?

With solar, you create your own electricity independently. Your panels convert sunshine to power, and you use that to power your home. You only pay for electricity that you draw from the grid, so anything over and above the power you harness from the sun. And if you produce more power from your panels than you actually need, you can sell it back to the grid. The Distributed Energy Buyback Scheme (DEBS) offers between 2.5 and 10 cents per kWh.

Is it worth it if we're not home during the day?

Solar panels only generate power during the daytime, but setting a timer on appliances such as your washing machine, dryer or dishwasher to run them at around midday means you use that solar power even when you're out. Fridges and freezers are always on standby, so your panels can power those those all day long. For an extra solar boost consider installing batteries to store the power so you can use it after dark.

Can solar panels help with charging my car?

Absolutely! The panels convert sunshine to power that goes into your home network - which means you can also plug in your electric car. The ACT will phase out the combustion engine by 2035, so planning a system to charge your vehicle at home makes sense.

How long will my solar panels last?

Generally speaking, solar panels have a lifespan of around 25 years. As long as you keep your solar panels clean and free of debris, they should last a long time. Gradually, tiny fractures (microcracks) develop in the silicon cells and performance will decline. But recent National Renewable Energy Laboratory (NREL) data shows that modern solar panels have a degradation rate of roughly 0.5% per year, so after 20 years of use, a solar panel sold today would be capable of producing roughly 90% of the electricity it produced when it was new.



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