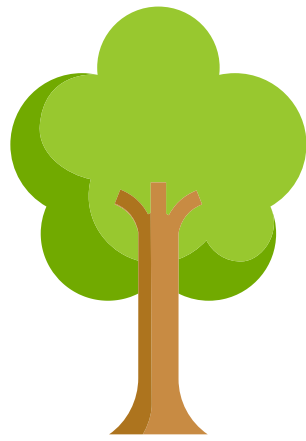


BENEFITS OF SOLAR



environment

- **Clean, renewable energy**

Solar power is a form of renewable energy, meaning it will never run out. The sun generates enough energy in one hour to power the whole planet for a year.

- **Reduce air pollution**

The air we breathe can help or hinder our health and wellbeing. Electricity generation from burning coal or fossil gas generates not only carbon dioxide, the major greenhouse gas, but also other pollutants such as sulphur dioxide, nitrogen oxides, particulates and carcinogens. Using gas leads to methane emissions from gas production and leaky pipes.

- **Use less water**

Water is one of our most precious natural resources. We live on the driest continent on the planet, and we run the risk of running out of fresh water in the future. Coal-fired power stations use thousands of litres of water a day. Water is used for cooling generators, processing and refining fuel and transporting fuel through pipes. Generating power through solar panels, however, uses no water whatsoever. The only water needed is rainwater to naturally clean the panels when they get a bit grubby!

- **Help to slow climate change**

The release of toxic gases into the atmosphere, such as carbon dioxide, methane and nitrous oxide, doesn't just contribute to air pollution, but also contributes to the enhanced greenhouse effect. While the greenhouse effect is a natural process that warms the Earth's surface to a liveable temperature, human activities, such as the burning of fossil fuels, have increased the amount of greenhouse gases in our atmosphere. This has led to the "enhanced greenhouse effect", which is warming our earth faster than ever before. In recent years, this has been linked to a number of catastrophic weather events, such as flooding, cyclones, storms, extreme heat and drought. Generating electricity from solar panels produces no greenhouse gases whatsoever. With solar energy powering a home or business, there is no burning of fuel and no emissions from energy production.

- **Reduce your household's carbon footprint**

Solar energy is one of the cleanest sources of energy, and it's an extremely effective way of making your household more efficient and sustainable. With even a small system installed on your home, you can help reduce your household's carbon footprint and contribute personally to the Australian Renewable Energy Target. For example; the installation of a 6.6kW solar system will reduce greenhouse emissions by over 250 tonnes in its lifetime (Victoria, Australia). Panels on your roof help reduce carbon emissions and bring down our collective dependence on fossil fuels. By installing solar, you're not only reducing your carbon footprint, but also doing your bit to increase renewable energy generation when you export energy from the panels to the grid.



economic

- **Save money**

One of the main advantages of solar panels is that they reduce your electricity bills. As soon as the panels are installed, they will generate electricity and lower your power bill. You will get paid by your electricity company whenever you export excess energy from your panels back to the grid. You will negotiate a feed-in tariff for the electricity generated and exported and the amount is credited to your bill.

- **Costs have fallen**

The cost of installing solar has fallen considerably and efficiency and technologies have improved.

- **Qualify for subsidies/government rebates**

When you buy a new solar system in Australia, you will receive a solar panel rebate that will reduce the cost of your purchase.

- **Increases home value**

Solar homes can sell for more than homes without PV. Studies show that solar homes will attract premium prices. Homes with solar are inherently more attractive/valuable to purchasers. Based on surveys, most Australians think that solar panels add value to a property. Estimates suggest that a 5kW solar PV installation could add around \$30K to the value of a house.

- **Creates jobs**

Communities can prosper from both large and small scale solar projects, such as jobs in remote areas and in the manufacture and installation of components and systems.

- **Fast payback**

In Sydney's Inner West, the majority of solar PV systems will pay back within 4-7 years. This is done through the savings on your electricity bill from your reduced consumption of energy from your retailer and from any credit to your bill from the feed-in tariff.



home

- **Low maintenance**

Once your solar PV system is installed, it will likely require very little maintenance. Typically, solar panels do not even need to be cleaned. The inverter may need replacing after 10-15 years, but this is likely the only additional cost you may incur throughout your system's life.

- **Longevity**

If you buy well, your solar panels will last 25 years, maybe more. The very best panels come with a 25 year warranty.

- **Energy independence**

Power generated during the day can be used at night if stored in a battery. Thus, reducing your reliance on the grid.



society

- **Improve grid security**

As our electricity grid moves to being carbon-neutral, solar PV will become more and more important for the electricity we need during the day. The more solar we generate, the less fossil fuels we will need to burn.

- **Improve air quality**

Breathing poor quality air on a daily basis has dire consequences for our health. Air pollution has been linked to asthma and allergies, bronchitis, pneumonia, headaches, anxiety, heart attacks and even some cancers. Using the sun to generate more and more of our power means less and less harmful emissions from burning fossil fuels. Generating electricity from solar panels produces no harmful emissions, and the more homes and businesses that rely on solar power means less toxic emissions from fossil fuels into our air.

- **Solar Works Everywhere**

Wherever the sun shines, solar works! It is a resource that can be utilised by everyone – city, rural, desert, mountaintops, islands!