PlaceNest / LEARN

SOLAR MADE SIMPLE



An illustrated Australian homeowner's guide to rooftop solar, electricity bills, system sizing and smart buying.



WHAT YOU'LL LEARN

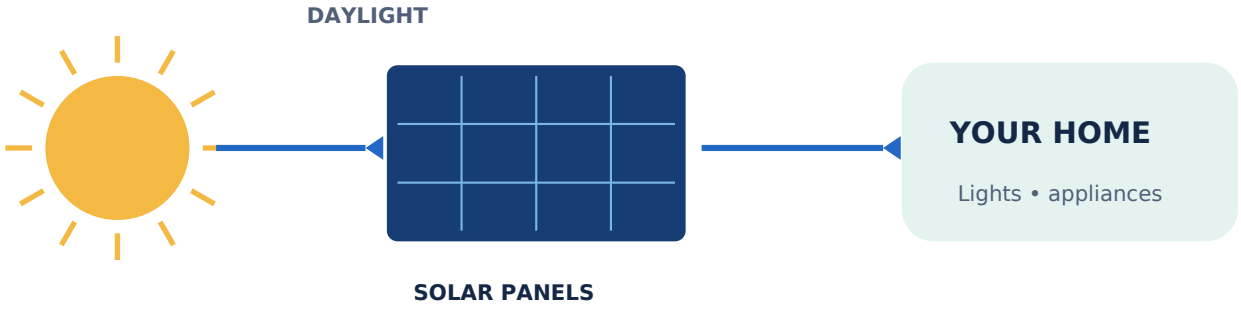
How panels work | How to read your bill | What size to consider
How savings work | What to ask an installer | Rebates and safety

AUSTRALIA • OCTOBER 2026

Educational information • Not a personalised quotation

Solar in 60 seconds

A solar system turns daylight into electricity for your home.



Panels produce direct-current (DC) electricity. An inverter converts it into alternating-current (AC) electricity used by most household appliances.

Use it now

Running appliances during sunny hours often makes solar more valuable because you buy less electricity from the grid.

Export what you do not use

Surplus electricity may flow to the grid. Your retailer may pay a feed-in tariff, subject to your plan and export limits.

Solar panels still generate some electricity on cloudy days, but generally less than in strong sunshine. Standard grid-connected solar usually switches off during a blackout for safety.

Start with your electricity bill

Your bill tells you more than an advertised 'perfect' system size.

1 Energy used (kWh)

Look for the number of kilowatt-hours used in the billing period. Divide by days to estimate daily use.

2 Price paid (c/kWh)

Find the rate for electricity imported from the grid. Some plans have different peak and off-peak rates.

3 Daily supply charge

This fixed daily fee generally remains even after installing solar. Solar does not normally erase your entire bill.

4 Feed-in tariff (c/kWh)

Check what your retailer pays for exported electricity. It can be much lower than the price you pay to import.

EXAMPLE: FIND YOUR DAILY USE

900 kWh ÷ 90 days = 10 kWh/day

This household uses an average of 10 kWh each day. It does not tell us when the electricity is used - daytime and evening patterns matter too.

Helpful extra information: 12 months of bills, smart-meter interval data, roof direction, shading, future EV charging and whether you expect to add a battery.

What does a 6.6 kW system mean?

Two units matter: power (kW) and energy (kWh).

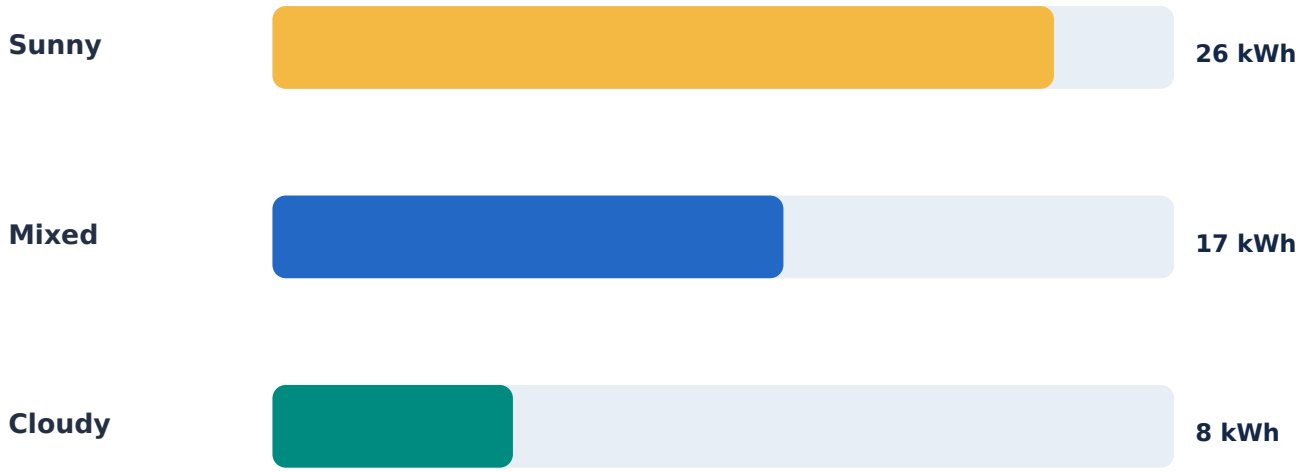
kW = how fast electricity is produced or used

Think of kW as the speed of water flowing through a tap.

kWh = how much electricity accumulates over time

Think of kWh as the amount collected in a bucket.

ILLUSTRATIVE OUTPUT - NOT A SITE FORECAST

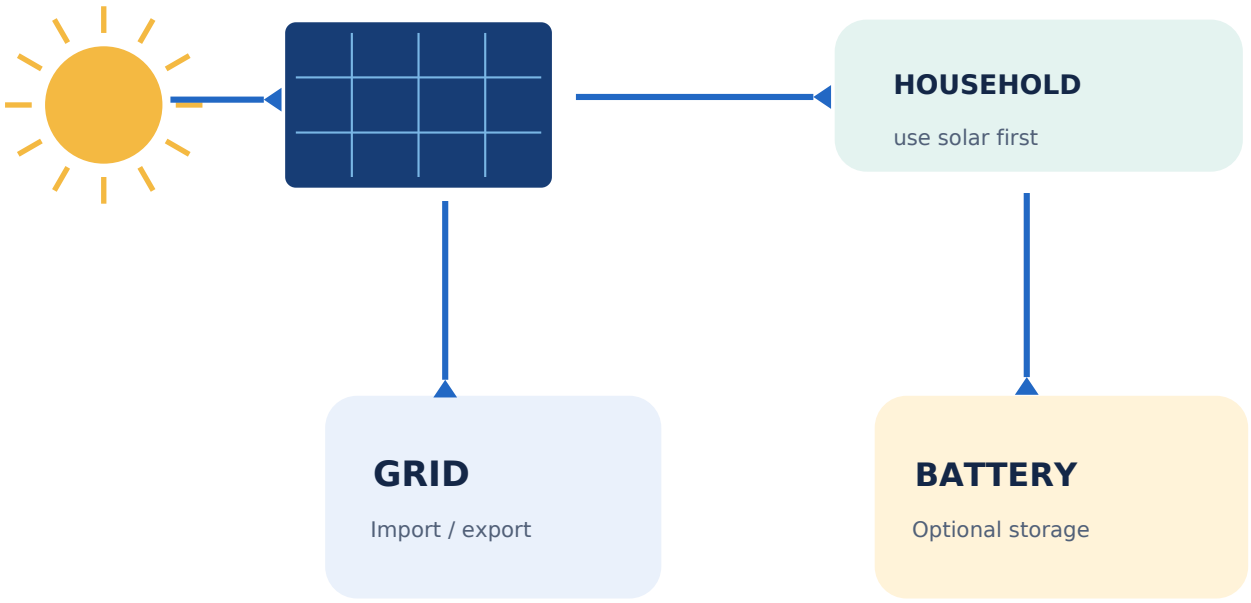


These numbers are hypothetical examples for a single day, not guaranteed output for a 6.6 kW system. Real generation depends on location, season, panel angle, shade, weather, inverter limits and system condition.

Ask installers for a monthly generation forecast, not just an annual total. Winter output and shaded roofs can materially change the result.

Where does solar electricity go?

Self-consumption, grid exports and batteries are three different things.



Without a battery

Use solar as it is generated. Export the surplus. Buy electricity from the grid at night or when solar output is insufficient.

With a battery

Some excess solar can be stored for later. Batteries have charging losses, power limits and costs; backup during blackouts requires suitable design.

A battery is not automatically the best financial choice. Compare solar-only and solar-plus-battery using your own daytime use, tariff, installation cost and replacement assumptions.

How do savings really work?

A transparent example shows why using solar at home often matters more than exporting it.

ILLUSTRATIVE DAY - ASSUMED PRICES

8 kWh	used at home	**$0.30/kWh**
4 kWh	exported	**$0.05/kWh**

Daily illustrative value **$2.60**

HOW THE EXAMPLE IS CALCULATED

Avoided purchases

8 kWh × $0.30 = $2.40. This is an illustrative reduction in imported energy charges, not a guaranteed saving.

Export credit

4 kWh × $0.05 = $0.20. Export payments depend on retailer tariffs, time of day and export rules.

Combined illustrative daily value: $2.40 + $0.20 = $2.60. It excludes supply charges, financing, maintenance, degradation, taxes, tariff changes and any battery losses.

Do not multiply one sunny day by 365 to promise annual savings. Model seasons, weekends, daytime demand and changing electricity prices.

Seven checks before you sign

A good quotation should explain the whole system, not just a headline discount.

01

Your roof

Shade, orientation, pitch, usable area and roof condition.

02

A sensible size

Monthly generation estimate and your day/evening usage.

03

Equipment

Exact panel and inverter models, warranties and monitoring.

04

Installation

Accredited installer, electrical compliance and workmanship.

05

Grid connection

Distributor approval, export limits and metering changes.

06

True price

Itemised total, STC discount, extras and finance costs.

07

After-sales care

Local support, faults, warranty process and documentation.

Get more than one written quote. Confirm whether the price includes switchboard work, monitoring, connection approvals, scaffolding and any unexpected roof work.

Rebates: check before you buy

Government programs change. Eligibility must be confirmed at the time of purchase.

Rooftop solar STCs

Eligible rooftop solar systems can receive an upfront discount through small-scale technology certificates (STCs). Quotes often show the STC value separately. Confirm accredited installation and approved equipment.

Battery support

The national Cheaper Home Batteries Program may discount eligible batteries. Rules and certificate factors changed in 2026; the final amount depends on capacity, installation date and eligibility.

State, territory and local assistance

Other rebates or loans may be available depending on location, household circumstances and program rules. Do not assume offers can be combined; verify directly.

OFFICIAL CHECKPOINTS

Australian Government Solar Consumer Guide

Clean Energy Regulator - solar batteries

Government rebates and loans

Your simple solar action plan

Five practical steps from first bill to final installation.

1

Collect your bills

Gather 12 months of usage, rates and supply charges.

2

Understand your pattern

How much electricity do you use while the sun shines?

3

Compare scenarios

Solar-only first; add battery as a separate comparison.

4

Compare real quotes

Review output forecasts, warranties and total installed cost.

5

Check and keep records

Confirm approvals, certificates, monitoring and support.

KEEP THIS QUESTION IN MIND

Does this system suit my home, my electricity habits and my budget - including what happens in winter?

A few words worth knowing

Keep this page handy when comparing quotations.

Solar PV	Panels that convert sunlight into electrical energy.
Inverter	Equipment that converts panel DC electricity into usable AC electricity.
kW	Power: the rate of generation or electricity use.
kWh	Energy: the amount produced, stored or consumed.
Self-consumption	Solar electricity used in your home rather than exported.
Feed-in tariff	Retailer payment for eligible electricity exported to the grid.
STC	Small-scale technology certificate used in eligible incentive schemes.
Export limit	A cap on electricity your system may send to the grid.

SOURCE NOTES & FURTHER READING

Australian Government Solar Consumer Guide

Solar for households

Clean Energy Regulator - solar batteries

Government rebates and loans

Editorial note (30 October 2026): This independent PlaceNest educational guide is general information, not electrical, financial or legal advice. Examples are illustrative. Verify current tariffs, incentives and installation requirements with official sources and qualified professionals.