

A FREE I LOVE SOLAR GUIDE

Storing Sunshine

Is a home battery actually worth it? A straight-talking guide to sizing, pricing, rebates and Virtual Power Plants — so you can answer that question for your own home, not just the sales brochure.

Written for Australian homeowners
by the team at I Love Solar

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Batteries, sized honestly for your home

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A NOTE BEFORE YOU START

A battery is one of the few solar add-ons that genuinely divides opinion — brilliant for some households, a slow-payback nice-to-have for others. This guide is written to help you work out honestly which one you are, not to talk you into anything.

SECTION 01

Why batteries have suddenly become a mainstream decision

For years, a home battery was the expensive, slightly indulgent add-on that only the most committed solar owners bothered with. Long payback periods and high upfront costs kept most Australian households on panels alone, quietly exporting their excess solar back to the grid for a shrinking feed-in tariff.

Two things changed that. First, feed-in tariffs have fallen steadily in most states, meaning the sunshine you don't use yourself is worth less than ever to sell back. Second, the federal Cheaper Home Batteries Program now knocks a genuine chunk off the upfront cost of a new battery, installed alongside solar, through the same Small-scale Technology Certificate mechanism that's discounted panels for years.

THE SHIFT IN ONE LINE

It's no longer "should I get solar, then maybe a battery one day" — for a growing number of households, it's "does a battery pay for itself on my usage pattern, right now."

That's exactly the question this guide is built to help you answer — with real numbers, not just the pitch.

SECTION 02

How a battery actually works with your solar

A home battery sits between your solar panels and your household circuits, quietly deciding where your electricity goes at any given moment.

1 During the day

Your panels power the house first. Anything left over charges the battery instead of being exported to the grid for a low feed-in rate.

2 In the evening

Once the sun goes down, the battery takes over — running your home on stored daytime solar instead of buying it back from the grid at peak rates.

3 During a blackout

Depending on how the system's wired (not every installation includes "backup" circuits by default), a battery can keep key circuits — fridge, lighting, wifi — running when the grid goes down. Worth asking about specifically, since it's not automatic on every system.

THE SIMPLE MENTAL MODEL

Solar panels generate electricity. A battery just decides *when* you use it — shifting free daytime sunshine into the evening peak, instead of letting it go back to the grid for cents on the dollar.

SECTION 03

What size battery do you actually need?

Bigger isn't automatically better — the right size depends entirely on your evening usage, not your roof size or your neighbour's system.

1 Work out your evening load

Add up what typically runs after the sun goes down: cooking, lighting, TV, air-conditioning, and any evening EV charging. Most Australian households land somewhere between 8 and 18 kWh of evening and overnight usage.

2 Match it to a realistic capacity band

HOUSEHOLD TYPE	TYPICAL USABLE CAPACITY
Smaller household, modest evening use	5–8 kWh
Average family home	10–13 kWh
Larger household, EV charging, pool, home office	13–20 kWh (or two batteries)

3 Don't just size for today

If an EV, a home extension, or a change in work-from-home habits is likely in the next few years, it's worth discussing headroom with your installer now — some battery systems allow you to add a second unit later, others don't.

I LOVE SOLAR TIP

A battery sized to your actual evening load will comfortably outperform a bigger, more expensive one sized to "just in case." Bring a recent power bill to your matched installer — it's the single most useful sizing input there is.

SECTION 04

The real cost: prices, rebates and payback in 2026

Battery pricing is more layered than solar panel pricing, because the federal rebate tapers with size. As of 2026, the Cheaper Home Batteries Program applies roughly this way across the first 50 kWh of usable capacity:

~\$271/kWh

rebate rate on the first 5–14 kWh
of usable capacity

~\$162/kWh

rebate rate on the next 14–28 kWh

~\$40/kWh

rebate rate from 28–50 kWh

Rates step down periodically and are applied by your installer as an upfront discount via STCs — always confirm the current figure at quote time rather than relying on last year's number.

SYSTEM SIZE	TYPICAL INSTALLED COST	AFTER REBATE	TYPICAL PAYBACK
10 kWh	\$7,000–\$11,000	\$4,500–\$8,500	6–9 years (standard tariff)
13–16 kWh	\$9,500–\$14,000	\$7,000–\$11,000	4–7 years (higher evening use)
13–16 kWh + VPP	as above	as above	3–5 years

WHY PAYBACK VARIES SO MUCH

The single biggest factor isn't the battery brand — it's your tariff. A household on a steep time-of-use plan with big evening peaks gets a much faster payback than one on a flat, cheap overnight rate. Ask your installer to model it against your *actual* tariff, not a generic average.

SECTION 05

Virtual Power Plants: getting paid to help the grid

A Virtual Power Plant (VPP) links your battery into a network the electricity provider can draw on during periods of high demand — in exchange for payments or bill credits to you. Batteries installed under the current federal rebate generally need to be VPP-capable, even if you don't join one straight away.

1 What you can realistically earn

STATE	TYPICAL ANNUAL VPP EARNINGS
South Australia	\$400–\$1,000+
New South Wales	\$200–\$600
Victoria	\$200–\$500
Queensland	\$200–\$400

2 The fine print worth checking

- ✓ Some VPPs require switching electricity retailers — run the numbers on the new plan overall, not just the VPP payment.
- ✓ You can usually set a "reserve" so the VPP can't drain your battery below a level you're comfortable with.
- ✓ Joining is optional even on a rebate-eligible, VPP-capable system — you can enrol later once you've lived with the battery for a while.

I LOVE SOLAR TIP

Treat VPP income as a bonus on top of your bill savings, not the reason to buy a battery. It genuinely shortens payback — but the household-usage savings should already make sense on their own.

SECTION 06

Brands & warranties: what actually matters

1 Cycle warranty, not just years

Look for both a time-based warranty (typically 10 years) *and* a throughput or cycle guarantee (often 6,000–10,000 cycles, or a set number of kWh delivered over its life). A battery cycled hard every day needs the cycle number more than the year count.

2 Chemistry matters less than you'd think

Most modern home batteries use LFP (lithium iron phosphate) chemistry, which is generally safer and longer-lasting than older lithium-ion formulations. It's a reasonable baseline expectation in 2026, not a premium feature to pay extra for.

3 Local support and software

- ✓ Confirm the manufacturer has genuine Australian-based support, not just a distributor.
- ✓ Check the monitoring app is included, easy to use, and shows both solar and battery activity in one place.
- ✓ Ask whether firmware updates happen automatically — a battery that improves over time (better VPP integration, smarter charging logic) ages a lot better than one that doesn't.

ASK YOUR MATCHED INSTALLER

Which battery would you install in your own home, and why? A good installer will usually have a genuine answer beyond "whatever's on special this month."

SECTION 07

When a battery isn't worth it (yet)

A good guide tells you when not to buy something, too. A battery is less compelling right now if:

- ✓ You're mostly home during the day and already self-consume most of your solar directly.
- ✓ You're on a flat electricity tariff with little difference between day and night rates.
- ✓ Your feed-in tariff is still reasonably healthy where you live, narrowing the gap a battery closes.
- ✓ You're planning a move in the next few years and won't be around to see the payback through.

THE HONEST ALTERNATIVE

If a battery doesn't stack up yet, shifting more of your own usage into daylight hours (see our Connected Solar Home guide) captures a good chunk of the same benefit for zero extra cost — and you can always add a battery later as prices keep falling.

SECTION 08

Common questions, answered

Can I add a battery to my existing solar system?

In most cases, yes — though whether it's a straightforward add-on or needs an inverter upgrade depends on your existing hardware. Worth a specific check with a matched installer rather than assuming either way.

How long does a home battery actually last?

Most quality LFP batteries are warranted for around 10 years and, in practice, often keep meaningful capacity well beyond that — similar in spirit to how solar panels usually outlast their headline warranty.

Do I need a battery to charge my EV from solar?

No — daytime EV charging works well without one. A battery mainly helps if your charging (or general usage) genuinely needs to happen overnight. See our EV charging guide for the daytime-first approach.

Is the rebate available if I already have solar panels?

Generally yes — the Cheaper Home Batteries Program is aimed at battery installations alongside an existing or new solar system, not just brand-new combined installs. Eligibility details are worth confirming at quote time since settings can change.



QUIETLY DOING ITS JOB

The best battery is the one you forget is even there.

No generators, no manual switches — just yesterday's sunshine, ready when you need it.

Brighter
Homes

READY WHEN YOU ARE

Find out if a battery actually stacks up for your home

Every household's numbers are different. I Love Solar matches you with pre-vetted, CEC-accredited local installers who'll run the real numbers against your own usage and tariff — not a generic online calculator — so you know exactly what a battery would and wouldn't do for you.

1

Answer a few quick questions about your home and energy habits.

2

We match you with vetted local installers who'll model your real numbers.

3

Compare tailored quotes side-by-side and decide with confidence.

Get your free match at ilovesolar.com.au

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