

Will a home solar battery save you money?

A common way to decide if a home battery system will save you money is to look at whether it will 'pay for itself' before the warranty period ends.

What is the payback period for your home solar battery?

The **payback period** is the time it takes for a battery to pay for itself with savings in your energy bills.

The likely payback period in years is usually calculated by dividing how much the system costs up front by the projected annual savings in your energy bills. The **NSW Home Solar Battery Guide** has a step-by-step calculator you can use for this.

If you have a warranty that is less than the payback period, the battery system may not pay for itself before the warranty expires.

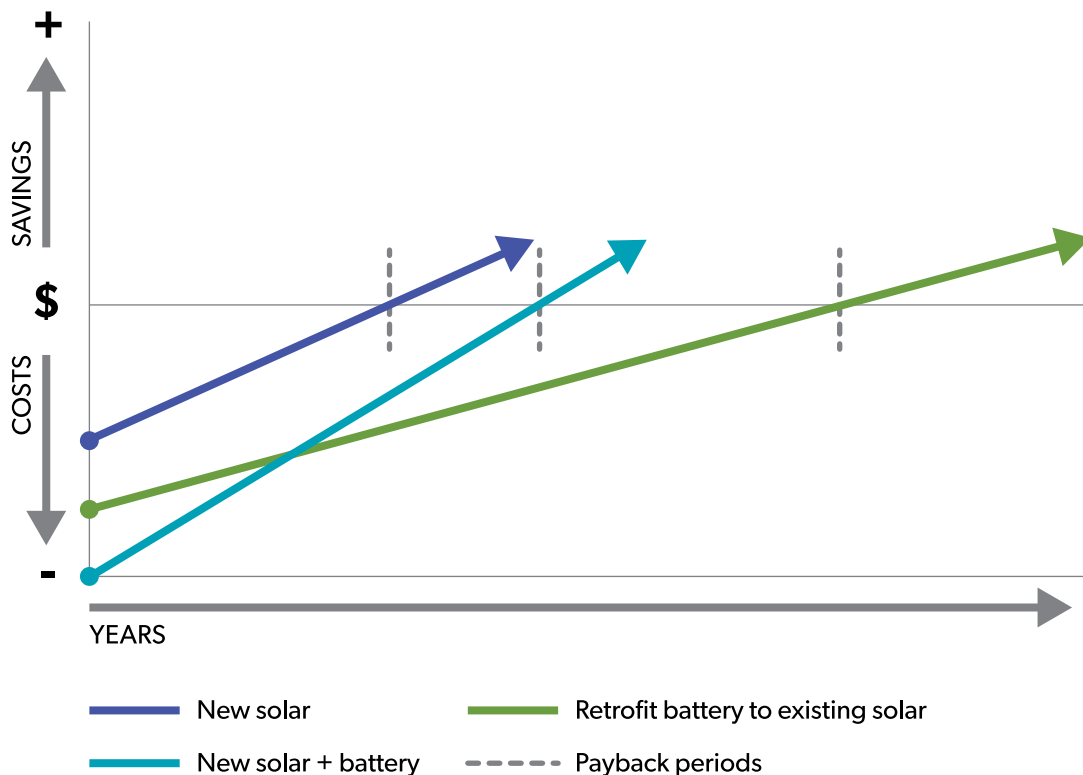
What options do you have?

Whether you already have rooftop solar, are getting solar with your battery or only buying a battery affects the payback.

Modelling done for the **NSW Home Solar Battery Guide** in June 2017 shows:

- **A new rooftop solar system without a battery** usually has the shortest payback period.
- **A new rooftop solar plus battery system** has the quickest payback of the battery options.
- **Retrofitting a battery** to an existing rooftop solar system has the longest payback period, often exceeding the warranty period.
- **Getting a battery only**, without having rooftop solar, currently doesn't make financial sense in most cases.

Typical payback periods in 2017 for different battery system options





The bottom line

Modelling done for the **NSW Home Solar Battery Guide** found that:

- In some cases a new solar system with a battery can pay for itself within 10 years.
- The payback time is quicker for a small battery than a big one.
- Sunnier inland locations tend to pay back one year quicker than Sydney.
- Within a few years, payback times are likely to reduce by around three years for new solar and battery systems.
- Being on a time of use tariff results in higher savings than a flat tariff for solar, with or without a battery, often speeding up payback by one year.
- A battery retrofitted to existing solar probably will not pay for itself, but it will still boost energy self-sufficiency.

There are many reasons why you might decide to buy a home solar battery.

Even if saving money isn't a big motivation, it's good to know the payback and warranty period when comparing offers.

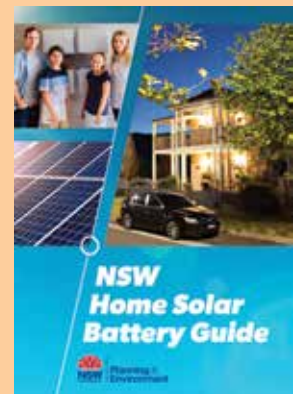
Are batteries a good investment right now?

Installing a home solar battery could already make financial sense where:

- 1** You have higher than average consumption (more than \$2,000 per year), are on a time of use tariff, and are planning on installing a new solar system with your battery.
- 2** You are in a rural area and getting a grid connection would be expensive, so it could make more sense to go offgrid. This would still have reliability, customer protection and other impacts.
- 3** Your network provider has imposed an export limit on your solar system to protect the grid, so some solar generation will go to waste if not stored in a battery.

There are a range of other things you need to consider when deciding whether to buy a battery. For example, how long a battery actually lasts will depend on how often and how deeply it is charged and discharged. Any feed-in tariff payment you receive for solar power exported to the grid should be factored into your payback.

The **NSW Home Solar Battery Guide** lists some online calculators that might help you assess the likely payback once you have a quote.



Planning & Environment

For more information download the NSW Home Solar Battery Guide from resourcesandenergy.nsw.gov.au/battery-guide.

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