

Solar Quote Comparison: Step 3

Quote details explainer for consumers

This section is designed to give you an overall understanding of what the different components of your solar quote mean and how to compare them.

Category	Explained
Total Installation Cost (Outright Purchase)	This should be the total cost of the installation (solar and battery if included).
Solar Comparison	
Cost per kW installed (DC) (Total cost of solar installation (\$) / Panel Size) *excluding battery cost if applicable	This is a useful metric to compare quotes. Divide the solar system cost by the total system panel size (in kW). This should exclude any costs related to the battery to allow for fair comparison.
System Size: Panel Size (DC)	The panel size (measured in kilowatts, kW) is the total capacity of your solar panels (this is under ideal testing conditions, so the output in practice is likely to be less than this).
System Size: Inverter Size (AC)	The inverter size is the maximum amount of power the inverter can convert from DC (solar) to AC (usable electricity) at any one time. The inverter must be appropriately sized to handle the energy your panels produce. However, it's common (and often recommended) for the inverter to be slightly smaller than the panel array, this is called "inverter undersizing" or "overclocking."
	Inverter size = panel size: Balanced system. Good for consistent performance.
	Inverter size < panel size: Common and efficient, often recommended. Slight clipping may occur at peak times, but overall output is optimised.
	Inverter size > panel size: Rare. May be inefficient or not cost-effective unless planning to expand the system.

Estimated Annual Output (kWh)	How much electricity the system is expected to produce each year. This depends on system size, panel efficiency, orientation and local sunlight. Note that this may differ between installers due to differences in calculation methodologies.
Panel Type (Brand and Model)	Look for reputable brands with high efficiency and long warranties (typically 25-30 years).
Inverter Type (Brand and Model)	Converts solar energy into usable electricity. Quality affects system performance.
Monitoring System	Lets you track energy production and battery usage via an app or web portal. Useful for spotting issues and optimising performance. This is also useful in a Solar for Renters Agreement.
Warranty - Panels, Inverter, Workmanship	Ensure all components and the installation itself are covered. Longer warranties = better peace of mind.
Battery System (if applicable)	
Battery Included?	It is not mandatory to pair a battery with solar. The benefits of adding a battery to your solar set up are: Energy Independence • Store excess solar energy during the day and use it at night or during cloudy periods. • Reduce reliance on the grid, especially in areas with unstable supply or frequent outages. Backup Power During Outages • Batteries with backup capability can keep essential appliances running during power cuts. • Great for rural areas or regions prone to storms or grid failures. Maximise Solar Usage • Without a battery, excess solar energy is exported to the grid (often at a low rate). With a battery, you store that energy and use it later, which can boost self-consumption and bill savings. Lower Electricity Bills • Use stored energy during peak times when grid electricity is most expensive (if you're on a time-of-use contract). • Some systems can be programmed to optimise usage based on time-of-use tariffs.
Battery Brand and Model	Choose trusted brands with proven reliability.
Battery Capacity (kWh)	The amount of energy the battery can store. Higher capacity = more backup or load shifting potential.

	For households, batteries below 6kWh are very small, a common size is around 10-15kWh for an average home, and 20–40kWh for larger homes. It should be noted that the larger the battery, the longer it will last in times of outages e.g. natural disasters.
Battery Type	Most modern systems use lithium-ion batteries. These are efficient, compact, and long-lasting. There are two main types. Lithium NMC (Nickel Manganese Cobalt) batteries are more compact and high performance, often used in fast electric vehicles, though have shorter lifespans than LFP (Lithium Iron(Fe) Phosphate) batteries, also known as LiFePO4.
Battery Warranty (years)	Covers defects and performance degradation. A good warranty is 10 years or more.
Battery Cycle Life	The number of full charge/discharge cycles the battery can handle before its capacity drops significantly. More cycles = longer lifespan.
Backup Capability	Can the battery power your home during a grid outage?
Battery Cost per kWh (total costs associated with the battery / Capacity)	A useful metric to compare quotes. Divide the total costs associated with the battery by the battery capacity)
Other / General	
Is the Inverter compatible with Vehicle to Grid (V2G) and/or Vehicle to Home (V2H)?	If you want to use your electric vehicle (EV) to power your home or send energy back to the grid, you'll need a special type of inverter that supports bidirectional energy flow. Most EVs store electricity as direct current (DC), but homes and the grid use alternating current (AC). An inverter converts DC to AC so your EV can power your home (Vehicle-to-Home or V2H) or feed energy into the grid (Vehicle-to-Grid or V2G). Not all inverters can do this, you need one that's specifically designed to handle energy flowing both ways, safely and efficiently. Choosing a compatible inverter ensures your system can manage solar generation, EV charging, and household energy needs all together, giving you more control over your energy use and potentially saving money.
Installation Timeline	When can the system be installed? Some providers may have long wait times.
Additional details on maintenance and support	Ask if the installer offers ongoing support, system checks, or servicing.