

Best Practices for Evaluating Home Solar Bids

The questions below are important to keep in mind when reviewing bids for solar systems. It's also a good practice to compare multiple bids, which you can do using the table on the second page.



Scope of work. In addition to the design and installation, solar energy systems require permitting, inspection, and net-metering agreements. Some locations may require building permits and structural inspection.

- Does the bid cover everything needed to get the system on-grid and generating electricity?

Production estimates for your home. The specifics of your site, such as roof angle and shading, will impact your electricity production. You may also want to know how much of your electric use your system will offset. Does the bid include:

- Estimated production for your site specifically?
- Comparison with your current electricity use?
- Estimated first-year savings?
- Estimated years until the system pays itself off?

Warranty. Is there a written warranty that covers the system components and workmanship? Panel warranties are generally similar, but inverter warranties vary, and replacement can be a significant expense. Does the warranty cover:

- Panels?
- Inverter?
- Workmanship?

Total system price. You want to make sure you know the total price of the system (not just the monthly payments) and that the prices are given both before and after available tax credits.

- Is the total price of the system clear?
- Is the price given both before and after available tax credits and utility rebates?
- Does the bid include any add-ons, such as roof work or system monitoring?

Installer qualifications. Although not necessary, solar-specific training and certifications are an indicator of installer experience and quality. NABCEP (North American Board of Certified Energy Practitioners) certification is becoming the industry standard, but others exist as well.

- Does the installer hold any solar-specific certifications?

Equipment quality. Solar panel manufacturers are grouped into three tiers based on their size and length of time in the marketplace. Tier 1 companies are generally considered the most reliable, followed by Tiers 2 & 3. What Tier are the panels in the bid from?

- Tier 1
- Tier 2
- Tier 3

Solar Bid Comparison Table



	ITEM	BID #1	BID #2	BID #3
CONTRACTOR INFORMATION	Company/Representative name			
	Phone #			
SYSTEM DESCRIPTION	System size (kW DC)			
	System base cost (\$)			
	Cost per watt (\$/W)			
	Federal and state incentives (\$)			
	Final system cost (\$)			
PROJECT VALUE	Estimated annual production (kWh)			
	Year one expected savings (\$)			
	# Years to payback			
WARRANTY	Panels (years)			
	Inverter (years)			
	Workmanship (years)			
OTHER	Other features or costs			

Item Descriptions

System size in kW DC. Solar PV system size is generally given in kilowatts of direct current (kW DC), also known as the nameplate size. The amount of energy actually generated by your system depends on the amount of sunlight received and the conversion to the alternating current (AC) that powers your home.

System cost. The total cost of the system before incentives and rebates. Some companies simply list a total cost, while others separate out the various components of the installation. For comparison purposes, make sure the system cost includes the entire system and installation.

Cost per watt. To help compare between bids for differently-sized systems divide the total cost by the system size (kW DC), then divide again by 1,000 to convert the price per kilowatt to the price per watt.

Federal and state incentives. These should not vary between installers.

Final system cost. The total cost of the system after the available incentives have been deducted. Note that you will generally have

to wait until you file your taxes to receive the federal and state incentives, and you must have a sufficient tax liability to get the full value of the incentives.

Estimated annual production. The total amount of energy produced by the system over the first year, in kilowatt-hours (kWh). This will depend on the system size, as well as the specific characteristics of your site.

Year one expected savings. The estimated value of electricity saved in the first year of operation. This depends on the total energy generated and the rate you pay for electricity.

Years to payback. The length of time until the system has paid itself off.

Panel, inverter, and workmanship warranties. The warranty length for each of these components (in years).

Other features or costs. Any additional features or costs that differentiate bids, such as system monitoring, or higher quality panels.