



Getting Started

Prior to providing a quote for a solar electric system solution customized to suit your home and needs, there are three main details we would like to collect from you:

1. Your electricity usage

To size a system accurately, we like to review the last 12 months of your electricity usage. This can be obtained by reviewing your past bills or directly contacting the utility company. In addition, most Arizona utility websites feature the functionality for you to review your account usage directly by setting up a password for your account.

Your electric bills indicate your usage- measured in kilowatt-hours (kWh). Solar electric power systems generate kWh's of power, which is the basic method to determine what percentage of your electric usage the system will be capable of offsetting.

If you do not have past usage for your home (perhaps you just obtained the property) American Solar Electric, with your input, can forecast a general range of future usage.

2. Available unshaded space for panels (during the peak sunlight hours of the day)

For maximum production, economic benefit, environmental benefit we would like to get a look at the amount of available space that is unshaded all day, during the peak sunlight hours of the day throughout the year. Solar electric panels are VERY sensitive to shade, but do perform with limited efficiency in cloudy weather.

Roof features to take into consideration as potentially shading a solar array include: vents, chimneys, skylights, other roof surfaces, air conditioners, swamp coolers, antennas, satellite dishes, etc. Other items to take into consideration are trees (even trees in your neighbor's yard), utility poles, mountains, large buildings, etc.

Once you provide us with your address, we can look up your home and rooflines (even available space for ground mounted or outbuilding applications) using online aerial photography. This allows us to get a preliminary estimation of roof size and solar access. As we get further in the process, a residential site evaluator will come to your home to confirm these details.

3. Your objectives for solar electric power offset

On average the amount by which our customers have been able to offset their utility bills ranges from 30% to 92%. This percentage offset is unique to each individual customer and is based on the above two factors and their objectives. Generating all of your electricity with the sun can sound attractive, but sometimes designing a system focused on the on-peak power usage can give you the best ROI.

Even though a combination of utility incentives, State and Federal tax credits have made solar electric systems more financially attractive to homeowners, there may still be budgetary constraints.



First Contact: Give us a call. We will discuss your expectations, and what size and type of system will best meet your wants and needs. We will discuss price, mounting location and technique, utility rebates and incentives, what to expect from a solar electric system, and address any other questions you may have.

Site Evaluation and Quote: If you are interested in pursuing a system, one of American Solar Electric's Solutions Associates will come to your house or business to identify suitable solar array locations, take measurements, evaluate your electrical setup, review a history of your electric usage (if available) and develop system estimates for your review and consideration. These estimates will include a financial analysis detailing average annual energy savings, payback period, estimated rebates, net costs, and return on investment.

There is never a charge for this service for our residential customers.

Initiate Project: Client accepts system design and system quote. A deposit is collected from the customer. American Solar Electric prepares system drawings and utility documents, coordinates system installation approval with your HOA, pulls building permits from proper authorities, and begins procurement of installation materials and major system components. Installation is scheduled with homeowner or construction superintendent.

Typical Construction/Payment Schedule:

Construction Schedule	Timeframe	Payment Schedule
Project Initiation	Day 1	15% deposit (of total project cost) required to initiate system design, permitting and engineering. Payable by cash, check, credit or money order
Design, Engineering, Permits, coordination with utility, municipality, and HOA	1 to 2 months after project deposit depending on municipality and utility	Upon completion, and prior to construction, the first progress payment is required. This payment is generally 20% of the total project cost.
Installation (usually takes 1-3 days)	2.5 to 3 months after deposit	Upon the completion of the system installation and successful inspection by the municipal or county building inspector the second (and final) progress payment is required this amount is equal to the sum of the deposit, progress payment one and the amount your utility will be rebating for the system purchase minus the total system



		cost.
Inspection & Commissioning.	3.5 to 4 months after deposit	Once your utility has successfully inspected and activated your system, the system rebate check is issued. Once received, this check is then endorsed over to American Solar Electric.

System Commissioning: After installation is complete and all electrical inspections have occurred, American Solar Electric tests various system components for safe operation and commissions the system in conjunction with the customer's utility company.

American Solar Electric guarantees its workmanship on residential and commercial projects for a period of 2 years from the date of system acceptance. This includes all wiring, conduit and the physical installation of the major system components.

Customer Walk Through: A full walk through of the system is done prior to or after commissioning. System operation guidelines and maintenance issues are addressed with client. The System Operations Manual is presented and an optional maintenance contract is offered to the client (semi-annual maintenance for systems incorporating batteries, annual maintenance for systems without batteries).

Note: Payment is due for all remaining material and labor invoices upon completion of customer walk through and system acceptance.

If you have any questions or comments regarding our Design / Build Process or would like to make an appointment to discuss a project with American Solar Electric, please e-mail us at Sales-AZ@americanpv.com or call our sales office at (480) 994-1440.