

Checklist for Choosing a Solar Energy Company

“You’ve decided to look into solar!” Here’s a checklist with guidelines for selecting a photovoltaic (PV) company for your solar project.



The solar selection guidelines included here provide important information for you to use in the process of selecting a reputable solar company. The tips and questions we have compiled will help you identify companies who exhibit experience, have quality solar products onsite and demonstrate financial strength. You want to know the company you choose to partner with will be around tomorrow to service your system and stand by your system’s warranties. The quality of your solar installation is paramount. It can dramatically affect the reliability of its operation, efficiency, and future costs you may have to incur.

Use the below questions and tips to compare companies -- their reputation, pricing, efficiency, products, service options, and warranties.

4 Fast “Getting Started” Tips

1. Always get a minimum of two proposals / quotes to ensure you are getting the best products and value from the best company.
2. Never electronically sign a contract from a company or person you have not met in person at the site of your solar project.
3. Watch out for hard-sell closing companies. If a company will not come to your home or business unless all decision makers are present i.e. husband and wife, or business partners, do not proceed. If the deal they present to you is “only good for today until midnight,” you should not proceed. This is a long-term investment on your part. You should not be pressured into making an on-the-spot commitment.
4. Ask for a copy of the company’s liability and workers’ compensation policies before signing a deal. As a homeowner you could be liable for an on-the-job injury, if a company doesn’t have their insurance policies in place.

Solar Company and Product Questions & Tips

Your time is valuable. Research ahead the companies you are looking at having out for a discussion about your energy needs and their proposed solar solutions. When you are meeting with a company whether in person or by phone, make sure you feel comfortable with their answers to these questions.



Checklist for Choosing a Solar Energy Company

1

1. How long has the company been in business?

Most companies offer a 10-year warranty on workmanship and 25-year warranty on materials. Be extremely wary if a company does not have a proven track record and history in the electrical contracting industry. You want the company you choose to be around to address any future issues you may have. Remember: The warranty is only of value if the company is still in business.

2. Is the company a real, established business or are they a fly-by-night scam?

Any new industry is prone to having scam artists enter the field to take advantage of unsuspecting customers. Solar is no exception. Check with your local Better Business Bureau (BBB). Most online and brick and mortar companies are registered with the BBB. Not every company is perfect. There may be a few complaints. But more importantly, please check on the last 36 months to see how many complaints there were -- and in what time period were they resolved.

3. Where is the company's headquarters and do they have a commercial facility?

At the very least, a solar company should operate from an office with warehouse space for storage of solar panels and equipment. In addition the company should have internal support staff as well as at least one factory-trained technician. We advise not to partner with a company that can't afford to warehouse inventory. This important step helps identify a company with financial strength.



4. Will the company agree to have you visit their facility?

Does their website have a map to an actual commercial address? Check with the City Hall for where the company's address is listed or located. Ask them whether the address is in a commercial or residential district. Another way to confirm their physical location is to demand a shipping tracking number within 24 hours of having your credit card charged or cancel the order. If dealers cannot provide a tracking number for you, they probably are not legitimate.

5. Does the company own their own warehouse facility?

If they do, you have exponentially increased the likelihood they'll be around tomorrow to service your system and fulfill your warranties. Go on to ask if they have installed solar on their own buildings. This is proof that they believe in "going green" and renewable energy – and they put their money where their mouth is. It provides a good example of the kind of professionalism the company exhibits, and shows their commitment to solar energy.

6. Has the company done business in any other states?

If so, be sure to search online for complaints filed in that state(s). You might be surprised at the audacity of get-rich-quick companies that move into a city or state, open up shop, and then proceed to take customers to the cleaners with their inferior products, poor installation and service until their reputation catches up with them.



Checklist for Choosing a Solar Energy Company

2

7. Does the company only do solar installations?

Diversification is important. If unfavorable economic conditions arise in the solar industry, companies without diversification may not survive -- leaving you with a system that no longer has a company to fulfill the installation warranties.

8. Will the company provide references?

After you've met with a company, request names and phone numbers of two happy customers, and in addition a customer that experienced a problem that the company resolved. This will help you choose a company that stands behind both its workmanship and materials.

9. What licenses and insurance does your company have in place?

This is one of the most important questions to ask. Many companies do not have a contractor's license, and the only way you can get contractor's liability insurance and a workers' compensation policy is if you are licensed. If a company doesn't have these policies in place, you as the homeowner could be liable for an on-the-job injury. Ask for a copy of the company's liability and workers' compensation policies before sign a contract.

Please be advised, never let anyone perform work on your home or business without first seeing evidence that he or she is an employee or subcontractor of the contractor you are working with and is covered under the contractor's or subcontractor's insurance.

10. What is the current status of the company's license?

In California, use <http://www.cslb.ca.gov> to check the current status of the company's license. Are they a full C-10 contractor or do they just have a C-46 license? Here is the difference.

A C-10 license states that the electrical contractor places, installs, erects or connects any electrical wires, fixtures, appliances, apparatus, raceways, conduits, solar photovoltaic cells or any part thereof, which generate, transmit, transform or utilize electrical energy in any form or for any purpose.

A C-46 states that a solar contractor installs, modifies, maintains, and repairs thermal and photovoltaic solar energy systems. A licensee classified in this section shall not undertake or perform building or construction trades, crafts, or skills, except when required to install a thermal or photovoltaic solar energy system. A C-46 license only is limited.



Checklist for Choosing a Solar Energy Company

3

11. Will your company handle all the required work?

Watch out for companies that hire subcontractors. In this situation it is difficult to track who's responsible if an issue comes up. Make sure you are satisfied with who is going to install it, the quality of workmanship, your potential liability as the homeowner, and who's going to service the system for the long term. The only exception is the use of a roofing subcontractor. Roofers are not required for all types of solar installations, but if your roof warrants special attention speak up and clarify this part of the installation with your solar project company. All issues can be properly handled if the installing company takes precautions and uses the best materials and processes for the job.



12. How will the company protect your roof against future leaks from the installation of solar mounting racks?

Installing solar on your roof is a long-term investment. A roof leak can have major ramifications down the road. This is an area of the installation that many companies try to cut corners. Ask how they do flashing for tile roofs. Will they double flash? If they put off answering the details about their installation process, buyer beware.

13. Does the company keep an inventory of solar panels and inverters on hand?

A company's answer will indicate at what level of financial investment in the solar industry they have and how they operate. A popular scam is one where a dealer states "in stock today!" This makes a customer assume that the dealer has inventory at their actual location. Don't expect a company to have everything in stock, but the dealer shouldn't have to drop-ship everything. If this is their modus operandi, who files the claim if something is damaged in shipping – you or the dealer?

14. Will the company I purchase my solar system from be able to service it?

A reputable solar contractor tests all modules before installing them. Yet, panels sometimes have minor defects from manufacturing or damage from shipping. This damage may not be immediately apparent. Make sure the company you select has factory-trained service technicians to do repairs or deal with returning the panel or parts to the manufacturer and install a replacement.

15. Does the company offer free technical or follow-up support?

Make sure technical support is provided before and after your solar system purchase. Ask about the training their people have. Believe it or not, some dealers do not offer any technical support at all. Without qualified technical support, you can seriously damage your solar equipment and void your warranty. Walk away from companies that do not have live onsite technical support. This is not a home improvement project you want to DIY – you could injure or kill yourself or someone else – or potentially start a fire.



Checklist for Choosing a Solar Energy Company

4

16. What kind of financing does the company have available?

Monthly and prepaid lease options are only offered by a select few companies as leasing partners require a level of financial stability and longevity that most installers do not have. Some contractors will mislead a customer by saying that a solar lease or PPA option is not offered by them because it isn't in their customers' "best interest." They probably don't offer it because they can't. Choose a contractor that is able to educate you on all of your available options, answer your questions, and help you make the best decision for your situation – not based on what is convenient for the less-qualified contractor.

17. Where should I have the company install my solar system?

The solar company you hire should have extensive experience and knowledge about where your solar installation should go. Look to their expertise. Ask to see a portfolio of photographs of the company's installations. In Southern California, the roof faces that are most south-facing will produce the best energy. Shade from trees or other buildings can reduce the system's efficiency. Be sure to take into account any Homeowner Association (HOA) restrictions you may have on solar panel placement.

18. Who deals with inspections and approvals from the electric company?

The solar dealer and installer you contract with should make sure the systems they install pass inspections.

19. Did the company ask to find out about any future plans to increase your energy needs?

Before having a system installed inform your solar company about any expected changes that will affect future energy needs. You may want to put a swimming pool in when your children reach their teenage years; you know you will be remodeling your kitchen in three years and will be purchasing new energy-efficient appliances; or you are considering putting on an addition. It is important to take everything into account when designing a solar system.

20. What is the minimum power capability (provided under warranty) of the solar panel the company is quoting you?

This is an important specification to use as you compare proposed solar system designs. You could be purchasing a solar panel that is rated at 200 watts, but only produces 170-180 watts. What is the highest minimum warranted power rating? Claims made on the high efficiency rating of some solar panels can be worthless if these components have poor minimum warranted power ratings. Sometimes, the negative tolerance rating is listed as a percentage. For instance, if a solar panel is listed with 10% negative tolerance rating, it means that a 200 watt rated panel may only be capable of producing 180 watts.



Checklist for Choosing a Solar Energy Company

5

21. What is the power production warranty on the solar panels?

Each solar panel has a power production warranty listed for it. Most solar panels have standard monocrystalline and polycrystalline components. These panels have proven track records. They may last more than 40 years. As a result of this, manufacturers now offer 25 years or longer warranties. Watch out for companies that offer warranties beyond the manufacturer's warranty.

22. What is the efficiency rating of the panels?

Every solar panel produces a certain amount of power per square inch. This power is the panel's overall efficiency. The more power per square inch a panel produces, the less space you will need to use on your roof or solar panel location to produce the same amount of power. The most efficient solar panels are those cut out of solid ingots of silicon. There are some manufacturers that don't use the expensive technologies needed for cutting solar cells from solid ingots. Ask the dealer / installer to provide you with a factory-printed specification sheet listing the solar panel's efficiency.

23. What about the efficiency rating of the inverter(s)?

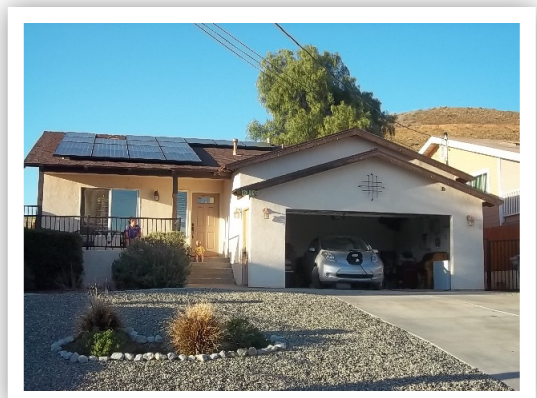
Same answer as for the solar panels. You always want to buy the highest efficiency inverter. An efficient inverter will expand your power production over the lifespan of the system.

24. What type of inverter(s) is the company planning to install?

Will the company be using a high frequency transformer or the 60Hz copper-wound transformer? Choose a company that uses the heavy duty copper-wound output transformer. They are more expensive, but you will see increased reliability and performance. Once again ask to see the factory specification sheet on the inverters.

25. What type of mounting racks is the company proposing?

Are they manufactured with heavy duty materials or is the company using light duty racks? This is important because of the weathering of the materials on your roof. Sometimes you will be quoted a specific brand, but then at installation the rack materials are substituted to a lesser quality of material. Your solar system is projected to last for 25+ years, make sure the mounting racks are of as substantial long-lasting materials. Once again, ask for the specification sheet on the solar panel mounting racks.



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My Notes

| | Company A | Company B | Notes |
|---|-----------|-----------|-------|
| 1. Has the company been in the solar industry for at least 5 to 7 years? | | | |
| 2. What is the current BBB Rating? Any Complaints? Were issues resolved fairly? | | | |
| 3. Does the company have headquarters and commercial facility? | | | |
| 4. Were they willing to have me out for a site visit? | | | |
| 5. Does the company have a warehouse? Do they own the building they operate out of? Have they installed solar on their building? How big is the system? | | | |
| 6. Has the company done business in other states? If so, any BBB complaints? | | | |
| 7. Does the company only do solar installations? | | | |
| 8. Did the company provide me with 3 references—with one being a customer with a resolved issue? | | | |
| 9. Does the company have a current C-10 license? | | | |
| 10. Does the company have a current C-46 license? | | | |
| 11. Does the company do all of the work— sale and installation? Or do they subcontract the installation? | | | |
| 12. How does the company protect the roof during installation? Double flashing for tile roofs? | | | |
| 13. Does the company keep an inventory of solar panels, inverters, racks on hand? | | | |
| 14. Will this company be able to service my system and fulfill their workmanship warranties? | | | |
| 15. Does the company have free technical support? | | | |
| 16. Does the company offer financing options? | | | |
| 17. Does the company have a design / consultation team to help determine the optimal solar installation for my solar project? | | | |



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| 18. Does the company handle all of the inspections and approvals? | | | |
| 19. Does the company indicate an interest in my future energy needs? | | | |
| 20. Does the company provide specification sheets on all of the products used in the solar installation so that I can compare efficiency and production output? Are they prepared to explain the differences to me? | | | |
| 21. What is the power production warranty on the solar panels? | | | |
| 22. What is the efficiency rating of the panels? | | | |
| 23. What is the efficiency rating of the inverter? | | | |
| 24. What type of inverter? Is is heavy? | | | |
| 25. What type of mounting racks? Heavy duty? | | | |
| 26. Does the company provide me with copies of all their insurances? Liability? Workers Compensation? | | | |
| 27. Proof of employment of the installers on site? | | | |
| 28. Does the company represent themselves professionally prior to and during my initial appointment? | | | |
| 29. Return my inquiry call promptly? | | | |
| 30. Schedule appointment? | | | |
| 31. On time? | | | |
| 32. Interview me on my energy usage? | | | |
| 33. Answer all of my questions? | | | |
| 34. Respectful of my property during measurements? | | | |
| 35. Got back to me with quote in timely fashion? | | | |

