



# A BUYER'S GUIDE TO GOING SOLAR





A photograph of a house roof with solar panels and a clear blue sky. The solar panels are dark and rectangular, mounted on a grey shingled roof. The house has white siding and a white gutter. The sky is a clear, bright blue.

# DECLARE YOUR ENERGY INDEPENDENCE!

Millions of homeowners are saving money with solar energy, the earth's greatest and most sustainable resource. Solar is cost-effective, reliable, safe and easy. Why wait, when you could be saving now?



# WHY SOLAR IS THE SMART CHOICE

Solar is a smarter use of your energy dollar. Solar owners typically lower their electricity rate from around \$0.39 to \$0.08 per kilowatt-hour (kWh). Even better, that rate is locked in for years, freeing you from the stress of future utility rate increases and exorbitant summer bills.

So go ahead: Crank up the A/C. Put in that fourth load of laundry. Boost your hot tub to the perfect temperature.

And solar is so easy, you may forget it's there — until you open your monthly electric bill, which is sure to make you smile every time.



# 9 SMART STEPS FOR GOING SOLAR

**In this simple guide you'll learn:**

1. How clean, cost-effective solar can bring new ease and comfort to your family.
2. If solar is the right solution for your home.
3. How to choose a highly qualified solar company.
4. What questions to ask about system costs and payment options.
5. What happens during installation.

**Understanding these basics will help you move ahead with confidence!**



# 1

# DO YOUR RESEARCH

## Trust us, it's worth it

Educate yourself. Get a clear understanding of what it means to “go solar” as your first step. One of our Solar Consultants would be happy to answer any and all of your questions. But you may prefer to start with a more general source, such as San Diego Gas & Electric, which devotes [a section of its website](#) to solar. The U.S. Dept. of Energy site, [energy.gov](#), also has excellent resources on solar.



# 2

## DECIDE IF SOLAR WILL WORK FOR YOU

Consider these important points:

### ✓ Your energy attitude

California is full of independent-minded, environmentally concerned citizens who have never been afraid to stand up for themselves and demand something better. That's one reason the state is a solar leader. If you want to get off the utility rate increase treadmill, then shift your existing electricity budget from the utility to solar. Why keep paying the utility every month when you can "write a smarter check" and pay yourself, at a rate lower than the utility's rate?



### ✓ Expected savings

If your electric bill is \$150 a month or more, solar can most likely save you considerable money. The amount of savings depends on variables like the size of your system, the amount of electricity you use, and utility rate increases. (The higher their rate, the more valuable your solar is.) California homeowners typically save anywhere from 5-30%, locked in for years with no increases.





### ✓ Time commitment

A reputable solar company does most of the work for you, minimizing your time commitment. You can expect to devote the following amounts of time to your solar assessment, proposal and installation:

- 30 minutes for the consultation to discuss your energy goals and get your questions answered
- Up to 1 hour for the onsite assessment of your home's roof and electrical system
- 4-12 hours of installation time – don't worry, all you have to do is be there!  
Your company should tell you upfront about how many hours your installation will take.



### ✓ Sun exposure

The more sun your roof gets, the better. Roofs can face anywhere from east to south to west. Little to no shade makes your system more efficient and productive. Solar experts may suggest trimming or removing trees or installing a ground-mounted system to get more production.



### ✓ Your roof

Is your roof structurally sound? If you're unsure, call in a roofing expert to confirm. What is your roof made of? Panels can be installed on virtually any roof type but the material does affect the installation approach. The answers to these questions may affect your installation cost.





### ✓ Expected power generation

Your system's solar output will depend on roof direction (azimuth), roof slope (pitch), the number of panels, and panel brand. An experienced solar consultant can calculate your system's power potential as part of your home assessment.



### ✓ Incentives

The Federal Government offers a generous 30% tax credit for a solar installation purchased with cash or a loan. (Leased systems don't qualify.) This essentially lops a third off the upfront price of going solar. Be aware that the tax credit starts stepping down in value at the end of 2019.



### ✓ Home resale value

Installing solar panels can help you sell your home faster and at a higher price.

**A study** by the U.S. Department of Energy's Lawrence Berkeley National Lab details how solar increases property values. For a typical residential system of 8,000 watts, the increase in value is \$28,000 - \$32,000.



### ✓ Environmental benefits

Solar energy allows you to produce electricity without noise or air pollution using a clean, renewable and incredibly powerful natural resource. Over 25 years, a 5kW solar system is estimated to offset 298,109 pounds of CO<sub>2</sub>, the leading greenhouse gas; 840 pounds of sulfur dioxide, which causes acid rain; 57 pounds of particulates that cause asthma—as well as other green benefits.



# 3 | RESEARCH SOLAR COMPANIES

**Your solar energy system will be part of your home for decades, so don't settle when choosing an installer!**

- Consider the years of experience and financial stability of the company. You want a provider that is knowledgeable and that will be around to honor the 25-year warranty that comes with most solar panels.
- Visit independent online review sites like [Angie's List](#) and services like the [Better Business Bureau](#), which are great resources for learning about an installer's ability to deliver a superior customer experience.





### 3. RESEARCHING SOLAR PROVIDERS

- Ask for customer references and review customer testimonials on the installer's website. While not necessarily as unbiased as the reviews you find on third-party websites, these provide additional insight into the company's customer satisfaction.
- Ensure that the solar company will explain in detail how they plan to treat your home and property each day during the installation.
- Ask how many different people you'll have to deal with throughout the solar process. Obviously in this case, fewer is better!
- Always ask to see electrical licenses C10 and C46. This is your assurance that the provider has the right training and experience to install a solar system that will ensure your family many years of comfort and cost-savings.
- Find out who is performing the system installation. The best installations are done by a closely supervised in-house crew of licensed and highly experienced electricians. Sub-contracting the installation is risky and makes it harder to control materials and the quality of the installation.
- Finally, is the solar company local? Providers with deep roots in a community have relationships with the utility companies and town administrators. This goes a long way toward streamlining the permitting and interconnection process.



# NET METERING

The 30% Federal Tax Credit mentioned above, a program called Net Metering is a big factor in why solar works so well and saves people so much money. With Net Metering, any solar you make but don't use immediately goes into the utility grid. But you don't "lose" that excess energy. You receive "credit" for it. Then, at night or on rainy days when your solar is not producing, you use up those credits. Your installer should know the latest details on the Net Metering program, and should complete your utility's Net Metering paperwork for you.

# 4

## UNDERSTAND THE BOTTOM-LINE COST BENEFITS

During your solar consultation, make sure you get a clear understanding of your solar financials — upfront during the purchasing phase and down the road. For example, if you purchase a solar system outright, you will see more upfront cost but more savings in the long run. If you lease the equipment, you will have no upfront costs and more immediate savings. These are critical distinctions. So ensure you get a solid and accurate estimate. And take time to understand the financing and warranty options that make sense for you and your family.





# 5 | CHOOSE YOUR PROVIDER

You've done your research and you're ready to choose your solar provider. Your final decision will be based on a mix of considerations including:

- Price
- Long-term savings
- Provider reputation
- The system's ability to meet your family's energy goals
- How comfortable you feel with the company and sales person

When comparing proposals, remember — cheaper isn't necessarily better. Expert system design, installation and high-quality panels are paramount to the ultimate success of your solar installation, and making sure you get what you paid for.



# 6 | GET PERMISSION FROM YOUR TOWN

Be aware that your community will require one or several permits before your solar system can be installed, although your solar company should obtain these permits for you.

If your neighborhood has a homeowners' association, they may need to approve the installation as well.

Check with your provider to ensure any permit fees are included in your overall price.





# 7 | READY TO INSTALL!

The local installation crew has arrived and introduced themselves to you and your family. Be sure you know which of the crew is the lead and your main contact for all onsite questions. The best companies also ensure you have one point of contact in the office for your entire solar experience.

Installation generally requires 2-3 days, although this may vary depending on the size and scope of installation. Rarely will a highly qualified provider extend the installation beyond 5 days.

Click [here](#) to watch a solar installation video.





# 8

## GET FINAL UTILITY APPROVAL

Once your solar system is installed, it will be connected to the utility grid via what's called an interconnection.

Generally speaking, your installer will coordinate three things during this stage:

1. Your interconnection application will be submitted to your utility.
2. A building and/or electrical inspector will review your system and, if necessary, suggest necessary corrections or modifications.
3. After final inspection and approval, your installer will apply for final approval from the utility so you can turn on your solar system!

Once again, a highly qualified solar provider will manage this process for you.





# CONGRATULATIONS! START SAVING! START MAKING CLEAN ENERGY!

**Following installation, it's important that your solar provider explains three important items to you:**

1. How your system works: it's helpful to understand the basics.
2. How your system monitoring works: you'll want to keep an eye on your system's performance using web-based monitoring which can be accessed via your computer or smart phone.
3. Any necessary maintenance: good news, there isn't much! But hosing off the panels occasionally, and trimming any tree branches that grow and shade your panels, will help your system get maximum sun.



# WE ARE PASSIONATE ABOUT SOLAR!

Solar is an easy way to get off the utility treadmill and onto your own path of energy independence. We encourage you to visit [Citadel Roofing & Solar](#) to learn more. If you're ready to get started, call us at [\(800\) 400-2852](#) or complete our [web form](#) to schedule a free consultation and estimate.

