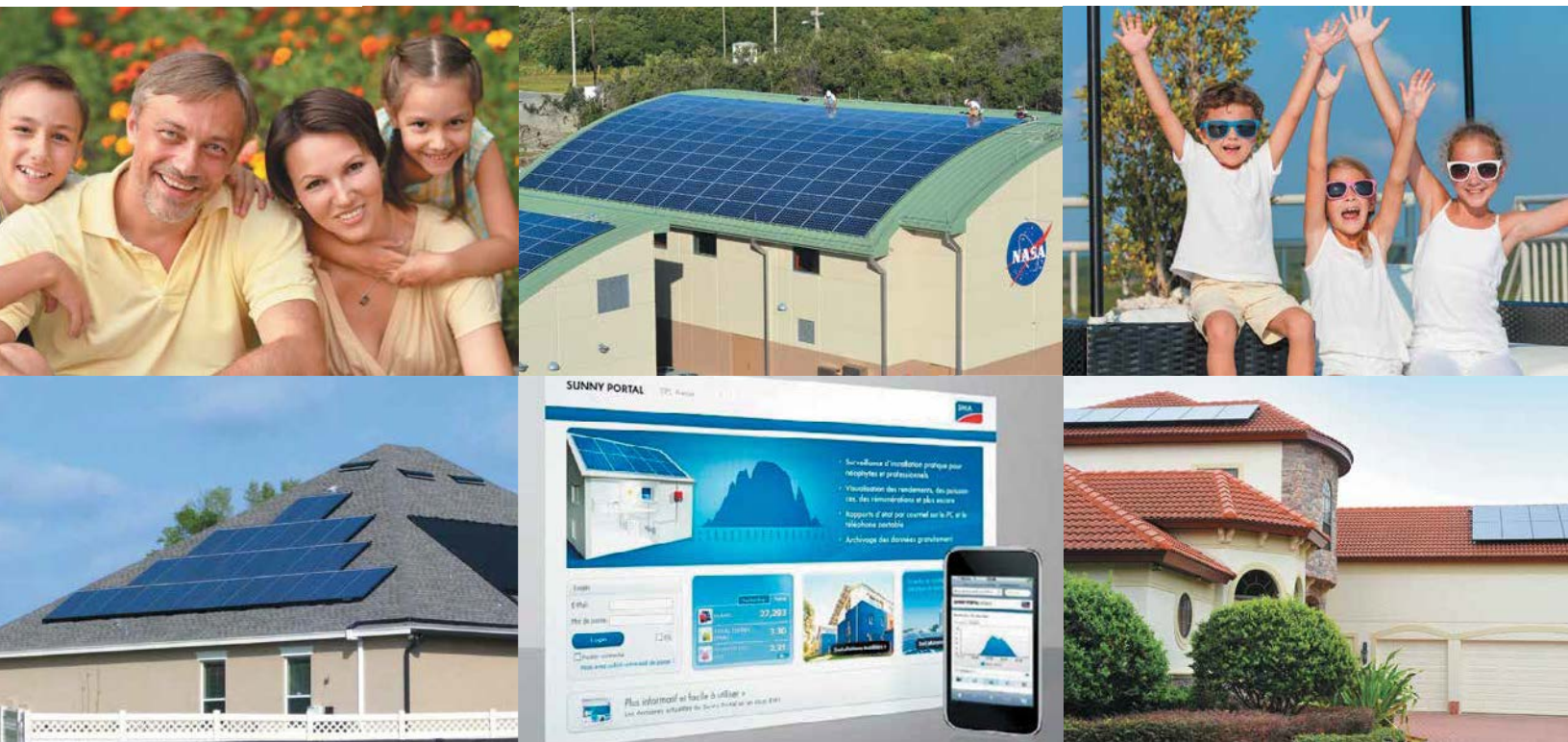


Homeowner's Guide to Solar



Since 1984 | Over 60,000 Installations | Guaranteed Performance

About Solar Source

The Solar Source legacy has been trusted by tens of thousands of clients since 1984. Specializing in solar electric, solar pool heating, and solar hot water heating for residential and commercial applications, we were recognized as the #1 Solar Contractor in Central Florida by Solar Power World.

Our unwavering commitment to quality solar energy solutions and best-in-class service set us apart. Whether you're harvesting solar energy for your home or your business, Solar Source offers optimal solar solutions to ensure you're saving green -- both in the environment and in your wallet.

With our unmatched warranties and decades of experience, Solar Source makes going solar easy!

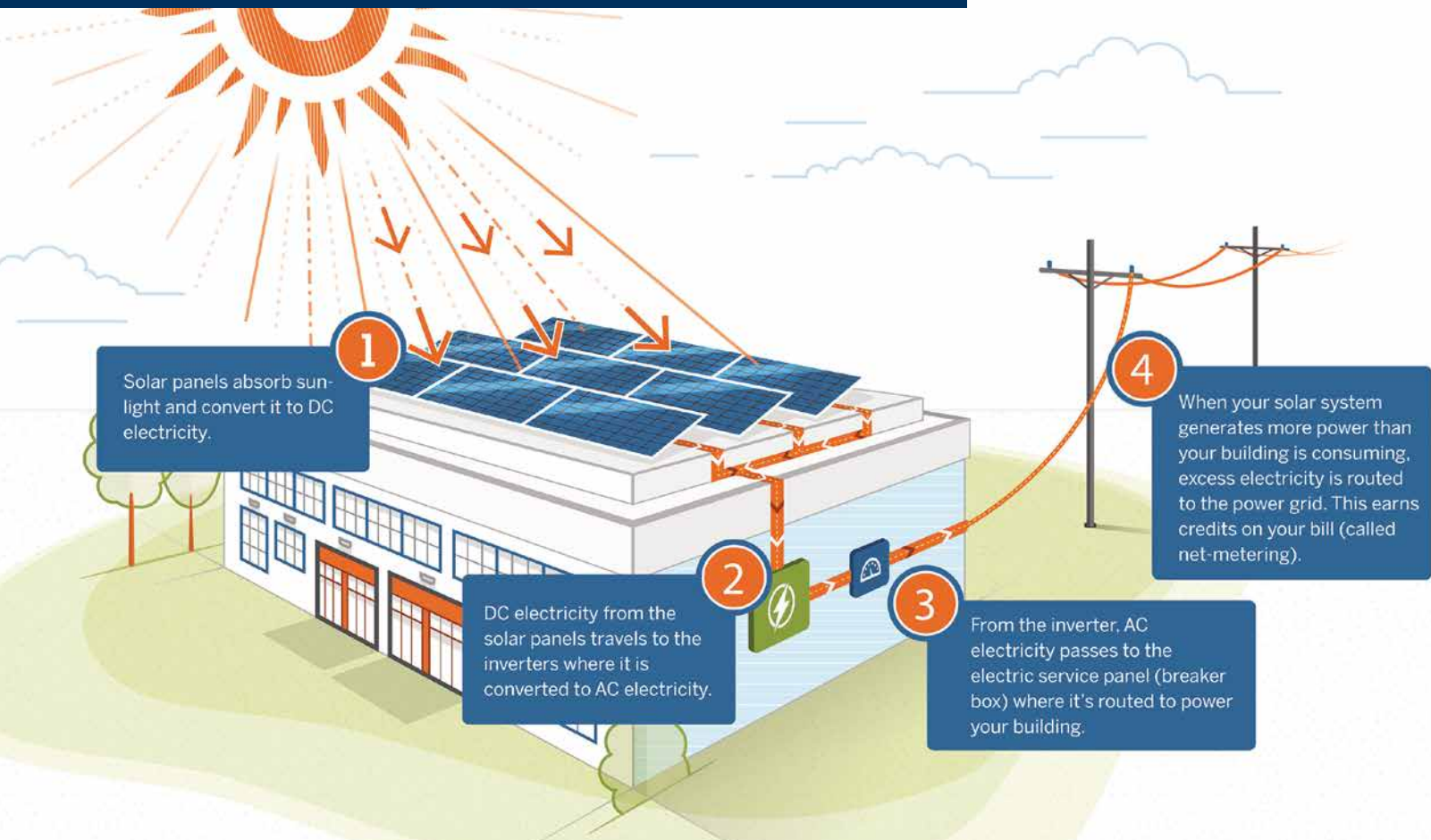
The Solar Source Advantage

We provide the best value that can be found anywhere, along with the information needed to make informed buying decisions. Over three decades of experience installing solar systems in Central Florida allows us to live up to our hard earned reputation.

- **Best-in-class equipment.** All of our system components are carefully selected for the unique and tough weather conditions in Florida and the Caribbean. The manufacturers we work with have been chosen by us because of their field tested quality and financial stability.
- **Highly trained technicians.** We hire and train the most skilled solar technicians and provide ongoing education and competency testing at regular intervals to ensure a superior installation is delivered on every project.
- **Safety.** Our team is trained on safety procedures and every truck is equipped with all necessary safety gear for any work we are performing. We conduct background screenings on all employees as a prerequisite to employment.
- **Insured for your protection.** We are covered with a \$5,000,000 insurance policy to protect your investment and our team. This coverage is 5 times more than most competitors maintain.
- **Best service and maintenance anywhere in Florida.** We offer 24/7/365 customer support to handle any concerns or emergencies.
- **Best warranties on all of our products.** With the most comprehensive warranties in the solar industry, our solar systems will provide you with years of hassle-free enjoyment.
- **Financing.** With our array of finance options, you don't have to wait to go solar. Enjoy the comfort security and savings that our solar systems provide – today!



How do solar energy systems work?



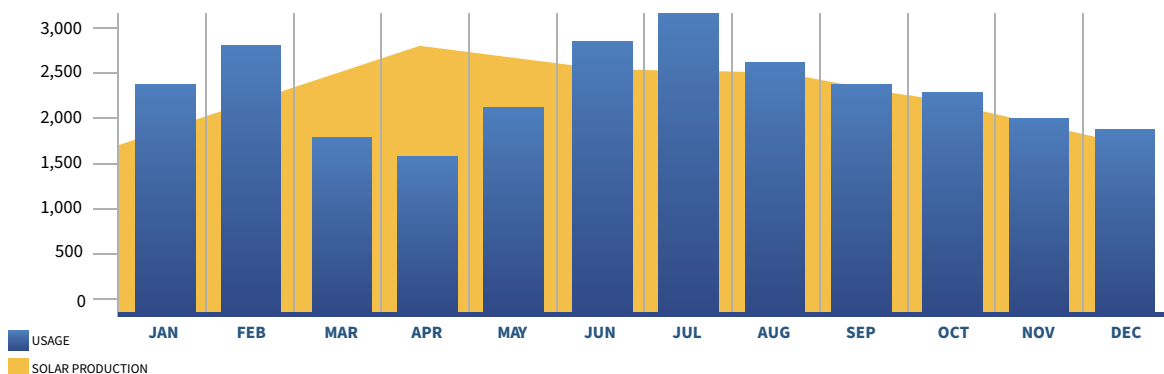
DURING THE DAY

Solar energy systems generate electricity silently and without any moving parts. During the day sunlight falls on the solar panels, generating DC electricity. That DC electricity is then converted into household 120V AC electricity by the inverter. The AC electricity is then fed into your electric meter and circuit breaker panel. The generated electricity then powers your home. When your home is not using all the energy produced by your solar energy system, excess energy is sent to the grid. This all happens silently and automatically every day.

DURING THE NIGHT & LIMITED SUNLIGHT

At night and during cloudy weather, the solar energy system's output is reduced or stopped. When this happens you will receive electricity directly from the utility grid. You're always connected to the grid, so you can have as much power as you need, any time you need it, regardless of whether the solar energy system is producing power.

TYPICAL ELECTRIC USAGE AND SOLAR PRODUCTION



Your Solar System Design



What is a solar panel?

A solar panel, or photovoltaic (PV) panel, is an electrical device that converts solar light into electrical energy. The installation location and available space play a role in selecting your solar panels. Our premium panels come with a 25 year power production, product, and labor warranty!

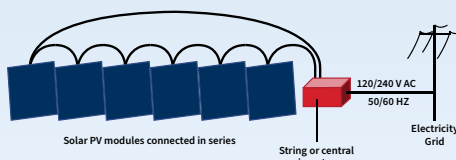
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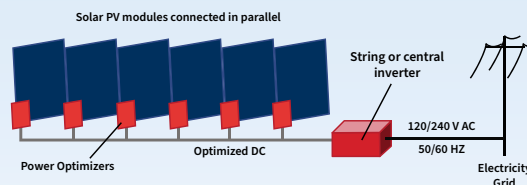
Types of Inverters

A critical point of any solar energy system is the inverter. The inverter is designed to convert the sun's DC energy created by the solar panels into usable AC energy for your home. There are three popular inverter types, string, string with optimizers & micro inverters. Choosing the right inverter for an application has numerous variables including shade, trees, roof design and existing electrical system. Inverter selection should be based on the best products available in the marketplace and your current and future energy needs.

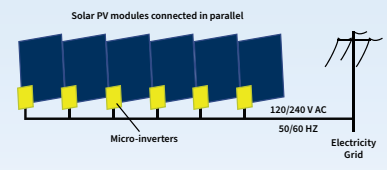
STRING INVERTER



STRING INVERTER WITH OPTIMIZERS



MICRO INVERTER



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Cloud Monitoring

Every solar system we install comes with solar system production software. These platforms can be accessed anywhere at anytime with an internet connection, making it possible to see your solar system's performance in the palm of your hand.



Your Solar System Design



Energy Storage

Even the most ardent solar evangelists can agree on one limitation solar panels have: they only produce electricity when the sun is shining. But, peak energy use tends to come in the evenings, coinciding with decreased solar generation and causing a supply and demand issue. The thing is, solar panels often pump out more than enough energy during those lower demand hours when the sun is shining to meet peak demand later in the day. This means that efficient solar energy storage can open up a wealth of possibilities for homeowners and businesses alike.

What are the benefits of storing solar energy?

Storing this surplus energy is essential to getting the most out of any solar panel system, and can result in cost-savings, more efficient energy grids, and decreased fossil fuel emissions. Storing solar energy has a few main benefits:

- **Balancing electric loads.** If electricity isn't stored, it has to be used at the moment it's generated. Energy storage allows surplus generation to be banked for peak-use. As far as renewable energy is concerned, storing surplus power allows the lights to stay on when the sun goes down or the wind stops blowing. Simply put, energy storage allows an energy reservoir to be charged when generation is high and demand is low, then released when generation diminishes and demand grows.
- **Filling in the gaps.** Short-term solar energy storage allows for consistent energy flow during brief disruptions in generators, such as passing clouds or routine maintenance.
- **Energy resilience.** The energy grid is vulnerable to disruptions and outages due to anything from wildfires to severe weather. Solar energy storage creates a protective bubble during disruptive events by decentralizing where we get our energy from.
- **Savings from electric bills.** If you live in a state that has no solar net energy metering, or policies that don't fairly compensate you for the solar energy you generate, battery storage can help lower your utility bills while consuming more of your own power. So, while you may not be compensated as much for excess energy sent to the grid, any additional solar power generated and stored throughout the day can be discharged from a battery at night or on cloudy days in the place of utility consumption.
- **Reducing carbon footprint.** With more control over the amount of solar energy you use, battery storage can reduce your property's carbon footprint in areas with fossil fuel-based utility power. Large solar batteries can also be used to help charge electric vehicles and turn any appliance in your home into a "solar-powered" device.



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TESLA
POWERWALL



GENERAC
PWRCELL



ENPHASE



solar**edge**



LG Energy Solution
ESS Battery Division

Frequently Asked Questions



Why should you buy a PV system?

People decide to buy PV systems for a variety of reasons. Some people want to help preserve the Earth's finite fossil-fuel resources and reduce air pollution. Others want to invest in an energy-producing improvement to their property. Some people like the security of reducing the amount of electricity they buy from their utility because it makes them less vulnerable to future price increases. And some people just appreciate the independence that a PV system provides.

Whatever your reason, solar energy is widely thought to be the energy source of choice for the future you should seek help to make it your energy choice for today and tomorrow.

Net Metering

In more than 35 states, customers who own PV systems can benefit from laws and regulations that require "net" electric meter reading. The customer is billed for the net electricity purchased from the utility over the entire billing period—that is, the difference between the electricity coming from the power grid and the electricity generated by the PV system. Through net metering, the customer obtains the full retail electricity rate—rather than the much lower wholesale rate—for kilowatt-hours of PV-produced electricity sent to the utility power grid. The benefits of net metering to consumers are especially significant in areas such as Hawaii and New York, which have high retail electric rates. Utilities also benefit because the solar-generated energy often coincides with their periods of "peak" demand for electricity.

Is your home or business a good place for a PV system?

A well-designed PV system needs clear and unobstructed access to the sun's rays for most or all of the day, throughout the year. You can make an initial assessment yourself. If the location looks promising, your PV provider can determine whether your home or business can effectively use a PV system.

The orientation of your PV system (the compass direction that your system faces) affects its performance. In the United States, the sun is always in the southern half of the sky but is higher in the summer and lower in the winter. Usually, the best location for a PV system is a south-facing roof, but roofs that face east or west may also be acceptable. Flat roofs also work well for solar electric systems, because PV modules can be mounted flat on the roof facing the sky or bolted on frames tilted toward the south at an optimal angle. They can also be attached directly to the roof as "PV shingles." If a rooftop can't be used, your solar modules can also be placed on the ground, either on a fixed mounted or a "tracking" mount that follows the sun to orient the PV modules. Other options (often used in multifamily or commercial applications) include mounting structures that create covered parking, or that provide shade as window awnings.

Are incentives available to help reduce the cost?

Yes, many states offer incentives. One excellent source is the National Database of State Incentives for Renewable Energy (DSIRE). This database contains information on financial and regulatory incentives that promote renewable energy technologies.

What should you know about warranties?

Warranties are key to ensuring that your PV system will be repaired if something should malfunction during the warranty period. PV systems eligible for some solar rebate programs must carry a full (not "limited") two-year warranty, in addition to any manufacturers' warranties on specific components. This warranty should cover all parts and labor, including the cost of removing any defective component, shipping it to the manufacturer, and reinstalling the component after it is repaired or replaced.

Is your site free from shading by trees, nearby buildings, or other obstructions?

To make the best use of your PV system, the PV modules must have a clear "view" of the sun for most or all of the day—unobstructed by trees, roof gables, chimneys, buildings, and other features of your home and the surrounding landscape. Some potential sites for your PV system may be bright and sunny during certain times of the day, but shaded during other times. Such shading may substantially reduce the amount of electricity that your system will produce.

To be eligible for some rebates, your system must be unshaded between certain hours during certain times of the year. Some states have laws that establish your right to protect your solar access through the creation of a "solar easement." Your PV provider can help you determine whether your site is suitable for a solar electric system.

Property and Sales Tax

Tax incentives may include a sales tax exemption and a property tax exemption on the PV system purchase, providing an economic benefit to consumers. The U.S. government also provides financial support for PV technology through a tax credit for use of solar energy.

Does your roof or property contain a large enough area for the PV system?

The amount of space that a PV system needs depends on the size of the system you purchase. Some residential systems require as little as 50 square feet (for a small "starter" system), but others could need as much as 1,000 square feet. Commercial systems are typically even larger. If your location limits the size of your system, you may want to install one that uses more efficient PV modules. Greater efficiency means that

Frequently Asked Questions (cont.)



the module needs less surface area to convert sunlight into a given amount of electric power. PV modules are available in a range of types, and some offer more efficiency per square foot than others do.

What kind of roof do you have, and what is its condition?

Some types of roofs are simpler to work with, but a PV system can be installed on any type. Typically, roofs with composition shingles are the easiest to work with, and those with slate are the most difficult. In any case, an experienced solar installer will know how to work on all types and can use roofing techniques that eliminate any possibility of leaks. Ask your PV provider how the PV system affects your roof warranty.

If your roof is older and needs to be replaced in the near future, you may want to replace it at the time the PV system is installed to avoid the cost of removing and reinstalling your PV system.

How big should your PV system be, and what features should it have?

To begin, consider what portion of your current electricity needs you would like your PV system to meet. For example, suppose that you would like to meet 50% of your electricity needs with your PV system. You could work with your PV provider to examine past electric bills and determine the size of the PV system needed to achieve that goal.

You can contact your utility and request the total electricity usage, measured in kilowatt-hours, for your household or business over the past 12 months (or consult your electric bills if you save them). Ask your PV provider how much your new PV system will produce per year (also measured in kilowatt-hours) and compare that number to your annual electricity usage (called demand) to get an idea of how much you will save.

What should you know about permits?

If you live where a homeowners association must approve a solar electric system, you or your PV provider may need to submit your plans. You'll need approval before you begin installing your PV system. However, some state laws stipulate that you have the right to install a solar electric system on your home.

How do you get an interconnection agreement?

Connecting your PV system to the utility grid will require an interconnection agreement and a purchase and sale agreement. Federal law and some state public utility commission regulations require utilities to supply you with an interconnection agreement.

Some utilities have developed simplified, standardized interconnection agreements for small-scale PV systems. The

interconnection agreement specifies the terms and conditions under which your system will be connected to the utility grid. These include your obligation to obtain permits and insurance, maintain the system in good working order, and operate it safely.

The purchase and sale agreement specifies the metering arrangements, the payment for any excess generation, and any other related issues. The language in these contracts should be simple, straightforward, and easy to understand. If you are unclear about your obligations under these agreements, contact the utility or your electrical service provider for clarification.

What should you know about insurance?

For grid-connected PV systems, your electric utility will require that you enter into an interconnection agreement. Usually, these agreements set forth the minimum insurance requirements to keep in force. If you are buying a PV system for your home, your standard homeowner's insurance policy is usually adequate to meet the utility's requirements.

Is the lowest price the "best deal"?

It might not be. You generally get what you pay for, and it's possible that a low price could be a sign of inexperience. Companies that plan to stay in business must charge enough for their products and services to cover their costs, including future service and support. Therefore, price should not be the only consideration, and quality should probably rank high on the list.

Has the company installed grid connected PV systems?

If not, has it installed grid-independent (or stand-alone) PV systems? Experience in installing grid connected systems is valuable because some elements of the installation-particularly interconnection with the local utility-are unique to these systems. Because grid connected systems are relatively uncommon, however, most contractors with PV experience have worked only on stand-alone systems. So, they have experience with all aspects of PV system installation except connection with the utility grid.

However, a competent company with PV experience should not be eliminated just because it has not yet installed grid-connected PV. Experience with off-grid systems is valuable, because grid-independent systems are more technically complex than grid-tied systems.

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