

solar electricity

POWERING YOUR HOME WITH SOLAR ELECTRICITY

BECOME POWERFUL

SOLAR ELECTRICITY MAKES SENSE TODAY

Solar electricity is quickly becoming the energy option of choice for many Americans. The advantages for you, your family and the environment are compelling and easy to understand. And with Sharp's help, having a solar electric system installed on your home has never been easier.



Visit us online at www.SharpUSA.com/solar



Why Go Solar? The Answer Is Up To You:

Savings Every Month. A Sharp solar electric system powers your home so you use considerably less electricity from the public utility.

Hedge Against Rate Hikes. Offset energy prices and unpredictable rate hikes by generating your own free power for decades.

Protect The Environment. Most electricity is generated by burning coal that emits pollutants into the atmosphere. Solar electricity comes from a clean and renewable source the sun. **Reliable Power.** As a world leader in solar manufacturing, Sharp solar modules generate power for decades and are backed with a limited 25-year warranty.

Installation Expertise. Our nationwide installer network ensures that there's a solar expert close to you, ready to come to your home to determine your energy needs with a free consultation.

Increased Property Value. Solar is a smart upgrade that makes your home more desirable and valuable.

If these benefits make sense to you, it's time to make the switch. It's your time to **BECOME POWERFUL.**





THE BENEFITS OF GOING SOLAR

Solar Makes Great Financial Sense

The math is actually pretty simple. If your monthly electric bill is more than \$100, you could save money every month with a Sharp solar electric system. Even if you finance the cost of your system, the loan payment plus your new, lower electric bill will usually be less than your previous statement. This means your savings start immediately, and your system will eventually pay for itself.

Some homeowners may even earn back two to three times the cost. A lower electric bill and a system that pays for itself are just two reasons why solar is a smart investment.

Solar Gives You Protection Against Electricity Rate Hikes

Imagine that you had been able to lock in automobile gas prices in 2004. You'd be paying less than \$2 a gallon not only today, but also for decades to come. With every gas price increase, you'd be saving even more money. That's exactly what you're doing with the cost of electricity when you install a solar electric system.

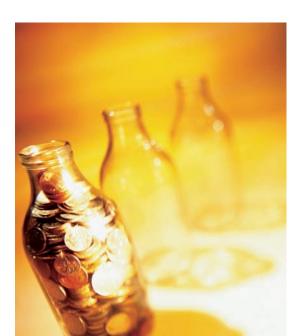
Because solar installation is a fixed cost, savings increase as utility rates rise. Essentially, you're building in a hedge against future rate increases. And rising utility rates are definitely something you can count on, especially considering that they've gone up an average of 5% per year for the past 30 years. In 2006, some states saw the highest tier residential rates jump as much as 55% in just one year.

Solar Comes With Big Financial Incentives

Federal tax credits and public utility rebates can help pay for a substantial percentage of your system and installation. Depending on where you live, there may be additional incentives available from your state government. Your certified Sharp installer can explain what savings are available to make your system even more affordable. **For rebate information in your state, visit the Database of State Incentives for Renewables and Efficiency at www.dsireusa.org.**

Solar Increases The Value Of Your Home

A solar electric system can increase a home's value by \$20,000 for every \$1,000 in reduced annual operating costs.





Solar Can Help Offset Climate Change

From Main Street to Wall Street, people are realizing the effects that our actions have on the environment—and they're going solar to minimize those effects and lower their carbon footprint.

Until recently, there hasn't been much of a choice but to use the electricity provided by conventional methods. With advances in technology and increased consumer awareness, however, solar electricity is now a very feasible option. So, while you'll be lowering your electric bill, you'll also be helping to raise our air quality.

Coal-fired power plants are responsible for 72% of all sulfur dioxide emissions in the U.S. Yet solar electricity produces absolutely no pollution. One million homes using solar electricity would reduce carbon dioxide emissions by 4.3 million tons per year. That's the equivalent of removing 850,000 cars from the road. And by using more solar electricity, fewer power plants that produce greenhouse gases would need to be built.

Sharp Solar Is 100 Percent Clean

A Sharp solar electric system generates no harmful emissions—zero. This means you can power your home with 100 percent pure sunshine that's not only clean, it's also renewable and abundant. So abundant in fact, it's been calculated that a 100-square-mile array of solar modules in the Southwestern United States could generate enough electricity to power the entire country.

Solar Offers You Energy Independence

By switching to solar electricity, we can help alleviate our overdependence on foreign sources. Solar electricity is used where it is made, so there are no transportation or delivery costs. Solar electricity's price stability is also independent of the effects of natural disasters, foreign political instability or trade disputes. The supply chain extends simply from the sun to your roof.

While you are enjoying reliable solar electricity, you are also sharing that reliability with everyone else. Doesn't it make sense that if everyone had solar electricity systems, the public power grid would be more reliable since there would be less strain on it?

HOW SOLAR WORKS

No Changes In How You Use Electricity

Solar electricity works exactly the same as the electricity you buy from the utility company. You turn on lights, plug in lamps and power appliances the same way you do right now. In fact, if you didn't see solar modules on the roof, you'd never notice any difference—except a lower electric bill.

Relax, It's Easier Than You Think

While the science of converting sunshine into electricity is complex, the idea is pretty simple.

Solar electricity is generated by a group of solar modules called an array that's installed on your roof or in your yard. When sunlight falls on the solar modules, a DC electrical current is created instantly. The DC electricity is fed into an inverter that changes it to standard AC electricity—the same kind your home already uses.

Solar Power Is Highly Reliable

Solar electricity has been in use for more than 50 years and is proven to be highly dependable. Unlike other methods used to generate electricity, solar doesn't rely on moving parts that can wear out. Sharp modules come with a 25-year limited warranty, and some systems installed more than 40 years ago are still performing.

Little Maintenance Is Required

Occasionally, a solar array should be rinsed off with a hose to clear the dust or debris that blocks sunlight and reduces efficiency. That's about all that's required.



THE SYSTEM

There are three main components that work together to make a typical solar electric system.

1. Solar Modules. Sunlight falls on the modules, which contain silicon solar cells. The energy in the sunlight is absorbed by the cells and frees electrons which flow along the array wiring. Electricity is the flow of electrons.

2. Solar Inverter. The electric current made by the solar modules enters the inverter and is changed from direct current (DC) to alternating current (AC), the type of electricity used by homes and businesses in America. 3. Electric Meter. An electric meter is a device that measures the amount of electricity supplied to or produced by a home. You already have an electric meter. After installing a solar electric system, your meter will measure the difference between the amount of electricity used vs. the amount of electricity produced by your system.



SOLAR PRODUCTS FOR YOUR HOME



Sun For All

Sharp offers more than one way to go solar. With so many options to choose from, you and your certified Sharp installer will decide what's right for your home and your family. Much of the decision is based on the amount of roof space you have and which direction your home faces.

A Sharp-certified installer will review the advantages of these different options and help you determine what works best for you.



OnEnergy[™] Roof-Mounted Solar Electric Systems

Most residential solar modules are installed on your roof. These systems include a rack with solar modules that attach to it. The OnEnergy™ system is Sharp's custom solution that's designed to meet your electricity requirements and the specifications of your roof.

The OnEnergy system replaces the bulky look of traditional roof mounts with a unique, low-profile rack designed to blend beautifully with a home's roofline.

• The low-profile racking system creates a seamless appearance that integrates well with several different roof types.

• Sharp offers a variety of modules that optimize energy production and allow Sharp-certified installers to create a custom solution for your home. There's even an exclusive triangle-shaped module for hip roofs and angled roofs.

• The OnEnergy system can be installed on asphaltshingle, flat-concrete tile and even curved high-profile (Spanish) tile roofs without compromising the integrity of the roof.

• The OnEnergy system is also UL-listed as a complete system and can be easily retrofitted on existing roofs or installed during new home construction.



Building-Integrated Solar Electric Systems

Designed to blend seamlessly with flat-concrete tile roofs, building-integrated modules resemble tile shingles. By integrating solar electricity with today's architecture, your solar electric system can become nearly invisible.



Ground-Mounted Solar Electric Systems

Ground mounts feature angled modules on steel supports anchored in concrete footings. These systems are ideal for large arrays on estate properties.





CHOOSE SHARP— THE TRUSTED NAME IN SOLAR

Since the invention of the solar electric cell, Sharp has been at the leading edge of the solar industry. From the world's first solarpowered calculator to solar-powered residential and commercial applications, Sharp powers more homes and businesses than any other solar manufacturer in the world.

This means you have an experienced solar partner you can trust. Sharp's industry leadership, quality manufacturing and extensive network of certified installers make converting your home to solar power more feasible and easier than you may have imagined. • With 50 years experience in solar, Sharp has a proven history of reliable products and dependable customer service.

• Sharp solar products come with outstanding long-term warranties, giving you peace of mind for years and years to come.

• Sharp offers a wide range of diverse and unique solar products, allowing installers to customize a solution that meets your specific energy needs.

• Sharp trains more installers than any other manufacturer. Before installers work with Sharp solar products on your home, they undergo a rigorous certification process to ensure your system is installed professionally.

Among many other industry-leading environmentally sound policies and operations, in 2006, Sharp installed a 5.21 MW solar array at the Kameyama LCD Plant, creating one of the world's largest roof-mounted solar electric systems.*





Ready, Set, Go Solar

Contact us, and we can refer you to an installer, trained and certified by Sharp. The installer will provide you with a free, in-home assessment to determine your energy needs, along with a detailed analysis of costs and savings.

Call us at 1-800-SOLAR-06, and we'll help you make the switch to clean, affordable solar electricity. For more information, visit www.SharpUSA.com/solar.



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