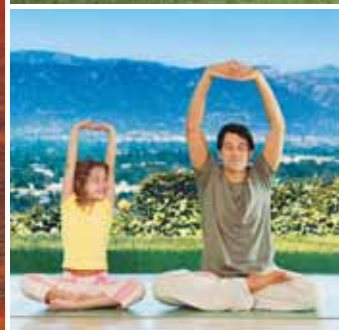


An Enlightened Energy Choice



A Smart Financial Decision

# A Choice That's Economically and Ecologically Sound



Consider the fact that there is enough potential energy in one hour of sunlight to power the electrical needs of the entire world for a full year. Imagine if we could harness this inexhaustible source of energy. Now imagine Sharp Solar: cost-effective residential systems that convert the sun's energy into clean, reliable power for all your home electricity needs.

## Solar Solutions from the World Leader

For 45 years, Sharp has led the industry with practical, efficient, and affordable solar electric systems. Sharp systems have been installed everywhere, from the demanding environments of satellites and lighthouses to commercial and industrial buildings, and even on the most beautiful, high-tech homes. Today, Sharp is the #1 manufacturer of solar cells worldwide, and produces nearly as much generating capacity as the next three largest manufacturers combined. Our complete residential solar systems let families generate their own electricity with no harmful emissions. They're quiet, attractive, safe, and reliable, with only minimal maintenance required over their long operational life. It's no wonder why so many homeowners are making the move to Sharp Solar.



## Financial Savings that Shine

Dramatic decreases in the cost of solar systems plus higher efficiency and longer system life spans all mean that installing a solar electric system on your home makes good financial sense.

Depending on where you live, state-funded rebates and federal tax credits can cut a system's purchase cost by as much as 70%. Generating your own clean, renewable solar power can significantly lower your monthly utility bill and provide a hedge against future rate increases. And, in most states, you can sell the excess electricity you produce back to your utility, further reducing your energy costs.

Today, solar is the right choice for the Earth and the right choice for your home. And there's never been a better time to let Sharp Solar put the power of the sun in your hands.



## The Brilliant Benefits of Solar

- Save money every month by lowering your electric bills
- Save money on your system purchase with state rebates and federal tax credits
- Utilize free energy from the sun to reduce the effect of utility rate increases
- Enjoy energy independence by becoming your own power producer
- Protect the environment by using clean, renewable energy in your home

# Harnessing the Sun's Energy



Solar has come a long way since 1954 when the first solar cell was created. Yet the basic principles of solar technology remain the same. Solar cells are made of thin layers of silicon. When sunlight strikes the cells, chemical reactions release electrons, generating electric current. Individual cells are grouped together to form solar modules which, when installed on the roof or ground as a component of a complete solar system, generate electricity.

## How It Works

The four basic components of a residential solar system are ① rooftop solar modules, ② an inverter, ③ an in-home solar power monitor, and ④ an electric meter. Sharp solar modules collect the sun's energy and convert it into electricity. Based on your electricity requirements the appropriate number of modules are connected to form a rooftop array. The inverter converts the electricity from direct current (DC) to alternating current (AC) for use in the home. The monitor lets you view the status of your system and its performance, while the standard electric meter displays net power usage. Trim, industry-standard mounting hardware and wiring complete the system, all designed to work together flawlessly and efficiently. Combined with professional installation from an independent Sharp Certified Installer, a Sharp solar system is designed to provide you with decades of clean, reliable energy.



## A Custom System Designed with Your Needs in Mind

Your Sharp solar system is customized specifically for your needs. We manufacture a complete line of solar modules in a range of power output levels, as well as unique triangular modules that lend a beautiful custom look to angled rooflines. Your independent Sharp Certified Installer will help you determine the ideal system based on your power needs, and will design a rooftop configuration with clear, unobstructed access to the sun and ensuring a clean, stylish appearance.

# The Complete Sharp Solar Solution



Sharp's innovative solar technology is widely available in the U.S. residential market. We assemble both the modules and inverters ourselves, ensuring that the electrical components are ideally matched to the system and provide the most reliable and efficient performance, decade after decade. Our home solar systems are installed quickly, and require little maintenance other than an occasional cleaning. And Sharp's comprehensive warranties stand behind every system.



## Solar Modules

Sharp's solar modules offer industry-leading performance and proprietary design. They boast a high conversion efficiency—the percentage of sunlight that is converted into energy for your use—to maximize your savings. And Sharp's triangular modules are ideal for multi-faceted roofs with many angles. By using both rectangular and triangular modules, a Sharp system can be customized to maintain the beauty of your home. Mounted with black frames, trim, and clamps, your solar system will have the pleasing look of a high-tech skylight.



## Solar Power Monitor

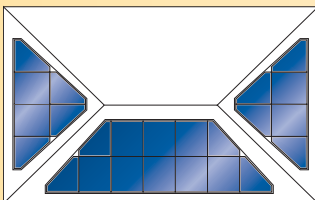
Sharp's solar power monitor displays current and cumulative readouts on electricity generation, power consumption, and CO<sub>2</sub> reduction levels so you can watch the environmental benefits—and your savings—add up. Designed with a backlit LCD screen, the monitor blends beautifully with your home's décor.



## Inverter

Sharp's powerful 3500 Watt inverter is the ideal size for residential use, and may eliminate the need for multiple inverters for a home system with large electrical requirements. It has the unique ability to blend electricity from modules on up to 3 different roof surfaces. This lets your installer design a system for your exact power requirements while allowing flexible module placement for the best possible rooftop appearance. In addition, its active cooling helps it maintain exceptionally stable power output even in extremely hot climates.

## Sharp Inverter Provides Rooftop Efficiency and Flexibility



Sharp's inverter blends electricity from modules on up to three different rooftop surfaces for system design flexibility.

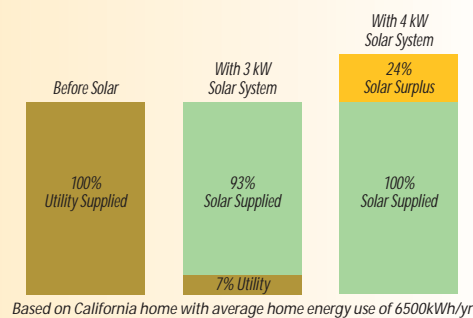
# Save Money by Day and Sleep Better at Night



When you decide to go solar, you'll sleep better knowing you've made the enlightened choice that helps to preserve the environment and leaves a cleaner world for your children. Better yet, you'll applaud your sound financial decision every month when your lower utility bill arrives. You'll reduce the amount of energy you purchase from your utility, lower your electricity costs, and provide a measure of protection against future utility rate increases. Who says daylight savings only lasts six months a year?

## Solar Lowers Your Utility Bills

Electricity rates in many areas continue to rise. Currently, California's rates are increasing an average of 6.7% per year! But by generating your own electricity, you'll enjoy a hedge against future rate hikes. And in most states you can sell your surplus electricity back to the utility and generate a credit on your bill.



Your individual energy needs, plus the size, type, and layout of your roof, will all influence the size of your solar electric system. While you'll realize ongoing savings by generating your own electricity, your greatest one-time savings will be on the day you purchase your system. A wide range of financial incentives available to you through federal and state programs can offset your total installed cost. Depending on where you live, these may include rebates, grants, loans, and production incentives, as well as sales, personal, and property tax credits.

## State and Federal Incentives Pay You to Install Solar Today

All 50 states and the District of Columbia offer some form of financial incentives to help you "save green" when you "go green." As of January 1, 2004, California provides a \$3.20 per Watt rebate and a 7.5% tax credit on residential systems. This can result in savings of up to 50% on the system's total purchase price. In other states, the incentives can be even more generous. New Jersey currently offers rebates of \$5.50 per Watt, resulting in net savings of as much as 70%. For specific up-to-date information on federal, state, and local incentives available in your area, consult the Database of State Incentives for Renewable Energy, funded by the U.S. Department of Energy. You can find this helpful resource at [www.dsireusa.org](http://www.dsireusa.org).

## Your Utility Meter Spins Backwards with Net Metering

Net metering programs in 38 states and the District of Columbia help increase your savings. With net metering, your electric meter tracks your net power use, spinning forwards when you use electricity from the utility, and backwards when your system generates more electricity than you need. Your local utility or [www.dsireusa.org](http://www.dsireusa.org) can give specific details of the net metering program in your area.



## How Net Metering Works

During the day, the system "banks" any surplus on the utility grid, feeding it back to the utility and generating a credit on your bill. The more electricity you produce, the more you save. At night, the system automatically draws the electricity you need from the grid. This forwards and backwards flow of electricity is completely automatic, and provides a smooth, uninterrupted flow of power for all your household needs.

# Today's Forecast: Sun Followed by Savings



Even if you don't live in California, solar can be a cost-effective solution for your energy needs. New York and New Jersey, for instance, receive ample sunlight for efficient solar power generation. Their relatively high electric utility rates mean homeowners save even more when they use free energy from the sun. And their generous rebates and tax credits make them among the most solar-friendly places in the country. Many other states offer attractive incentives that can make solar truly affordable for you.

Here are two examples illustrating how incentives can dramatically reduce the cost of a solar system. Because these incentives may vary even within a state, your Sharp Solar Certified Installer will explain specifically how the incentives available to you can offset the cost of your system. Your independent installer can also complete and submit all rebate and tax credit forms and deduct these savings bonuses directly from your purchase price. You'll enjoy the savings up front, paying only the net cost out of your pocket.

## Rebates Lower the Purchase Price of Your Solar System

Typical California System		Typical New Jersey System	
Size of system: 3500 Watts		Size of system: 3500 Watts	
Base cost: \$9 per AC Watt,* installed		Base cost: \$9 per AC Watt,* installed	
<b>Total System Cost</b> (\$9 per Watt x 3500 Watts)	\$31,500	<b>Total System Cost</b> (\$9 per Watt x 3500 Watts)	\$31,500
<b>Rebate</b> (\$3.20 per Watt x 3500 Watts)	- 11,200	<b>Rebate</b> (\$5.50 per Watt x 3500 Watts)	- 19,250
	\$20,300		\$12,250
<b>Tax Credit</b> (7.5% of \$20,300)	- 1,523	<b>Tax Credit</b> (currently none)	- 0
<b>Net System Cost</b>	<b>\$18,777</b>	<b>Net System Cost</b>	<b>\$12,250</b>
<b>Net Savings</b>	<b>40%</b>	<b>Net Savings</b>	<b>61%</b>

\*Base costs are examples for illustrative purposes. Your actual installed costs may vary.



## Solar Can Pay Off Even When You Sell Your Home

When you install more energy-efficient windows or insulation, your home's reduced energy bills may make it more desirable and valuable in the real estate market. The same is true of solar. A 2001 California Energy Commission study found that the majority of home buyers would be more interested in a home that had a renewable energy system already installed, and they would be willing to pay more for it. Your solar investment will continue to pay dividends even when you move on to your next home.

# Sharp Simplifies the Solar Solution



Whether you're considering a retrofit or new construction, adding solar to your home doesn't have to be a daunting task. It's natural to have questions and concerns, and Sharp makes it easy to get the answers. Just call us and an independent Sharp Solar Certified Installer will come to your home and guide you through the process, step by step.

## Step 1: Contact Sharp Solar

Call Sharp Solar at 1-800-SOLAR-06 and we will have an independent Sharp Solar Certified Installer contact you. Our strong network of more than 100 installers and service sites throughout the U.S. ensures that there's a solar expert nearby.



## Step 2: In-Home Analysis and Quote

The independent installer will make an appointment with you to explain how the system works and to detail your options. They'll check the intensity of sun in your area, the roof's design, condition, and orientation to the sun, and your current electrical service. They'll analyze your electric bills and perform an energy analysis to determine the system that best meets your energy needs, budget, and economic goals. Finally, they'll provide you with a detailed quote and explain the available state and federal financial incentives that can dramatically reduce your out-of-pocket cost.

## Step 3: Installation

The actual installation usually takes only a few days after all permits are in place. Your independent Sharp installer will manage every aspect of the installation, including building permits, inspections, rebate forms, and other paperwork. Every independent installer undergoes a comprehensive Sharp training program to become an experienced solar expert. Our installers stand behind their work, and Sharp stands behind them.

## Sharp Solar History

For 45 years, Sharp's research and development has led to numerous important innovations in the industry. And our major investment in solar—including the recent opening of our new "clean" manufacturing facility in Memphis, TN—ensures that we'll continue to expand and improve our line of solar products for years to come. Sharp has been the world's #1 solar cell producer every year since 2000. No other company has made such a powerful commitment to solar energy.



## A History of Sharp Solar Achievements

1959	1967	1980	1992	1994	2000	2003	2003
Sharp begins development of solar cells	Development of solar cells for aerospace use	Introduction of calculators with solar cell batteries	Development of high-efficiency multi-crystal silicon solar cells	Design of first solar system specifically for home use	Sharp becomes the #1 producer of solar cells in the world	Introduction of residential systems designed for the U.S.	Introduction of innovative triangular solar modules in the U.S.

# A Complete Product Line for a Customized Home System



Sharp offers solutions for virtually every residential or commercial application, all backed by world-class Sharp training, technical support, and customer service. From solar-powered homes and businesses to traffic lights and telemetry systems, Sharp has more solar modules on the job than any other solar manufacturer worldwide. No matter what type of application, Sharp Solar has the power you need. And your independent Sharp Solar Certified installer will recommend the ideal solution for your home.

## Sharp Solar Product Line

		70 Watts	140 Watts	167 Watts	80 Watts	123 Watts	165 Watts	175 Watts	185 Watts
Solar Modules	Appearance	Blue cells, black anodized aluminum frame	Blue cells, black anodized aluminum frame	Blue cells, black anodized aluminum frame	Blue cells, anodized aluminum frame	Blue cells, anodized aluminum frame	Blue cells, anodized aluminum frame	Black cells, anodized aluminum frame	Black cells, anodized aluminum frame
	Rated Power (DC)*	70W	140W	167W	80W	123W	165W	175W	185W
	Solar Cell Type	Multi-crystal silicon	Multi-crystal silicon	Multi-crystal silicon	Multi-crystal silicon	Multi-crystal silicon	Multi-crystal silicon	Single-crystal silicon	Single-crystal silicon
	Number of Cells	21	42	48	36	36	72	72	72
	UL Listed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Limited Warranty, Power Output	25 years	25 years	25 years	25 years	25 years	25 years	25 years	25 years

\*STC (Standard Test Conditions) : 25°C, 1kW/m<sup>2</sup>, AM 1.5

Inverter/Solar Power Monitor	Appearance	Inverter: Neutral-toned NEMA 3R housing for outdoor installation Solar Power Monitor: Backlit LCD display with surface-mounted neutral-toned case for indoor installation
	Maximum Continuous Output Power (AC)	3500W
	Inputs	Multi-string: Up to three separate input strings, each varying by number, model and roof angle of modules
	Peak Conversion Efficiency	92.40%
	Cooling	Active cooling system for stable power output
	Applications	Residential, commercial and industrial solar electric systems
	UL Listed	Yes
	Limited Warranty	5 years

Module and inverter specifications and design are subject to change without notice.

## Comprehensive Product Warranties

Sharp solar electric systems have long been recognized as among the most reliable in the world. With no moving parts to wear out and almost no maintenance required, they are built to last. Our inverters are warranted for 5 years and our modules are covered by a 1-year warranty plus a 25-year warranty for power output (see your installer for full details). Our systems are superbly designed to withstand extreme heat, wind, and impact, with proven dependability in thousands of installations worldwide. You're making an investment in solar for both your family and the environment. The Sharp name guarantees that your investment will continue to pay dividends for decades to come.



# Sharp Products: On Your Home and In Your Home



Since Sharp's invention of the mechanical pencil in 1915, we have been at the forefront of technical innovations. And we are just as devoted to designing stylish products that enhance your lifestyle. From our AQUOS™ ultra-thin Liquid Crystal Televisions and Viewcam™ digital camcorders to our advanced high-speed microwave ovens and Plasmacluster™ air purifiers, our products offer greater comfort, convenience, and superior home entertainment.

This same focus on style and industry-leading technology extends to the development of Sharp solar electric systems that fit beautifully into your life. These systems don't just perform superbly—they actually look great on your roof. With deep cobalt blue solar cells, flush black frames, and triangular modules that hug your roofline, a Sharp solar system's custom-designed look enhances your home's appearance. The solar power monitor integrates beautifully into your décor as well, and mounts inside for easy viewing.

Sharp products may already be in your home. Now you can get the same high-tech, high-style products you've come to expect from Sharp on your home as well. When you decide that solar is right for you and your family, choose the most innovative, most recognized name in solar energy: Sharp.

Now is the right time for Sharp Solar.

*Liquid Crystal Televisions*



*Air Purifiers*



*Microwave Ovens*



*Camcorders*

To learn more about Sharp solar products, or to locate an independent Sharp Solar Certified Installer near you, please call 1-800-SOLAR-06 or visit [www.sharpusa.com/solar](http://www.sharpusa.com/solar).

**SHARP**  
..... be sharp

**SHARP**  
..... *be sharp*

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