#### COMMITTED TO PEOPLE AND OUR PLANET.

At Sharp, our passion for protecting the eco-system for future generations is equaled by our enthusiasm for improving the lives of people today. Sharp is committed to a higher level of standards for energy efficiency and environmental sustainability, working to minimize waste and greenhouse gases in all Sharp factories.

#### Sustainability Guides Our Actions

As our contribution to achieving a low-carbon society, Sharp's factories are designed to reduce environmental impact and achieve higher levels of sustainability.

#### A Passion for Conservation

Sharp's industry leadership extends to organizations which encourage our own company and others with strong environmental records to go above and beyond their legal environmental requirements.

#### Plug-In to E-Cycling Program

An active participant since its inception in 2003, Sharp has been recognized by the EPA for its performance in collecting and safely recycling used electronic equipment.

#### **Energy-Efficient Product Transportation**

Sharp is an award-winning member of the EPA's voluntary SmartWay™ Transport
Partnership. This alliance has established guidelines for fuel efficiency improvements to reduce greenhouse gases by limiting unnecessary engine idling and increasing the efficiency and use of rail and intermodal transportation.





MANUFACTURING COMPLEX FOR THE 21ST CENTURY: SAKAI CITY FACTORY. With a projected production capacity of one gigawatt, Sharp's new, state-of-the-art industrial complex is scheduled to begin producing thin film solar in 2010. The largest factory of its kind, the Sakai plant will also produce its own electricity with an 18-megawatt roof-mounted solar system.

#### **Evergreen Award**

The U.S. Government's General Services Administration honored Sharp with their Evergreen Award, recognizing Sharp's outstanding environmental practices and commitment to a sustainable future.

#### The Climate is Right for Change

From Main Street to Wall Street, people are realizing the positive effects that our actions have on the environment, and they're going solar to amplify those effects by lowering their own carbon footprints. With Sharp's dedication to environmentally sound manufacturing and operating procedures, you can make the switch to solar with the assurance that you're building a sustainable society with an experienced solar partner you can trust.

1-800-SOLAR-06 www.SharpUSA.com/solar

#### SHARP SOLAR ACADEMY.

Being an environmentally advanced company is part of our corporate DNA. Our portfolio consists of energy-saving and energycreating products, but we also strive to be an environmental steward through initiatives such as solar cell production, green factories, energy-saving LCD TVs and LCD TV recycling programs. Along with technology, Sharp views education as a core component of our environmental stewardship. The embodiment of this is the Solar Academy, our worldwide environmental educational program where Sharp staff volunteers teach 4th and 5th grade students about the realities of climate change and the positive effects that our energy choices can make on the environment.



#### **Powering Green Choices**

Designed in collaboration with teachers, educational non-profits and engineers, Sharp is proud to partner with our communities to promote conservation and teach the next generation about clean energy, the science of solar, and the steps we can all take to make more eco-conscious decisions. To learn more and to see if the Solar Academy is available in your area, please visit our website at

www.SharpSolarAcademy.com



solar electricity

**BECOME POWERFUL** 

### SUN FOR ALL.



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It's been nearly a half-century since Sharp's first reliable solar-power solution was used in a lighthouse. It's also when our vision for a clean, solar-powered world led us to develop solar systems for a broad range of applications. From satellites, telecommunications, water pumps, remote houses and safety signals, to grid-tied homes, businesses and large solar farms, Sharp has manufactured a variety of products that harvest abundant, inexhaustible solar energy — all to deliver electricity. Almost 50 years and countless innovations later, we're a global leader in solar, providing the systems to power more homes and businesses than any other solar manufacturer in the world.

Today, we offer a vast portfolio of proven solar solutions, including both monocrystalline and polycrystalline silicon and our newest innovation, multi-junction thin-film silicon. And we continue to look forward, developing new technologies, all leading to higher-value products for your application. Our development is driven by the needs of the markets we serve. Our goal is to provide the best value for each solar application, and

ultimately, the best electricity

value on the planet.

(Depicted above) 14,100 Sharp amorphous silicon thin film modules creating a 1.63 megawatt array in Viernau, Germany.

## THIN FILM PHOTOVOLTAICS: THE NEXT EVOLUTION OF SOLAR TECHNOLOGY.

For nearly 50 years, Sharp has consistently brought down the cost of solar electricity through design and manufacturing efficiencies. Our selection of environmentally abundant and benign silicon as the basic semiconductor springs from our exceptional knowledge of silicon thin films, based in part on our

world-leading LCD technology and scientific knowledgebase, access to abundant raw material, environmentally sound manufacturing and performance relative to other thin-film semiconductors. Thin film is our technology roadmap in achieving a lower cost per kilowatt-hour.

### THE PRODUCT OF CHOICE FOR MULTI-MEGAWATT SCALE POWER PRODUCTION.

Sharp's thin film product pairs amorphous silicon with a layer of Sharp's proprietary microcrystalline silicon to achieve higher stability and better performance than previously thought possible for thin film solar. This tandem-junction architecture captures more of the solar spectrum and converts more sunlight into electricity. It is produced with only a fraction of the silicon used in our crystalline solar cells, creating a less material-intensive manufacturing process that

contributes to a lower effective cost per kilowatt hour (kWh) for large-scale applications. Additionally, with a low temperature coefficient for output power – approximately half that of crystalline silicon – thin film generates greater specific power than its crystalline silicon counterpart in geographic regions where temperatures are high. In warm climates, this translates into as much as 10 percent more kilowatt-hours per kilowatt.

### HELPING YOU IMPROVE YOUR BOTTOM LINE FROM 93 MILLION MILES AWAY.

Today's corporate leaders are constantly challenged to reduce operating costs, increase efficiencies and develop strategies to achieve sustainability. Savvy commercial enterprises are embracing solar technology and partnering with Sharp to create energy solutions that significantly offset their utility costs in the process.

But the advantages go beyond improving our customers' bottom lines. Solar also acts as a hedge against unpredictable rate hikes, but perhaps just as important, commercial solar users contribute to a more sustainable society and demonstrate strong corporate social responsibility.

Sharp is passionate about environmental conservation and manufactures a variety of products that are among the most energy efficient. When you choose Sharp, you get more than well-engineered products. You also get Sharp's proven reliability, outstanding customer service and the assurance of our 25-year limited warranty on power output. Using breakthrough technology, made possible by nearly 50 years of proprietary research and development, Sharp's crystalline silicon solar modules incorporate an advanced surface texturing process to increase light absorption and improve efficiency. High module efficiency offers an outstanding balance of size and weight to power and performance.



# IT PAYS TO POWER YOUR HOME WITH SHARP.

Sharp residential solar systems give homeowners the ability to generate their own clean, green energy from the sun. Homeowners are significantly lowering their monthly electricity bills and worrying less about future rate hikes. And in most states, solar homeowners can sell their excess electricity back to the utility at the full retail value, further reducing their energy costs.

Today, solar is the right choice for the earth and the right choice for our homes. Sharp's OnEnergy™ system can fulfill the energy demands of almost any home with a unique, low-profile rack, designed to create an elegant appearance that blends beautifully with today's residential architecture. Combined with our black-framed solar modules, the OnEnergy system sets a new standard in solar aesthetics for asphalt-shingle, concrete-flat tile and curved

### CALIFORNIA REBATE EXAMPLE RESIDENTIAL INSTALLATION

System Size System Cost	5 kW DC \$7.00/watt DC
Total System Cost	\$35,000
State Rebate (\$1.90/watt x 4 kW AC)	\$7,600
Federal Tax Credit (30% of post-rebate cost)	\$8,295
Final System Cost	\$19,105
Net System Savin Net Savings	gs \$15,895 45%

Rebates vary by state and by home.

high-profile (Spanish) tile roofs. And for homeowners needing maximum energy output, Sharp proudly introduces its most powerful monocrystalline residential module, offering flexible installation for nearly any kind of roof.

Since 1963, Sharp has led the solar electric industry with efficient, affordable systems and powers more homes than any other solar manufacturer in the world.







Commercial enterprises partner with Sharp to significantly reduce operating costs.



Residential products are engineered to deliver superior aesthetics with proven reliability.

For more information on the type of solar system that's right for your hon or business, visit or call www.SharpUSA.com/solar 1-800-SOLAR-06