



## Frequently Asked Questions For Homeowners

### **What is Solar Santa Monica?**

Solar Santa Monica is a city-sponsored program that tests Santa Monica's new approach towards energy. It starts by helping residents save energy through energy efficiency, and then helps them produce energy using solar systems. We want our City to be making most of the power it needs by 2020.

### **What will it take to reach this goal?**

Everyone needs to step up at some level – this year, next year or when they can. Our plan is to improve the efficiency of every building in Santa Monica, and put solar panels on 17,400 roofs! As of March, 2009 we have 161 solar sites.

### **What is the latest on Solar Santa Monica?**

Solar Santa Monica remains the same as it was envisioned – a free service to help residents make their way through the decision-making process of buying solar.

We have refined the program, based on experience over the past 2 years, to emphasize:

- A free, comprehensive On-Site Solar Assessment with written Report and recommendations.
- Referrals to specialized solar lenders.

- Referrals to other specialists such as plumbers, roofers, etc.
- Assistance with comparing competing bids for solar or efficiency home-upgrade projects.

Because of these additions, we are now calling the program the Solar Santa Monica SERVICE.

The program started officially in February, 2007, when after a comprehensive RFP process, preferred installers were selected. Since then over 300 people have signed up for a free residential assessment, and 60 of them went on to get a proposal from one of these installers. Other people sought out installers on their own.

At the same time, a number of businesses in Santa Monica – including municipal buildings -- were moving ahead to install solar with, and sometimes without, the assistance of the City-sponsored service.

The upshot of all this activity – Santa Monica DOUBLED its solar capacity in 2007 over what it had installed up to that date! 2008 was a great year as well with many large solar projects in the pipeline.

### **What's in line for 2009?**

Our first referral took place on January 2 – so activity is continuing as planned. To reiterate, the goal of the program is to

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improve the efficiency of every building in Santa Monica, and put solar panels on 17,400 roofs!

Some of what to expect in 2009:

- Re-opening of the proposal process for solar installers.
- Continued outreach in the community through events such as the Farmers' Markets, presenting to businesses, neighborhood and regional trade shows, etc.
- Financing programs sponsored by the city (AB 811).
- Influencing legislation to help apartment owners and dwellers take advantage of solar.

#### **Who is paying for Solar Santa Monica?**

Residents, businesses, the City, utilities, the State and Federal government, vendors, installers, lenders -- everyone is chipping in. The City of Santa Monica does not pay directly for any solar installations, but it does waive the solar permit fee, and expedites permitting. The City also supports the program by searching out good partners and by managing the day-to-day activities of Solar Santa Monica.

#### **Why should I take advantage of this new service?**

We think people need to understand how their utility bill works, and what to expect in years to come. You have already committed to paying for electricity. Either you can "rent" your electricity from the utility company each year, or you can "own" your own electricity. We expect electricity rates to continue to rise. If you improve the efficiency of your home, and install solar, you won't be as affected as much as your neighbors since you will be producing most or all the power you need, right on your own roof!

#### **What will I get if I participate?**

Solar Santa Monica has assembled a team of experts to make it easy for you. They seek out good deals on everything from appliances, to the cost of solar panels and their installation, to bank financing. As people join in, we'll all enjoy cleaner air, increased property values, and lower utility bills.

#### **Why should I invest in solar?**

You have committed to paying for electricity for the coming years. Either you can "rent" your electricity from the utility company each year, or you can "own" your own electricity. If electricity rates continue to rise, you won't be as affected since you will be producing most or all the power you need, right on your own roof. And your system is likely to last 30 years or more. That's why people see solar as a hedge against future price increases.

#### **What about solar power for heating water?**

A solar hot water system, or solar thermal system, is just as important as a solar electricity system. With a solar thermal system you can cut your demand for natural gas by 50-75%. Solar thermal uses different panels from solar electricity, but has some of the same advantages including a long operating life, tax credits, and rebates.

#### **How do I get started?**

You can come to the office, go to the website or call. To begin, we recommend a DIY Energy Survey, a Solar Estimation Table, and Solar Map to find your solar potential.

- Office: 1212 5<sup>th</sup> Street First Floor
- Website: [www.solarsantamonica.com](http://www.solarsantamonica.com)
- Call: (310) 458-4992

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Decide which recommendations make sense, and how to pay for them. When you're ready to move forward, let the Solar Santa Monica team refer you to the contractors we've pre-screened.

### **Who makes up the SSM Team?**

Solar Santa Monica is run out of the Office of Sustainability and the Environment on 5th Street just south of Wilshire. The "Team" is made up of that office's staff working with [EcoMotion](#), an environmental consulting firm headquartered in Irvine, CA, that was selected in a competitive solicitation to help implement the program.

### **Who are the Contractors?**

Solar Santa Monica issued a Request for Proposal and Memorandum of Understanding to allow local solar contractors the opportunity to join our Preferred Solar Contractor list. Solar Santa Monica checks for valid licenses, calls references to ensure quality work, and number of installations locally and beyond.

### **How do they know what size system I need?**

Your system will be sized to fit your electrical needs. As an example, the average California home uses about 6,500 kWh a year. Since a typical 1 kW system can produce about 1750 kWh per year, if you fit the average then a system that is between 3 and 4 kW would cover your needs. Solar Santa Monica encourages people to start the process by reducing their need for electricity – and thus the size of the system – by installing more efficient appliances, lights, pumps, etc.

### **How much roof space will I need?**

Typically, every 1 kW of a solar electrical system needs about 100 unobstructed

square feet of south, south-west or south-east facing roof space. Solar panels for heating water are somewhat larger, but you'll usually need only one or two of them.

Check out the LA County Solar map to find your roof and its solar potential!

<http://lacounty.solarmap.org/>

### **How much will a solar system cost?**

Solar costs vary depending on the size of the system, panel model, and roof type. Because the byproduct of solar panels is their electricity output, installers generally bid on a price per watt basis. An economy of scale may influence the price so the bigger your system, the less you pay per installed watt. Most residential systems will have a gross cost between \$9.00-\$10.00/installed watt. Keep reading for ways to reduce that cost!

### **What help can I get to pay for it?**

You have access to a California Solar Initiative rebate and a Federal Tax Credit.

### **How much is the California rebate?**

The California Solar Initiative currently offers a rebate of up to \$1.90/watt for residential systems. (This rebate amount will go down as more systems are installed.) If you install a 2W system, that would mean a rebate of \$3,800. One advantage of Solar Santa Monica is that our Preferred Solar Contractors have agreed to do the work and charge you a price that already takes the rebate into consideration. That is, you'll pay the discounted price without waiting for the rebate!

### **What changes can we expect in the rebate amounts?**

The rebate is scheduled to be reduced as

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certain levels of participation are reached. As of June, 2009, residential rebates in Southern California Edison territory are at step four – that is, \$1.90 per watt. When the total number of watts installed in SCE territory reaches the specified limit, the rebate will drop to step five, that is, \$1.50 per watt. (At this time more than half the step three amount has been used.)

#### **What is the Federal Tax Credit?**

President Obama's American Recovery and Reinvestment Act of 2009-10 established a tax credit of 30% of the cost of the solar installation, for an individual tax payer or business.

We do not expect any changes, but we will continue to report industry news in Solar Santa Monica's electronic Update, which comes out about once a month. (To subscribe:

<http://solarsantamonica.com/newsletter.html>)

Check with your tax advisor to be sure you can take advantage of the credit.

#### **Is financing available?**

The most common financing is through a mortgage loan – either a home improvement loan or a home equity line of credit. Solar Santa Monica has also made arrangements with four financial institutions to offer specialized “energy loans” to its participants. As for our “Financing Options” document.

#### **Will the value of my home go up when I install my solar system?**

A frequently cited study done by the Appraisal Institute says that a home's value increases by \$20 for every \$1 reduction in annual utility bills. If your new system saves you \$500 a year, that

would mean the value of your property would increase by \$10,000.

#### **If I improve my home by adding a solar system, won't my property taxes go up?**

Good news! Section 73 of the California Revenue and Taxation code exempts solar electric systems from increasing your property tax, at least through 2009. Of course, adding value to your home means you may need to review your property insurance coverage.

#### **How does my system interact with the electric utility?**

In Santa Monica, your system will be grid-connected. That is, if your panels are producing more electricity than you need during the day, the excess goes into the grid. At night, when the panels aren't working, you will draw electricity from the grid.

As of June, 2007, you have the option of choosing to remain on your standard tiered rate, or of choosing to be on a Time of Use (TOU) rate. Under the TOU, power produced or required at peak times (afternoons) is worth more than power produced or needed at night. So, your system will allow you to sell power to the utility at high rates and buy it back at lower rates. Whether tiered rates or TOU rates are better for you depends on your daily usage profile PLUS the size of the system you intend to install. Discuss this with your Assessor during the in-home visit.

Edison doesn't really “buy” your power. Rather, you are credited for kWh that are offset against your bill. At the end of the year there is a final accounting. You won't get a check for any annual overage – that's why it's important to size your system properly.

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**Will a solar system produce electricity for me when the power goes out?**

Most solar systems installed in Santa Monica are grid-connected. This means the system adds power to the grid when the panels are working, and the house pulls from the grid when the panels aren't working. If the grid goes down, your system shuts off automatically to protect repair workers. However, you can purchase special components that allow you to "switch" to your own panels for emergency power. You can also add batteries that store power for when neither the grid nor your panels are working. Naturally, these extras make the system more expensive – but you have that choice.

**How long will a solar electric system last?**

Your system is likely to last 30 years or more. The panels themselves are warranted for 25 years. That's why people see solar as a hedge against future price increases.

Contact us today!