

The Many Benefits of Going Solar at Home

Solar power technology has advanced and the cost has plummeted.



Economic Benefits of Solar Energy at Home

PV panels, comprised of solar cells, generate an electrical charge when photons in sunlight hit them — a phenomenon known as the photovoltaic effect (PV). PV panels, comprised of solar cells made mainly from silicon, are mounted on a home's rooftop in areas that receive maximum sunlight. The tightly compacted cells absorb photons and convert them into energy.



Materials

Solar PV panels are less expensive than ever before, thanks to increased demand driving economies of scale. Today's panels are about half of what they cost in 2008. How much has demand increased? The U.S. residential solar market grew 76 percent, Q115 over Q114, with installations of 437 megawatts of PV.

Installation and Maintenance

As the residential solar market has grown, installation costs have gone down as well. PV panels require very little maintenance, and a high-quality installation can last more than 30 years. With a battery backup, day-to-day monitoring and operation are worry-free.



Financing Options

For some homes, solar provides a very favorable ROI, but even then and for other homes, leases, rebates and low-interest financing options are available to make the transition more affordable and your energy savings kick in more quickly — often in the first month.

Energy Savings

Mosaic, a pioneer and leader in solar financing, reports that its average customer saves more than \$67,000 in electricity costs over the life of a solar installation. (Tips for calculating your energy savings are coming up.)

more than
\$67,000
in savings



Greater Savings to Come

While the energy cost benefits of solar are already substantial, aging power plants and a host of other factors make it increasingly likely that nuclear and fossil fuel energy sources will rise in cost, making solar even more attractive.

Performance Benefits of Solar for Your Home



Reliability

We can all be sure the sun will rise in the morning and set in the evening — at times that are precisely predictable. While clouds have some impact on energy production, PV panels are literally as reliable as the sun.



Security

PV panels liberate you from "Big Power." Gain freedom from massive rate hikes, fossil fuel/nuclear power plant disruptions caused by weather and accidents, or attacks on our energy grid.



Safety

Solar energy cells, made from silicon, are extremely environmentally friendly: they do not burn fuel, produce sound or generate harmful emissions.

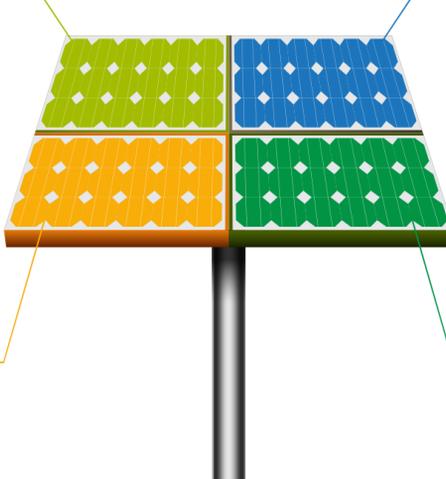
Global Benefits of Taking Your Home Solar

Strengthen Homeland Security

Power grid disruptions can have catastrophic impact on the entire country. PV panels help keep us all safer.

Fight Global Warming

Solar power creates energy without any negative impact on the climate. Let's work together to turn the tide on global warming.



Conserve Water

PV panels use more than 20 times less water per kWh of electricity than nuclear power plants, and 16 times less than coal power plants.

Create Jobs

According to the Political Economy Research Institute at the University of Massachusetts, \$1,000 invested in solar produces 14 jobs, versus 5-7 for natural gas and coal.

Is Solar Energy the Right Choice for You?



If you live in the San Francisco Bay area, Fresno (California) or Greater Boston (Massachusetts), you are in luck: **Google's Project Sunroof** makes it easy for you to calculate your potential savings with solar by giving you key data including the hours of sunlight per year at your address, current electricity costs, roof square footage available for PV panels, recommended installation size — along with lease, loan and buy options.

The economics of solar vary depending on where you live, the size of your house, energy requirements, and other factors. If you aren't able to use Project Sunroof, a reputable installer will be able to give you the facts.



"We are like tenant farmers chopping down the fence around our house for fuel when we should be using Nature's inexhaustible sources of energy — sun, wind and tide. ... I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that."

— Thomas Edison

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<http://cleantechnica.com/2013/10/08/advantages-disadvantages-solar-power/>
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