



## How Does Solar Impact Your Home Value?

Installing solar panels is one of the best ways to increase the property value of your home.

Homeowners often undertake home improvement projects to increase the value of their property and/or improve their quality of life. While some home improvements can greatly increase property value, others do very little to impact it. For example, remodeling a kitchen is thought of as a home improvement with a good return on investment. On the other hand, a swimming pool is a fun addition but may do little for a home's resale value because of the additional costs associated with pool maintenance.<sup>1</sup>

**Installing solar is one of the best ways to increase home property value.** Unlike many other home improvements, solar panels can help a house sell faster. They also actually **save the homeowner money** by reducing electricity costs, and research shows that homeowners consider energy costs an important factor in their decision to buy a new home.

### Homes with Solar Sell Faster

Homes with lower electricity bills also sell faster, spending less time on the market. According to the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy, a home with solar panels will sell twice as fast as a home without solar panels.<sup>2</sup> The website for the U.S. Department of Housing and Urban Development states that energy saving improvements increase the potential resale value of your home and help it sell more quickly because they "make your house more affordable to more people", "attract attention in a competitive market", and are "improvements which will actually save money."<sup>3</sup>

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<sup>1</sup> (Fulmer n.d.) According to CNN's Money Central, you could spend between \$1,500 and \$2,000 a year in maintenance, water and regular repairs for an unheated pool. Heating a pool intermittently for one season can increase heating bills \$500, and most pool owners can see their electric bill go up another \$50/month from running the filter. The cost of homeowners insurance is also impacted by owning a pool - "most insurers recommend that pool owners get a \$1 million umbrella liability policy, as well as install a pool fence, warning signs, and a cover."

<sup>2</sup> (National Renewable Energy Laboratory 2008)

<sup>3</sup> (Pacific Gas & Electric; U.S. Department of Energy; Alliance to Save Energy; Federal Citizen Information Center; 2009)



## Homes with Solar Have Higher Property Value

The electricity savings from solar panels translate directly into an increased home resale value. The U.S. Department of Housing and Urban Development states that home values rise an average of \$20 for every \$1 reduction in annual electricity bills.<sup>4</sup> This means saving **\$ 1,000 per year in electricity costs can increase your home value by \$ 20,000.**

The value of the home solar system increases over time, as well. As electricity prices continue to rise, a homeowner's energy savings will also increase. "One thing's for sure," states the USA Energy Guide, "when it comes time to move, solar panels will add to a home's resale value, no matter where you live."<sup>5</sup>

If you installed solar on your home through an agreement with a third-party, such as SunRun, and decide to move before the end of your customer agreement, it's easy to do so. Most homeowners who move choose to transfer the agreement to the new homeowner. In this case, the new homeowner takes over the agreement and pays the same low rate for solar power. The new buyers see the lower electricity rates, system maintenance and monitoring as advantages. Homeowners can also choose to purchase the solar equipment at a depreciated cost and sell it with their home.

### The proof is in the numbers:

- According to Shea Homes, the home resale value of California solar homes increased 55% while the value of homes without solar increased only 45%.<sup>6</sup>
- All 257 solar homes in one Clarum Homes development sold within a year of being put on the market - 2 years faster than planned. These homes were originally priced at \$379- 499,000 and were selling for as much as \$600,000.

Research released by the California Energy Commission reveals that California home buyers *want solar and energy efficient homes*.<sup>7</sup>

- 91% of Californians see energy efficiency as an important factor when considering the purchase of a new home.

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<sup>4</sup> (Nevin, Bender and Gazan 1999)

<sup>5</sup> (Alfano 2010)

<sup>6</sup> (National Renewable Energy Laboratory 2008). The comparative Shea Homes case study can be read in Barbara Farhar and Timothy Coburn's article "A New Market Paradigm for Zero- Energy Homes: A Comparative Case Study" which appeared in the Jan/Feb 2008 Vol. 50 Issue 1 of *Environment*, p. 18- 32.

<sup>7</sup> (California Energy Commission 2007), This New Solar Homes Partnership market research was conducted by an independent contractor - Fairbank, Maslin, Maullin & Associates - from March to May 2007.



- 70% said the cost of the monthly electric bill was an important factor in their decision to buy a new home.
- 81% believe that a home solar system allows homeowners to start saving on monthly living costs immediately.

According to the [California Energy Commission's brochure for Realtors](#), owning a solar home makes "financial sense" and coupled with additional energy efficiency improvements, can "help to lower the homeowner's utility costs up to 60% while protecting our environment."<sup>8</sup>

#### Why do solar panels make a home more valuable?

- **Lower Electricity Bills**

As utilities continue to raise their rates, home solar panels can help you get your electric bills under control. Nationally, utilities have increased electricity rates on average of about 6% per year for the last 30 years. These rates will only continue to increase. By going solar, homeowners can lock in lower rates for their solar electricity, and purchase less traditional electricity from the utility. While the cost of utility electricity increases with time, the cost of solar power remains low and constant – a "locked-in energy price over the life of the solar equipment, because the 'fuel' – sunshine – is free."<sup>9</sup>

And the more electricity you use, the more you end up saving. According to the American Society of Civil Engineers, the national demand for electricity has [grown 25% since 1990](#).<sup>10</sup> Solar panels are a good way to meet that growing demand with the consumption of clean power, rather than fossil fuels.

- **Location and Timing Advantages**

The value of solar electricity is also tied to the timing and location of production. A [working paper](#) by Severin Borenstein, the Director of the University of California Energy Institute, argues that the timing of solar production can potentially increase the value of solar by 30- 50%.<sup>11</sup> Demand for energy peaks in the middle of the day, increasing the cost of electricity pulled from the grid. However, solar power production also peaks in the middle of the day.

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<sup>8</sup> (California Energy Commission n.d.)

<sup>9</sup> (National Renewable Energy Laboratory 2008)

<sup>10</sup> (2009 Report Card for America's Infrastructure Advisory Council of ASCE 2009)

<sup>11</sup> (Borenstein 2008)





And, best of all, the production happens on your roof. Solar panels generate electricity “disproportionately at times when electricity is most valuable...at the location of the end-user.”<sup>12</sup> When you use traditional electricity, a percentage of the total electricity generated is lost because of the energy necessary to move the electricity from the production site to your home. Additional energy is lost as the voltage level changes from high to low as it moves from power plants to your home. Since electricity is transmitted through power lines at *very high* voltage levels over long-distances, these levels must be lowered to a safer and more manageable level for your home. The U.S. Energy Information Administration reports that in 2007, 6.5% of the electricity generated was lost during this process – before it even reached the end user.<sup>13</sup> Using power produced on your roof avoids these transmission and distribution (T&D) losses.

### **About SunRun**

SunRun is the simple and affordable option for homeowners who want to switch to solar. SunRun pioneered affordable home solar with the first residential power purchase agreement in 2007, and is the best at it today. With over 5,000 customers, SunRun is now the nation’s leading clean alternative to utility electricity. Available in Arizona, California, Colorado, Hawaii, Massachusetts, New Jersey, and Pennsylvania, SunRun owns and maintains systems on thousands of homes, more than any other company.

SunRun solar plans allow homeowners to upgrade to solar for little or no cost, without the risks and hassles typically associated with residential solar power. For the highest quality installation, SunRun partners with the leading local solar installers, who together employ more than 2,500 green collar workers. By doing so, SunRun offers customers the benefits of the local installers’ expertise in the area, while SunRun focuses on offering the best solar financing and ongoing customer experience. SunRun takes complete care of the systems, which includes professional monitoring, maintenance and repairs, solar insurance, inverter replacement, and a money-back performance guarantee.

SunRun is a featured solar provider in The Home Depot and Toll Brothers pre-installs SunRun solar systems in select new homes. SunRun has raised \$300 million in financing for purchasing solar systems from PG&E Corporation and U.S. Bancorp, as well as \$83 million in venture capital from Sequoia Capital, Accel Partners, and

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<sup>12</sup> (Borenstein 2008)

<sup>13</sup> (U.S. Energy Information Administration 2009)





Foundation Capital. SunRun founders were also jointly named Ernst & Young Entrepreneur of the Year in 2010.





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