



Learn These Advantages Of Solar Energy For Your Home

Description

The capacity to harness the energy of the sun to power our dwellings is a comparatively recent achievement in human history. While the use of pure solar energy to power our houses is still in its early stages in the United States, it is already giving significant benefits to those willing to invest in their future.



In fact, more than 1 million homes in the United States are now using residential solar panels to generate their own clean solar energy and reap the benefits.

What Are The Advantages Of Solar Energy?

Solar energy is quickly becoming one of the most popular kinds of alternative energy in America due to the numerous advantages of producing pure solar energy. Homeowners who install rooftop solar panels can save thousands of dollars on energy bills, increase the value of their houses, and stabilize their energy prices – all while combatting global climate change.

The Financial Benefits Of Solar Energy

Solar panels' financial benefits are the primary reason why so many individuals and families are turning to solar technology to power their houses. In the short term, homeowners can save money on their monthly electricity bills while stabilizing residential electricity rates and enhancing the long-term value of their houses.

Start Saving On Your Energy Bills

Many factors will influence how much money you can save by installing solar panels in your home. Your specific energy usage, current power costs, total system cost, and method of financing all have an impact on your solar savings.

According to research conducted by the NC Clean Energy Technology Center, solar customers in America's 50 largest cities who invest in a 5 kW solar PV system save an average of \$44 to \$187 per month (before a loan, lease, or PPA payment) during the first year of ownership.

According to other data, people who invest in a solar power system for their home can save anywhere from \$10,000 to \$40,000 over the course of 20 years. Depending on the total cost of your solar PV system and how you choose to finance the system, you can frequently start saving money right away.

How Much Does Solar Cost?

Residential solar energy is now cheaper than ever before. Over the last decade, the cost of installing home solar panels has decreased by more than 70% due to better efficiency, cheaper labor costs, and more financing alternatives in the solar business.

In other words, there has never been a better time to invest in a home solar PV system! While the overall cost of a new solar PV system can range from \$10,000 to \$30,000, recent figures from the Solar Energy Industries Association (SEIA) suggest that the average price of a new solar PV system in the United States is significantly closer to the lower end of that range.

In fact, the typical cost of a domestic solar PV system today is around \$3/kW, or around \$15,000 for a 5kW system, which would be enough to power the majority of American houses. Many states allow you to go solar for less than \$10,000!

Furthermore, significant financial advantages are already available for most US homes that desire to switch to solar. In many cases, these solar incentives, which are explained in greater detail below, can assist in subsidizing the cost of a new residential solar PV system by more than 50%.

Stabilize Your Electricity Costs

Saving money on your energy costs is clear, but it is not the only financial benefit of installing solar panels on your roof. Solar energy also offers homeowners long-term stability and dependability in terms of residential electricity rates.

Fossil fuels are a limited natural resource with a history of unpredictable prices. When these resources become rare or appear to be scarce, their prices can spike unexpectedly.

The sun, on the other hand, supplies a limitless amount of energy that may be harnessed to power our homes. As a result, homeowners that install solar panels can stabilize their energy expenses, whilst those who rely on traditional energy sources will continue to face erratic and unpredictable energy rates.

Increase The Value Of Your Home

Investing in a household solar PV system can also considerably boost the value of your home. Several studies have shown that adding solar panels to a home can boost its value.

A comprehensive analysis undertaken by the Lawrence Berkeley National Laboratory reviewed data on sales over a ten-year period throughout found that The study studied a total of 22,822 residences (3,951 of which included solar PV systems) sold between the years 2002 and 2013 in 8 different states.

Home purchasers were regularly willing to pay a premium for homes equipped with PV solar panels, according to the researchers. The average premium paid for a solar-paneled home was roughly \$4/Watt of solar generation potential or nearly \$15,000 for a home with a 3.6-kW solar PV system.

Take Advantage of Solar Incentives

Solar energy is well-known for its importance in the endeavor to reduce our carbon footprint in America and become a more energy-independent nation. As a result, the US government has developed numerous financial incentives for individuals and families in America who are considering installing solar panels on their homes. You may be eligible for the following solar incentives:

- Solar Investment Tax Credit (ITC)
- Solar Renewable Energy Credits (SRECs)
- Federal Solar Tax Credit
- State and local tax breaks

These rebates and tax credits can offset up to 90% of the cost of a household solar power installation in some places.

Environmental Benefits Of Solar Energy

Aside from the financial benefits of residential solar energy, homeowners who install solar panels on their roofs can help save the environment.

Reduce Your Carbon Footprint

The bulk of domestic electricity in the United States is currently generated by fossil fuels such as coal and natural gas. When used to create energy, these fossil fuels have been demonstrated to be extremely detrimental to the environment and are commonly regarded as the primary driver of global climate change.

Installing solar panels on your home's roof can help battle greenhouse gas emissions while lowering America's reliance on fossil fuels. In reality, the average domestic solar PV system saves around 100,000 pounds of CO2 over the course of 20 years.

How Solar Energy Works

It is beneficial to understand how solar energy works in order to appreciate its benefits. When the sun's rays make contact with the photovoltaic solar panel on your roof, the process of harnessing the sun's energy to generate solar electricity begins.

When photons from the sun's rays strike a solar panel, they are absorbed and transformed into direct current (DC) electricity. The direct current (DC) electricity generated by your solar panel is then transferred to a solar inverter and transformed into alternating current (AC) electricity that may be used to power your home.

Extra energy from a grid-connected solar PV system is redirected to the grid. However, an off-grid or stand-alone solar power system may store excess energy locally.

Category

1. Lifestyle

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