



Important Information About Solar Before Investing!

Recent Solar Advancements

Solar accounted for 40% of all new electric generating capacity in the U.S. in 2019, its highest share in the industry's history and more than any other source of electricity with 13.3 gigawatts (GW) of solar PV capacity installed to reach a total installed capacity of 77.7 GW, enough to power 14.5 million American homes.

Source: Solar Energy Industries Association (SEIA) <https://www.seia.org/us-solar-market-insight>

Technical advancements, such as the ability of today's residential solar systems to compensate for shading and other natural effects that in the past negatively affected energy production, have increased overall energy generation while reducing the cost of producing a kilowatt of solar energy by over 50% over the last 5 years, making solar a very attractive and affordable option for property owners and especially those who qualify for the current tax incentives.

Financial Incentives

The federal government's solar tax credit of 26%, along with other state and local incentives, has fueled the solar industry's explosive growth. **Here in South Carolina there is an additional 25% state tax credit!** The combination results in 50% of the cost of your system being paid by taxes that otherwise you would have given to those governments.

Solar Tax Credits – How They Work

Federal Solar Tax Credit: The 2021 federal credit is 26% of your solar system's total cost (including battery energy storage) with no cap. So, if you would owe the federal government \$7,800 in income taxes and you've purchased a system with a net cost of \$30,000, that would create a 26% federal solar tax credit of \$7,800. This means that you would get to keep all of the income tax money that you would have normally paid to the federal government and apply it toward the cost of your system. If your annual tax liability to the federal government is less than the 26% federal solar tax credit amount, any unused portion can be rolled over for use in future years for as long as you have tax liability.

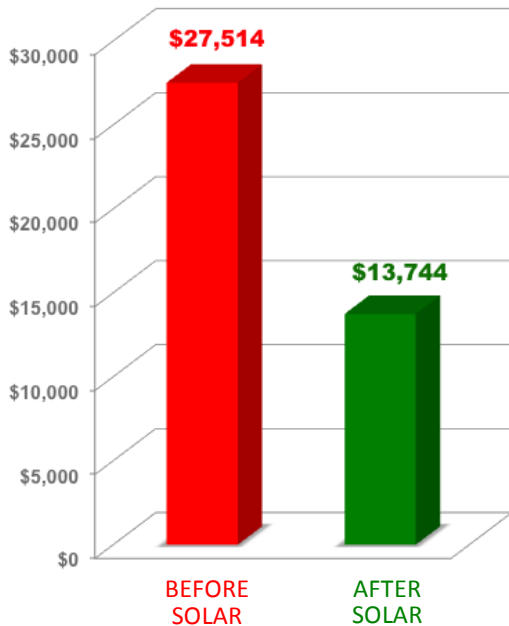
South Carolina Solar Tax Credit: The 2021 SC state tax credit is 25% of your system's total cost (including battery energy storage). Therefore, that same \$30,000 system would create a SC state solar tax credit of \$7,500. You can take up to \$3,500, or 50% of your SC state tax liability, whichever is less, each year for up to 10 years.

*To qualify for solar tax credits, you must pay federal and state income taxes.
We are not tax professionals; please check with a tax professional for your specific tax advantages.*

Energy costs are like taxes – they never stop and they’re always going up!

- Utility companies are a monopoly!
- Property owners have had no choice as to where they buy their electricity!
- The only restraint utility companies have on what they charge is the State Utility Commission’s board members, which are appointed, not elected!

10-Year Cost Comparison for Property Owner with a \$200 Per Month Average Energy Bill



**PAY YOUR UTILITY COMPANY \$27,514
OR
PAY OFF YOUR SOLAR SYSTEM \$13,744**

Every situation is unique but many solar customers will save thousands of dollars over just 10 years!

- ❖ **THE INCREASED PROPERTY VALUE WILL ALSO REAP FINANCIAL BENEFITS OVER TIME.**
- ❖ **ADDED BATTERY ENERGY STORAGE WILL ALLOW THE HOME TO FUNCTION FOR MONTHS DURING A POWER OUTAGE.**

Property Suitability



Solar panels can be placed on separate roof areas to face different directions or be ground mounted.

Solar requires space and exposure to the sun. The more a solar panel is exposed to radiant sunlight, the more energy it can produce. In North America, the ideal direction for panels to face is South, Southeast, Southwest, or a combination.

Solar also produces energy during cloudy and rainy days. We can show you a solar panel in our showroom that produces energy while inside and fully shaded.

Solar Panels Standard Specifications and Warranty: The panel’s size is based upon its number of cells, which determines the amount of wattage it will produce – from 250 watts up to 400 watts of DC energy. The ideal temperature for solar generation is 70° to 80° F; therefore, spring months can generate more energy than the hot summer months. Our panels are designed to minimize summer hot spots that reduce the energy generation. They are all tier one/premium grade and guaranteed for up to 25 years against manufacturing defects and energy degradation (guarantees vary by manufacturer).

Our Current Preferred Solar Panels and Warranties

(May change due to availability)

USA Manufactured:

- *Mission Solar*: 12-year warranty against defects, doubled to 25 years with registration. 25-year warranty for energy generation of 80% of original output.

Canadian Manufactured:

- *Canadian Solar*: 12-year warranty against defects, 25-year warranty for energy generation of 85% of original output.

Asia Manufactured:

- *LG*: 25-year warranty against defects and 25-year warranty for energy generation of 90% of original output.
- *Panasonic*: 25-year warranty against defects and 25-year warranty for energy generation of 90% of original output.

Determining the Size of Your Solar System

Electrical energy is measured and billed by your utility company in kilowatt hours (kWh). Your system size is determined by your yearly kW consumption. **We need the last 12 months kWh consumption from your power bills.** Once this is known, we can determine the amount of solar kW that will be needed to offset 100% of your energy consumption.

Below is an example of an electricity bill showing monthly consumption in kWh ...

METER NUMBER	METER READINGS: PREVIOUS	PRESENT	MULTI-PLIER	TOTAL USAGE	RATE SCHEDULE DESCRIPTION	AMOUNT
██████████	59511.842	63457.989	1	3,946 KWH	RE - Residential Srv, All Electric Fixed Monthly Leaf 50C Charge	399.26 .89
Amount Due						400.15

**Total
Monthly
kWh
Consumption**

Electricity Usage	This Month	Last Year
Total KWH	3,946	1,750
Days	29	29
AVG KWH per Day	136	60
AVG Cost per Day	\$13.77	\$5.94

Our records indicate your telephone number is ██████████. If this is incorrect, please follow the instructions on the back of the bill.

A late payment charge of 1.5 % will be added to any past due utility balance not paid within 25 days of the bill date.

Factors Affecting Energy Usage

In some cases of high kWh consumption, a 100% offset may not be achieved due to one or more factors.

If energy consumption is higher than the average home your size and age, then it probably is due to your **HVAC system's age or condition**. Your HVAC system is the #1 energy consumer in your home and typically uses 54% to 70% of the kWh consumed.

You can determine this by making a list of your electrical bills by month. If your highest months, most likely to be in the summer and winter, are excessive and double or even triple the lower mild-weather months, then this can be remedied.

Additionally, insufficient attic insulation or leaky ductwork will increase the runtime of your HVAC system and increase your kWh usage. There were no ductwork codes for new construction until 2013. If your house has hot or cold rooms, then the ductwork design or condition is probably the culprit, lowering your comfort and increasing your kWh usage. Our special solar/HVAC/attic insulation packages will increase your home's comfort and value while reducing your future energy costs.

There are many factors that can affect the amount of energy that a kW of solar will generate: direction, shading, angle, and the number one factor – weather.

Taking Into Account Weather Conditions

The federal government offers a website specifically designed for solar sizing: <https://pvwatts.nrel.gov/>. We enter your specific address into the website and it locates the closest weather station. Then we input the proposed solar kW size and technical specifications, along with the kWh rate, and it creates a report that projects the average amount of solar kWh generation, based upon the lows and highs over the last 30 years of weather at that weather station.

For example, a 10.5 kW system would consist of twenty-eight 375-watt solar panels (also known as modules) requiring approximately 560 square feet of roof or ground area. Based upon a \$0.10 per kWh rate from the utility company, the system would typically generate **15,748 kWh** of energy at an annual cost of **\$1,575**.

(Note: Per the PVWatts website, system output may range from 15,145 to 16,235 kWh per year near this hypothetical location.)

Homeowners Associations

Most homeowners associations allow solar to be installed but some do restrict its visibility from the street. If you have an HOA, you'll need to contact them and possibly provide them with a design proposal of the solar system for approval. We will provide the design proposal to you at NO CHARGE.

Solar Financing Options

100% Financing, \$0 Out-of-Pocket with Minimum 650 FICA Score

We offer multiple terms and low-interest solar financing options – from 3.39% to 4.99% annual percentage rates to 12-Months-Same-As-Cash and 20-Year Terms. This type of financing offers great terms and flexibility, with no property liens and no prepayment penalties. Our most popular is the 12-months-same-as-cash option that allows you to save your normal monthly utility costs, file your tax returns, and collect the refunds to pay down the principle. Then, when the monthly payments start, normally SC solar tax credits can cover the payments for the next few years. This option can provide you 3-, 4-, or maybe 5 years of no energy costs with no prepayment penalties!

Option 2

Many of our customers can improve their property while reducing their future energy costs by applying their solar tax credits and paying for the system just as they would have been paying the utility company. Doing it in this manner, you can often pay off the system in 7 to 10 years with no prepayment penalties!

These options allow you to invest the money that you would have spent on government taxes and utility bills to improve your property value and reduce your future expenses.

Don't miss out on this limited opportunity that will expire along with the Solar Tax Credits!

Other Considerations

- ❖ We're a **licensed and insured** electrical and HVAC contractor with a 5-star reputation and over \$10 million in installations.
- ❖ We're also a **Generac** preferred contractor and a premier **Samsung** and **Bosch** HVAC dealer.

For more info, please reply via email: Don@WhyGreenEnergy.com, call or text me direct: **864-906-6159**, or go to <https://usenergysolutions.setmore.com/> to schedule online a free, no-obligation evaluation of your property.

I'm looking forward to assisting you in obtaining your energy goals!

Best regards,



Don Redman

President, U.S. Energy Solutions