

Your solar guide to green power



**Become a
solar power
expert!**



Part One: Let's Talk Solar

- Overview: How Solar Works
- Net Metering
- SRECS

Part Two: How we help you on your way to solar savings

- What system type is right for your family?
- How to choose a trusted installer?
- How to evaluate and compare solar proposals?
- Belmont Solar's Step Plan

Part Three: Become a Solar Power Expert

- Roof or Ground Mount?
- What are the best Solar Panels?
- How much do solar panels cost?
- PA Solar Incentives
- Should I buy or lease solar?
- Financing your solar installation

Ground Mount Solar

If you take a drive through the rural areas of Pennsylvania and beyond, you will see more and more ground-mounted solar systems. These systems are becoming increasingly common because they have important advantages.



Of course the biggest advantage is location! If your home is not oriented south, the ground mount is the way to go to capture the sun's energy. An added benefit is being able to place it in the most optimal position, away from shade created by chimneys or trees. If you have plenty of unused land, you can opt for a larger system and generate even greater savings. Another advantage, beyond having more options in positioning and size, is that a ground-mounted system will also reduce costs when doing upgrades to your home, like replacing the roof.

Also, if you want to be on the edge of technology, you can install a pole mount solar system with a sun tracking option. This type of system keeps the orientation and angle in relation to the sun in an optimum position throughout the day .

What are the best Solar Panels?

Much has changed in past 15 years. The most important factors to consider when deciding which panels are best for you, are the efficiency of the panels, the construction and warranty, the value for the money spent, and aesthetics.



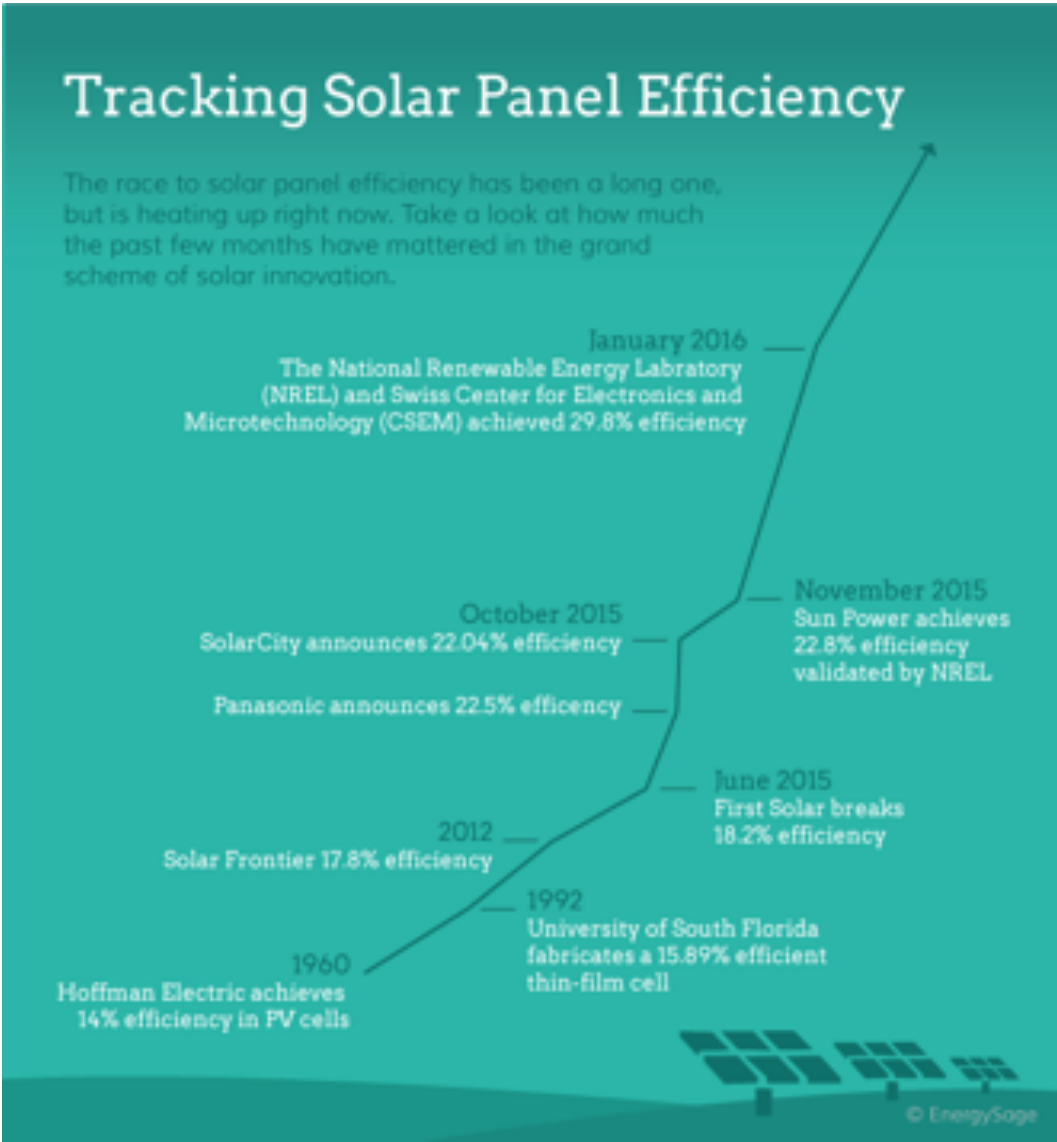
Customers differ in terms of which factors matter most to them. If you have limited roof space, then efficient power generation is an important factor. Maybe a major brand name offers you peace of mind. That's why we talk with you and help you find the right solution, sharing our experience with the different brands. As much as we like to see our customers, we do not want to come back for a "visit" because of needed repairs! For that reason, workmanship and warranties are important also.

Solar Panel Efficiency:

Solar panel efficiency refers to how much electric power you will get from an hour of sunlight. The most important factor is the angle at which the sunlight strikes the panel. The amount of electrical power being created changes as the sun changes position in the sky over the course of the day.

Although we have no control over the sun's position, we do have control over the solar array's design. That is where the invaluable experience and proven expertise of the Belmont Solar team comes into play.

Value for your money!



Solar panel efficiency more than doubled in the past decade

Innovation:

Another factor is the continuing improvement in technology. Efficiency has more than doubled in the past 15 years. The chart above illustrates the great strides in efficiency in just the last few years. Increasing demand helps drive and finance advanced research and improves manufacturers' economy of scale.



These factors have had a huge impact on the cost of installing solar, decreasing your initial investment and making it pay off for you much more quickly. Developments are many and exciting! The good news can be simply stated. Over the past decade, solar panel efficiency has increased while the price of installed solar systems has decreased, dramatically.

Warranty and bottom line:

Compared to most products, solar has better warranties, as most solar companies offer 25 years of coverage on their components. Where can you find a product with this much protection? In your search for the best panels, the bottom line is look for high efficiency to maximize your investment, and a good warranty to protect you from maintenance costs.



How much do solar panels cost?

The average system size for a residential application is about 6 KW. For this amount of power, the average gross cost has fallen from \$50,000 to just \$18,000 in about the past decade. For 2022, the federal tax credit is at 26%. Subtract this from the purchase price, and you're looking at approximately \$14,000 for a residential solar system that can cover most of your electricity needs.

Solar is a financially wise investment. The returns are steady and not influenced by market changes. Solar's ability to avoid the politics and price volatility that increasingly characterize fossil fuel markets is a major advantage.

Incentives: Solar credits and tax credits

Federal and state incentives are offered to state residents and businesses who choose to go solar. One of the largest financial incentives for installing solar in Pennsylvania is the federal Solar Investment Tax Credit (ITC). According to the Solar Energy Industries Association (SEIA), since the program's implementation in 2006, it has stimulated the growth of the U.S. solar industry by more than 10,000%! The program allows homeowners and business owners to deduct from their federal taxes 26% of the total cost of installing a new solar system. Depending on the size of the system, this credit can save you thousands of dollars off the cost of switching to solar.

Unfortunately, the federal solar tax credit is winding down. Installations completed in 2022 will qualify for the full 26%, while installations in 2023 will only receive 22%. If you wait until 2024 to switch to solar, you will not receive *any*

federal credits for a residential installation, while commercial systems will still qualify for a 10% deduction.

Solar Renewable Energy Certificates (Credits)

Solar Renewable Energy Certificates (SRECs), also called “alternative energy credits,” will help customers finance, and wisely invest in, a solar system. SRECs are created for each 1,000 kilowatt hours (kWh) of electricity produced by a qualified alternative energy source. These



SRECs are measured by what is called the “production meter.” The production meter measures your full production, in other words, the number of kWh coming from your system. Many people incorrectly think that the production meter measures the power you have

pushed back into the grid. Your full production is the renewable energy you created and, therefore, that’s the number you will get credit for.

Your installation will be connected to the SREC market place through companies like [SRECTrade.com](https://www.srectrade.com) This is a fully automated process and will send you a bank transfer periodically. The value of SRECs is subject to supply and demand, just like any other market.

Find more information about Solar Renewable Energy Certificates by clicking [here](#).

Should I buy or lease solar panels?

To us that's an easy question. Although leasing seems great, with no initial investment, like with everything that sounds too good to be true, the downsides are big.

You love to see your meter run backward, but there are questions. The main questions people have before making the decision are:

How will I finance? With cash upfront or a loan? Buying the system outright is the best way to maximize your financial returns. You, and not the leasing company, will take the 26 % tax credit (ITC). On average, a



system will cost between \$10,000 and \$30,000, so consider the savings. Every dollar saved goes straight to you. And if you don't have the upfront cash, consider the fact that the monthly loan payment is usually covered by the savings on your electric bill.

How about maintenance? Solar panels are very durable and require little or no maintenance over a guaranteed lifespan of 25 years. And we

have your back. The unsurpassed Amish workmanship of Belmont Solar is guaranteed, making maintenance a nonissue.

What about leasing or PPAs? Solar leases and PPAs (Power Purchase Agreements) are generally for 20 to 25 years. During those 25 years, there is a very good chance you need or want to move. The lease option is a disadvantage, as the buyer will need to take over the lease and must be credit worthy.

We at Belmont Solar see very few reasons to explore leasing, as leasing is only a good option if your credit score is below 650. You are in a contract with the lease supplier for the life of the system. The leasing company determines the monthly rate you will pay for the electricity.

Another negative effect is that the market value of the house decreases, because the next owner has to have an outstanding credit rating in order to take on the extra lease.

Financing your solar installation

Solar power will save you a significant amount of money on your electricity bill and in most cases it eliminates your bill completely. These benefits are guaranteed for a period of 25 years or more. However, the upfront cost might scare you away. That would be unfortunate, because you have options. We will explain the options here.

Solar loans: Solar loans are specifically designed for installing solar. The lenders offering solar loans know all about solar and specialize in helping people afford it. Belmont Solar has a relationship with a solar loan company, and we can help you with this important part of the installation process.

Personal loans: A personal loan is a great choice and worth exploring, especially if your relationship with your bank is good and you trust your bank's loan advisor. Such loans offer great flexibility in repayment terms, and you can shop around, as lenders compete more with each other for personal loans than they do for solar loans. The added advantage is that, once the loan is deposited in your bank account, you can pay cash and get a cash discount.

Home equity loans: The big benefit of choosing a home equity loan is that this type of loan often has a lower interest rate, reducing your monthly cost and bringing a faster Return on Investment (ROI). The payment terms of home equity loans can also be spread over a longer period of time, thus lowering the monthly cost even more. And just like the personal loan, having the money in hand gives you the option to pay cash and take that cash discount. The interest you pay on home equity loans can also be tax deductible. However, you do need to exceed the standard deduction to get this advantage. One drawback about a home equity loan is that you need to have built up a certain amount of equity in your home to qualify.

The option that is best for you depends on your financial situation and what feels comfortable to you. It is a personal choice. We at Belmont Solar can advise you in making the right decision. We encourage you to call us for advice, but you definitely should talk to your bank and your financial advisor as well. If you do require financing to make this wise investment, the sooner you get that help, the sooner you can enjoy the benefits of owning your system outright.

Please remember...

Taxpayers who make the move to solar during 2022 can take advantage of the 26% tax credit for qualified expenditures on a solar system that provides electricity to their residence (owned and lived in by the taxpayer). For more information, visit this [webpage](#). For a personalized assessment of the credits and rebates you may qualify for, visit our website or give us a call. You are just a phone call away from enjoying all these incentives and adding a renewable energy source to your home or property. Call us today at 717-768-7796