

Going Solar with Eyes Wide Open

Sometimes, the more expensive purchases are often the most complex. Because these major purchases do not occur often, the average person is probably not well prepared to understand all of the important factors necessary for making the best purchase decisions.

Going solar is one of those complex decisions. To get a system that adds value to your property and can ultimately save you money without creating major headaches in the process, there is a lot to learn. If you are considering whether solar is right for you, the following information makes you aware of factors that could be important for decisions you will be making about your future solar power system.

How Does Solar Save Me Money?



Many people go solar because of the environmental benefits it offers, but most are also looking for a financial benefit.

There are a number of factors that will impact how much of a financial benefit you can get from solar including system size and efficiency, tax incentives and the cost of your current electricity supply.

The primary way solar makes money for customers is by reducing the amount of electricity supply purchased from the local utility or electricity supplier. If your electricity rates are high, solar can benefit you in two ways.

Other than the upfront costs for the solar power system, the actual power generated by your solar system is free. So, if half of your property's electricity needs are met by your solar system, then you are essentially reducing your electricity supply portion of your utility bill by half.

You will also have times when your solar power system is over producing. This excess output will go back into the grid – and in many states that can earn you a credit, for this excess output from your roof. Given that electricity rates historical have increased over time, your savings may become even greater over the life of your solar system.

Evaluating Your Property

The most important factor in determining whether rooftop solar can work for you is whether you have a roof.

If you rent, most likely someone else owns the roof over your head. That most likely means you cannot put up solar panels on that roof. If your homeowners association or local town ordinances do not permit rooftop solar, you also are not able to install panels.

Even if you own your roof, it may not be structurally sound to support a rooftop solar system or you may be shaded by other buildings or trees making it inefficient to install a solar system.

Despite the benefits that a solar system can offer, some studies have indicated that as many as 75% of electricity customers are not able to go solar.

The best way to know if you can go solar is to contact a reputable solar installer and have them evaluate your property. Using online satellite imagery, they can remotely look at most properties and see major obstacles to solar. If your property appears to be a good solar candidate, most installers will also do an onsite evaluation. Here are the key things they are looking for:



Roof space – The amount of open or unobstructed roof space will help determine how many solar panels you can have installed on your roof. That of course will not only determine the cost of your system but also the potential power it can generate. All things equal, more panels mean more power. Roofs that are relatively flat and do not have obstructions such as chimneys, vents, dormers or elevator shafts are ideal since they allow more space for panels.

Roof orientation – A south facing roof is ideal as it has the most sun exposure during the day. That does not mean buildings facing other directions cannot work for solar, but they may be less efficient than equally sized systems facing south.

Shading – Any shade that prevents the sun from reaching the solar panels will reduce the amount of power that can be generated. If this is temporary shading – only occurring at certain points in the day, then that will have less of an impact on electricity production than if the shade is permanent. If shading is caused by a movable object, such as a tree, it may make sense to move or remove it. Unmovable objects, such as tall adjacent buildings, may make solar unviable for your property. Perhaps another solution such as a ground mounted solar system could be explored.

Choosing a Dealer

There tend to be two types of solar installers or dealers in the world.

There are local, often “mom and pop”, solar installers. They may have had some experience in roofing or electrical work and saw the growing solar market place and decided to join it. These installers generally will know the area and local laws. They may have access to different solar equipment options as well. However, local solar installers are often small and that may mean they outsource some of the services. They may also not be able to offer some financing options and there may be a concern about their stability and whether they will be around when you need service sometime in the future.

There are also large national companies. Sometimes their primary business is manufacturing panels so their equipment recommendations may be biased. Some of these companies own their own network of installers but some work with a local network of installers – making it confusing as to who is taking responsibility for your project. Their contact center may also be located on the other side of the country and staffed by people not familiar with your area. Usually, the larger companies can provide a full range of services and most have been around for a decade or more - hopefully indicating that they are stable (although some of the mighty have fallen in recent years so there is no guarantee.)

There are a few installers, like Ross Solar, which are local companies but have the backing of a major company. This provides the local service along with the expertise and stability of the larger companies.

Incentives, Financing and Other ROI Considerations



There are typically three options to pay for your solar system. You can purchase a solar system outright from your available funds. A “cash” sale is the least complex and most likely will lead to the quickest return on your solar investment.

Like other high cost items, you can also finance a purchase. This will often involve a third-party company that will essentially loan you the funds for purchasing your solar power system. This may make it possible for you to get a solar system installed at your property for little or no money upfront but because the financing payments include interest fees, the payback for the system may be longer. And, like most financing programs, you will need to qualify for the financing with credit scores and income may be a part of that evaluation.

Like motor vehicles, another option for some solar power systems is a lease. In the case of a lease, you do not technically own the solar system installed on your roof but you agree to purchase the output from that system (usually at a lower cost than your current electricity supply). A lease generally requires no money upfront and often someone else is responsible for any needed maintenance and repairs. Since the system can essentially be installed for no cost, the payback can be immediate. However, since you do not own the system, the credit for any excess output distributed to the grid goes to the owner and tax-related benefits also are often available to you. Additionally, at the end of the lease term, the future of the system will have to be determined – which you may have an option to purchase it at that time for a reduced cost. It is also not clear the impact a leased solar system may have on the sale of your property.

Tax benefits have driven most of the growth of solar’s popularity. Currently there is a Federal Investment Tax Credit (ITC) which may apply to your purchase. Many states also have tax incentives or other financial programs for solar. Whether these programs apply to your system or not may be dependent on whether you purchased, financed or leased your system. You should contact your tax advisor to better understand what incentives can apply to you and in what amount. Depending on what applies from these different solar incentives, the payback on your system can be impacted.

If you are in New York, Massachusetts or Connecticut and want more information on how solar works, and how solar can work for you, contact:

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