TOP SOLAR BENEFITS

FOR HOME OWNERS

Go Solar
New Jersey

Top Solar Benefits for Homeowners

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Does solar power really save me money?

Energy from the sun provides you with the potential for a cleaner and more stable power source, instead of depending on sources of energy that generate harmful pollution and get depleted quickly. Utilizing solar energy offers more than the promise of a healthier environment though, it also helps save costs.

When you install solar panels for your home, the idea is that you can save yourself money while helping to promote clean energy. The question is—does solar power really save money?

The answer is yes!

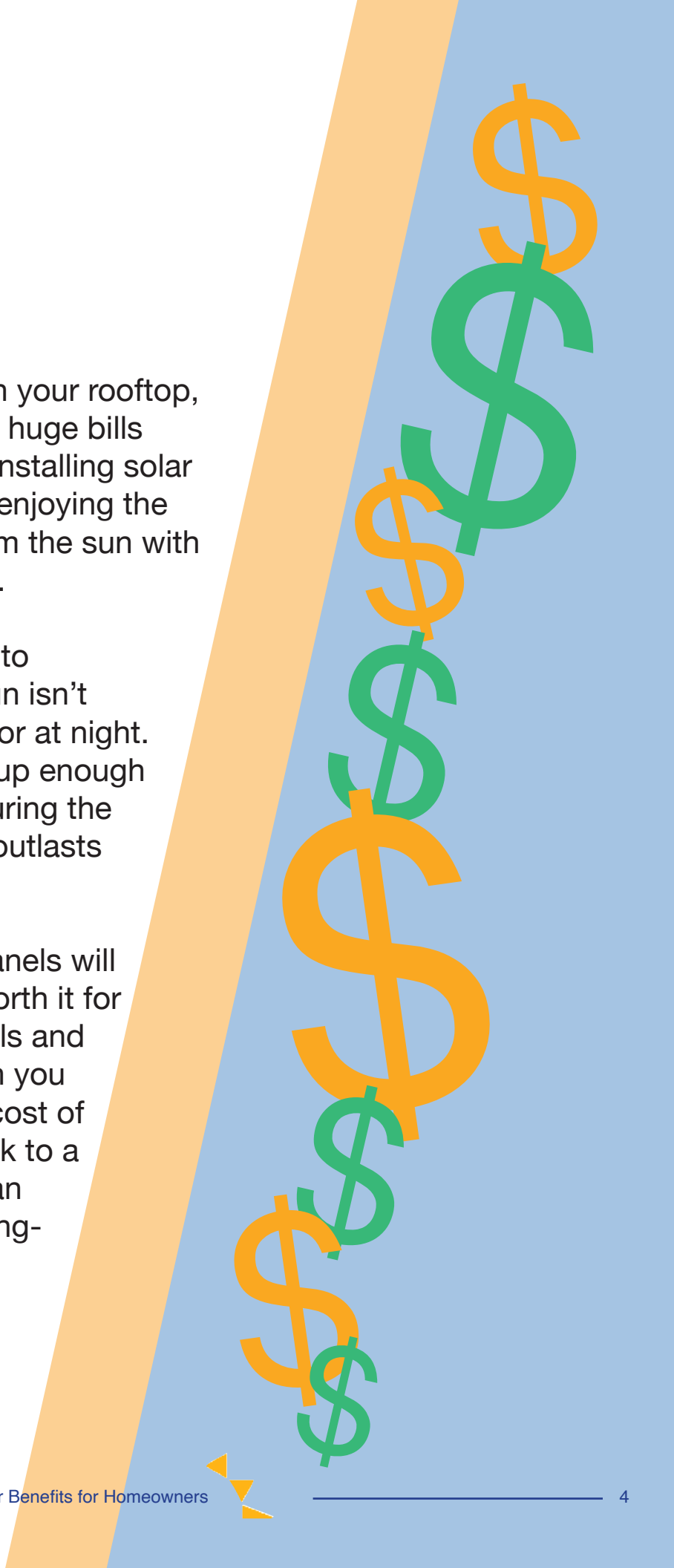
The amount you save will vary from household to household and dependent on a few factors— keep reading to dive into all the benefits and cost savings of solar panels.

Save Money on Electric Bills

Once you install solar panels on your rooftop, you will likely be able to cut the huge bills from the utility company. After installing solar panels for home use, you start enjoying the benefits of receiving energy from the sun with non-recurrent capital expenses.

Your utility company may need to supplement power when the sun isn't visible, such as during a storm or at night. However, it is possible to save up enough solar power in your batteries during the day to ensure that your power outlasts longer time frames.

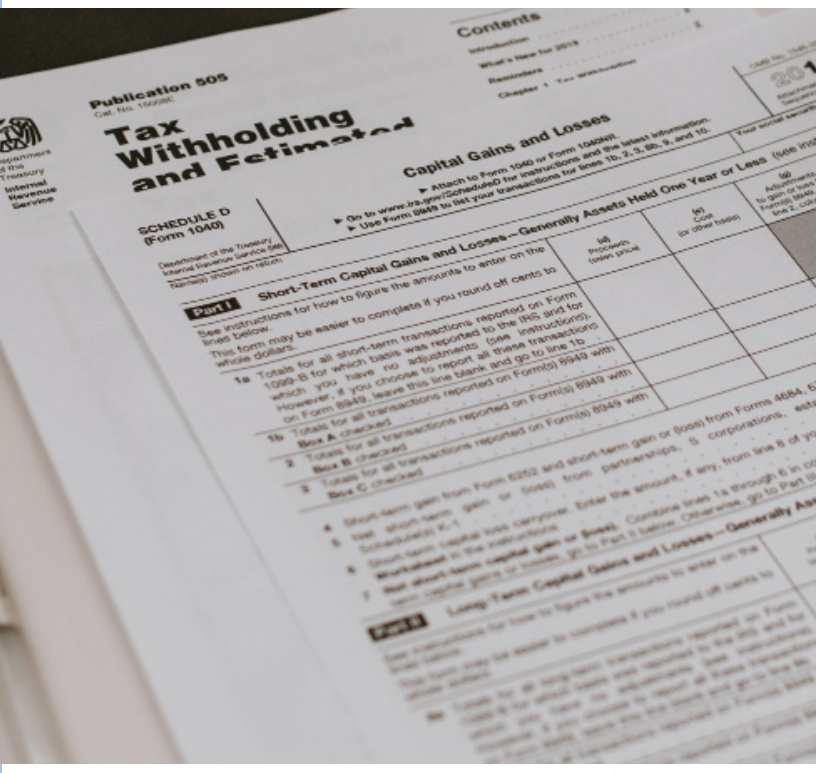
To understand whether solar panels will save you money, it would be worth it for you to review previous utility bills and get a year's worth of data. Then you can average out your monthly cost of utilities. From there, you can talk to a solar panel professional who can give you a good idea of your long-term savings.



Reduce Expenses on Tax Credits

There is an incentive program for installing solar panels for every state. This suggests that based on where you live, there are several tax credits for making environmentally friendly choices of going solar.

For instance, in some states, residents are offered Solar Renewable Energy Credits and clean energy grants as incentives for installing solar panels. There are also tax breaks available to those making the switch to solar energy. Tax subsidies can be as high as 30% of your solar panel installation cost, making it affordable to install a solar panel.



Metering Credit Benefits

In areas that get a lot of sunshine during the year, there can be an additional incentive for installing solar panels: net metering benefits.

Net metering means that electricity will go through your meter and out to the grid. Having a digital meter installed will help record the amount of electricity moving in each direction, i.e., into and out of the house. The “net” part of the term infers that the homeowner pays the “net” amount of electricity consumed by the home, excluding the extra sold back to the grid. You get to enjoy additional solar power savings at a lower electric bill.

Solar Water Heating as a Way of Cost Reduction

There are other incredible means through which solar energy can save you some money, inlcuding savings on your natural gas bill.

Solar hot water systems absorb heat from the sun in the form of thermal energy and use it to heat water for your home.

Solar water heating systems can replace your current water heating system, and can be quite cost effective. Since purchasing a solar hot water system is a one-time purchase, while a natural gas water heater would require the purchase of a system, and then regular purchase of gas and electricity to keep it running.

Therefore, if you choose to have a solar heating system installed on your roof, then you can expect significant annual returns dependent on your water use.

Increase in Home Value

It is a wise investment to install solar panels on your rooftop considering the fact that it adds significant value to your home. Whether you want to stay in your home forever or upgrade it for a future sale, installing solar panels are a great investment.

Add some value to your home by putting the sun to work for you. With the addition of this type of clean energy to your home, you get maximum control over your electricity usage. It also protects you from power outages that plague the typical grid, and ultimately have a positive effect on the environment.

Of course, if you're making a purchase of solar panels, it's important to make sure you have the latest technology and that the warranty is in effect. Every homeowner having older solar systems installed in their homes should factor in some depreciation and anticipate a slightly lower premium upon sale.

Homes with solar installations are found to be more attractive to buyers than homes without, and gorvernments are increasingly recognizing the long-term community and infrastructure advantages of executing solar incentives.

With net metering benefits, solar panels will be hugely beneficial as electricity rates continue to increase.The buyer of a home with solar installation could receive a whopping 200% return on the sale price premium.

Home solar power is under your control once you have it installed. It also adds property value to your house. With lower tax incentives and monthly electricity bills for new solar installations, homeowners can accurately look forward to gaining a handsome return on their investment and also recover their initial investment.

Cost Minimization from Solar Panels & Electric Cars

With every mainstream auto manufacturer now offering an electric car model, electric cars are becoming mainstream. Taking environmental consciousness one step further by using solar panels to power the electric cars.

You will need to calculate how much electricity your car will need in the future. Once you understand how much electricity your car will need to be fully charged, then you can install the necessary amount of solarpanels that can produce the amount of energy your car needs.

The EPA rates this based on how many kilowatt-hours (kWh) it takes for cars to travel. They convert the number of miles they travel into “miles-per-gallon equivalents’.

Similar to the car, you can make estimates about your various household appliances and use these estimates to predict how many solar panels you will need, how much they will cost, and what your savings will be in the long term.

Expected ROI and Savings

Many countries have been solar-friendly for years. Some of these countries have introduced significant programs to help speed up the development of solar installations in every home. This information needs to be taken into consideration when calculating the return on investment (ROI) or the period it takes to pay back the value of financial investment.

Similarly, this question can be framed for energy generation and evaluating the impact solar panels have on the environment. You might need an answer to a question like, “How long will it take until the solar power system begins to generate energy huge enough to offset the energy it took to produce?”

The truth is that the solar energy payback period depends on your location as different weather patterns affect solar generation. Take, for example, if a solar panel is installed in the Sahara Desert. Such a panel will produce more energy and payback will be much faster than having the same solar panel installed above the Arctic Circle.

Most solar panels have an energy payback period of about 2 years.

Another useful number to keep in mind is that the solar panel efficiency value is based on an assumed 14% rate. In recent times, solar panels have an efficiency of about 40% to 50%.

A solar home's value increases for every decrease in energy costs.

For example, if solar panels save $500 for a household's electricity bills in a year, that home's value may increase at about double that amount. If you're having a home appraised, it will be beneficial for the appraiser to be familiar with solar technology.

Three methods you can used to value residential solar energy:

- **The income approach:** is a forward-looking aproach that explains that a solar installation will generate more value for a homeowner than the cost during the system's life span.

- **Cost approach:** this method considers the value of the purchase should equal the total cost to build an equivalent structure.

- **Comparison approach:** This approach identifies past transactions of comparable products. It then uses these as a benchmark to determine the value of a property.

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If you're looking for assistance in making a decision, lenders, real estate agents, residential solar market experts, and appraisers usually have a sound understanding of the value and economic benefits of solar installations.

Giving Back

ENERGY COST REDUCTION BY

75%

CARBON POLLUTION REDUCED BY ALMOST

95%

COOLS DOWN TEMPERATURES

Environment impact (i.e., decrease carbon emission and personal carbon footprints.) Before the innovation of solar panels, it's somewhat difficult to speak about climate change without frightening statistics.

If there were no swift actions taken by the governments globally, by rapidly transitioning from traditional fossil fuel energy sources that pollute the environment to use solar panels, it would have been worse. There would have been dire consequences from extreme weather events that were predicted which would have further ravaged the ecosystem.

Sustainable energies like solar reduce air pollution and get our planet back on track for future generations.

The power from the sun is sustainable and, renewable. Pollution is largely made of carbon dioxide, and this poisonous gas gotten from burning fossil fuels like natural gas, coal, and oil is being reduced by transitioning to clean energy (solar). There is a sharply reduced rate of carbon emission into the environment.

The Environmental Protection Agency (EPA) has stated that despite the reduced carbon emission and its footprints, carbon dioxide will remain in our climate system for a very long time. This suggests that even if we hit zero emissions in the next ten years (2030), the planet still requires a very long time to heal.

As a way of generating positive environmental impact, that solar energy also reduces water pollution. Photovoltaic solar cells do not require water to function. Most manufacturing processes usually need water for production and efficiency, solar panels don't. Energy from the sun is clean, sustainable, free, and renewable. Fossil fuels cannot be renewed.

As a matter of necessity, not only must the government take responsibility and make changes for our planet's future, everyone has the obligation to do so.

One little individual effort of transitioning to using solar energy contributes a significant difference to help minimize carbon dioxide in the earth's space. Every family that adopts the use of energy from the sun helps mitigate the effects of climate change and global warming not only in the neighborhoods but throughout the entire universe.

Apart from energy from the sun, other sources of clean energy around us—energies from the wind and seas—have their magnitude and fantastic ways of being harnessed to meet human demands for energy while eradicating the emission of carbon dioxide.

Community Impact

As a substitute for fossil fuels and other non-renewable sources of energy, the sun has long been regarded as one of the most viable energy sources and a path to gaining freedom from the need for fossil fuels.

- There are some challenges to solar energy that need to be solved.
- It isn't feasible to think a location would have sunshine every day.
- The sun doesn't shine at night
- Clouds block the sun rays from reaching solar panels
- Solar cells also have a low conversion efficiency.

But these few years have witnessed a significant change for solar panels development because advances such as lower-cost storage batteries depict a credible future of harnessing the sun for energy more efficiently.

The greenhouse gas emission rate per unit of energy produced is much less with the innovation of solar system technology than for energy from fossil fuels.

There is a need to plan for implementing renewable energy because it will require both social and institutional changes, not minding if the technology for these systems has been put in place. Improvements and further researches are still expected.

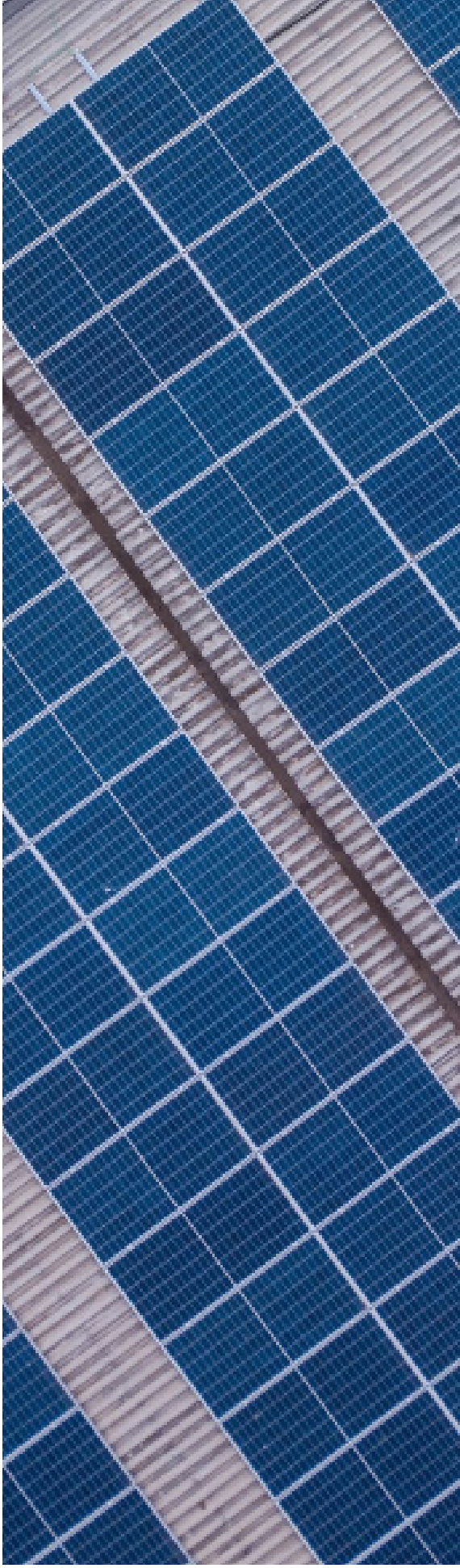
Energy Independence

The invention of solar batteries used in home solar systems are new to the market. Solar batteries offer a significant economic benefit: you can save the extra energy your solar panels produce at home instead of feeding it back into the electricity grid.

When installing your solar battery, do it as part of your home solar energy system. With these batteries, you take full advantage of using the electricity generated by your solar panels on a day-to-day basis. During the times when you need more electricity, you can use the stored solar power.

In some locations where you can net meter, for every kilowatt-hour (kWh) of solar energy sent back to the grid, you will typically receive a credit on your utility bill. These credits can be useful later on when you need more electricity than your solar panels are generating. In this kind of situation, installing a solar battery as a homeowner won't increase your savings. The electric grid will provide the same financial benefit as a solar battery would.

However, some electric utility companies change their rates in different forms that make solar batteries a smart choice and investment for homeowners. Understanding your options will allow you to make an educated decision for your situation.



Getting Started

One of the biggest hesitations that people have about solar panel installation is the cost. The reality is that when you look at the big picture, solar panels are a great investment if you're in the right position. It's a one time investment, not a recurring payment. That means once it's paid off, it's paid off—whether you can pay in one full payment or finance your purchase. A vast majority would rather find it more convenient to pay gradually using a financing option.

One options is a solar purchase power agreement. This option means that they homeowner doesn't own the solar panels outright. It means that the solar developer or company co-owns the panels with the homeowners. The customer pays a monthly utility bill to the solar companies as a service and maintenance fee for using the panels. Others do lease the solar panels from the solar developers within a timeframe and a reasonable price payable every month.

All these are pointers showing that owners of solar companies want their customers to pay for their services conveniently. So structures have been put in place to ease payments at various levels. This is done in collaboration with the government because they also benefit from individuals who use solar energy.

The use of solar energy in homes, offices, and businesses (small and large scale) is being encouraged especially for its relative affordability and, of course, welcoming payment options.

Financing Solar Panels

Thankfully, solar companies have painstakingly put the affordability of their products into consideration. They want all homes to be able to afford and conveniently pay for their products and services. Hence, they have made available to their customers various payment structures and strategies to ensure affordability within a budget-friendly framework.

Most solar companies are clear-cut on the various financing options available to their clients. There are four popular financial options put forth by solar companies. These include:

- **Solar Loans**
- **Solar Lease**
- **Solar Power Purchase Agreement**
- **Outright Payment**

These payment modules are the principal financial options operated by most solar companies. They're all suitable but vary in terms of convenience and customers' perspective. The payment modules can be chosen based on the amount at hand to purchase the solar panels. Whichever payment module you choose to acquire your solar panels or system, an excellent point to consider is that apart from the popular advantage of having a highly subsidized payment for your utility, it also increases your property's value.

According to a research published in an article by Zillow Research, "Homes with solar-energy systems sold for 4.1% more on average than comparable homes without solar power." So owning a solar system is the most profitable decision that anyone could take as a foreseeable investment. Read on to learn more about financing options.

Solar Panel Financing Options

1 Get a Solar Loan

This is an alluring strategy for many, mainly because there are no down payments to be made. There is a very low or relatively reasonable interest rate for any solar loan taken. What makes solar loans unique is the highly extensive duration for payment, which can be a minimum of 2-3 years and can be up to over 20 years in some instances. This is often a flexible payment option that's affordable and convenient.

However, you need to have a good credit score to be qualified for a solar loan. Aside from having good credit, it is pertinent to note that a solar loan is a form of a home equity loan, which is often secured with an asset of equivalent value.

2 Leasing Solar Panels

Leasing solar panels entail paying a fixed amount during the lease for utility following the lease terms with the solar company. The Solar Power Purchase Agreement works a bit differently as payments for utility are not fixed but are instead calculated based on the customers' amount of power. It usually has a zero down payment option for customers.

3 Solar Power Purchase Agreement

This agreement is distinctly crafted out by solar companies, and their terms vary from one company to another. A common thing to all solar companies regarding the Power Purchase Agreement is that customers have to drop a down payment, then pay their utility bills to the solar company based on the kilowatt used per hour. The rates could vary by company and the content of the agreement.

The Solar Power Purchase Agreement also allows for payments to be spread across an extended period, extending to a wide range of years. The entire idea backing the Power Purchase Agreement is that solar companies become the distributor of power to their customers and the utility prices are relatively affordable.

4 Outright Payment

Most individuals cannot afford this option, yet those that do, enjoy the benefits immensely. It saves money, and the customer is not indebted to the solar company in any way. Yet, whichever way one acquires solar panels, there is a general advantage: solar is a long-term investment that guarantees a lifetime of savings on utility bills.

Weighing the Benefits of Finance to Own and Power Purchase Agreement

Getting solar panels is the goal for many people globally, for various reasons. However, the expensiveness of solar panels is usually a challenging thought for many. Solar companies have created diverse payment options to help their customers acquire their products.

According to the various terms of agreement generated for each payment option, these payment options all have their advantages and disadvantages.

Some customers cannot afford a down-payment at the time of purchasing solar panels from solar companies. The solar companies advise that their customers apply for a solar loan, which invariably implies that their customers finance loans to own their panels. These loans are relatively beneficial to both parties.

However, getting a solar loan is not that simple. One must have built a good credit score, which would enable the customer to apply for the loan. The credit score varies from one company to another and is entirely subject to the company's decision.

All of these could be avoided if the customer carefully examines and weighs payment options compared to other options. Here, the customer pays a down-payment of a relatively affordable amount and gradually pays a significantly reduced amount monthly to the solar company in view of utility bills.

Well, if you're considering acquiring a solar system, it is best and safer to painstakingly read carefully through whatever financial option the solar company is offering you.

Qualifying for Solar Installation

Light is an essential element we all need continually—even our day-to-day activity involves the use of light. Electricity through fossil fuels used to be the major means by which light is generated in offices and homes. Gotten from the sun, solar remains the cleanest and the most renewable energy source available to run our day to day activities.

What solar panels do is to convert the solar energy from the sun into electrical energy. It requires light energy from the sun and not heat energy, and that is why it is still possible for light to be produced on seemingly cloudy days because direct sunlight is not needed.

This has come to be the cheapest form of energy generation because the sun is a natural source of energy, and it produces more energy than we'll ever need for a lifetime. Aside from the fact that the cost of installation is not that intensive as other sources of electrical power, the operational cost is also low. With it, you don't need to get fuel before you use the solar power generated.

Installation of the solar panel has become much easier over the years, and there's still hope for installation to become more accessible for everyone. If you are considering installing a solar panel in your house or office, you will need to verify if you meet the requirements.

Things to Consider Before Solar Panel Installation

The strength of your roofing materials

The solar panel will be installed on your roof, so the strength of your roofing sheets have to be considered. Of course, solar panels tend to serve as a protective coat against harsh weather conditions and mainly, ultraviolet rays from the sun. Still, you need to be sure about the kind of materials your roof is made of so that the installation company will know if it's good or not and what to do about it. The strength of your roof will determine if the solar panel can stay on your rooftop.

Cost of maintenance

Being a piece of equipment that generates solar power, it must be well maintained, and maintenance is not all that costly. The surface of the panel must always be kept clean from dust and leaves. Solar panels usually come with a long-time warranty. You will need the installer to help examine your panels after about 5 years to confirm good condition. You can also inquire about the maintenance recommendations and best practices the installers suggest.

Electrical wiring

Your desired place of installation has to be safe for solar panel installation, and electrical installation has to be checked for any error. Any form of damage should be repaired, and any error in the electrical installation has to be fixed so that your home can be safe both during and after installation.

Application for Permit

You will need to obtain a permit to install them. You need to know and understand the rules and regulations guiding solar panel installation. If you are a homeowner and you want to install a solar panel, you need to be aware if there are regulations to that effect. If it's a rented apartment, you will need to get in touch with the homeowner to inform him and get permission.

Roof obstruction

Tanks, pipes could obstruct the installation of solar panels in your home. If your rooftop has pipes or chimney on it, it may be challenging to get your solar panel installed. A north-facing roof is also more exposed to sunlight, but if your roof isn't facing north, your solar panel can still be installed. This decision is best to bring to the professionals when the time comes.

Sunlight exposure

Sun, which is the primary source of solar energy, determines whether you are qualified for solar panel installation or not. If there are trees around your house that block the passage of sun rays from reaching your rooftop, you may need to cut some and trim some before installation.

Climatic condition

Cloudy areas are known to produce less light energy from the sun, this makes the solar panel produce less electricity. The local electricity determines how much you save on solar panels. Your installation company will guide you as to the best way to get the solar panel working for you.

Signs a homeowner may qualify for solar panel installation

Once an expert evaluation is carried out on your building and everything that needs to be corrected and done is made known to you, steps taken towards it is what determines whether you are indeed ready for installation or not.

If there is shade around your roof because of trees being close to your home, what you need to do is remove them. Get a permit and ensure that everything you need to do is done properly. This will make it easier for the installation company to swing into action and get your solar panels installed for you.

A Word from Our Solar Company

At Go Solar New Jersey, our goal is to provide homeowners with an attainable source of renewable energy for their homes. In turn, this reduces environmental impacts of fossil fuel sourcing one solar panel at a time. Contact our solar experts to begin your energy saving journey!

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