

Thinking about Solar Panels?

**Your Solar Guide
Covers Everything
from Cost Savings
to Installation Tips,
and much more**



Thinking about Solar Panels?

Here's What to You Need to Know

Solar energy is a powerful and sustainable way to reduce your electricity bills and increase your home's value. With the rising costs of electricity, it's time for homeowners to take control and save big with solar energy.

In this comprehensive solar guide, will cover everything you need to know about solar panels, from the cost savings to installation tips, federal and local tax credit incentives in your state to help you make an informed decision.



Form 5695
Department of the Treasury
Internal Revenue Service
Names shown on return

Residential Energy Credit
► Go to www.irs.gov/Form5695 for instructions and the latest information.
► Attach to Form 1040 or Form 1040NR.

Make sure to use the form for the year in which you are filing taxes (2019).
OMB No. 1545-0074
2018
Attachment Sequence No. 158
Your social security number

Part I Residential Energy Efficient Property Credit (See instructions before completing this part.)
Note: Skip lines 1 through 11 if you only have a credit carryforward from 2017.

1	Qualified solar electric property costs	1
2	Qualified solar water heating property costs	2
3	Qualified small wind energy property costs	3
4	Qualified geothermal heat pump property costs	4
5	Add lines 1 through 4	5
6	Multiply line 5 by 30% (0.30)	6
7a	Qualified fuel cell property. Was qualified fuel cell property installed on, or in connection with, your main home located in the United States? (See instructions.)	7a
Caution: If you checked the "No" box, you cannot take a credit for qualified fuel cell property. Skip lines 7b through 11.		Yes <input type="checkbox"/> No <input type="checkbox"/>
b Print the complete address of the main home where you installed the fuel cell property.		
Number and street		Unit No.
City, State, and ZIP code		

THIS IS AN EXAMPLE OF THE FEDERAL SOLAR TAX CREDIT IRS FORM. PLEASE BE SURE TO USE THE FORM FOR THE YEAR IN WHICH YOU ARE FILLING (2025?)



Table of Contents

If you're someone who is interested in solar but wants to learn a bit more before getting started, we've got you covered! To help, we've compiled all our facts into this guide.



- 4 Solar 101
- 7 Cost Savings with Solar Panels
- 8 Who qualifies for Federal Solar Tax credits?
- 9 5 Installation tips for Homeowners
- 10-11 Advantages & Disadvantages of Going Solar
- 15 How many Solar Panels do you need?
- 17 In Closing: Sunlight✓ Savings✓ Simple✓

| Solar 101

What Are Solar Panels and How Do They Work?

Solar panels are devices that sit on the roof of your home or on the ground near it. The panels, often called photovoltaic panels or PVs, are designed to absorb the energy from the sunlight that hits them. When this happens, it allows the panels to hold onto that energy and converts it into electricity that powers your home.

How Do Solar Panels Generate Electricity?

When direct sunlight strikes the solar panels, the panels activate. When that happens, the solar panels absorb the energy into the PV cells. Those cells create an electrical current which is then converted into AC electricity that can be used in your home.



What Are The Different Types of Solar Systems You Can Get?

- **Grid-tied solar systems:** This type of system is connected directly to the utility company's power grid in your area. This allows you to have some security of the grid should there be a problem that knocks power off to your system.
- **Off-grid solar systems:** This type of solar system is not connected to the utility grid and is dependent on battery storage to function properly. These homes will rely completely on solar power.
- **Hybrid solar systems:** These systems typically are connected to the power grid but also have a battery storage system. This tends to be ideal because it enables not only for you to have utility grid access when you need it but you may be able to sell excess solar energy generated to the utility company for credits.

Do Solar Panels Work At Night?

No, solar panels do not work at night. They only work during the day to capture solar light from the sun. That does not mean your home will be without power during the night, though. Solar energy can be stored in batteries that can be accessed when the panels are not generating power themselves.

Do Solar Panels Keep Producing When The Power Goes Out?

Most of the time, solar panels that are on your roof are likely to continue to generate electricity even when the electricity goes out within your community because they still absorb energy! However, if your system is connected to the grid, then they are not likely to generate electricity for you during these periods of electricity outage because they rely on the grid system to function.

Invest In A Professional For Installation

Solar panel installation requires professional support, and there are numerous steps beyond just purchasing solar panels and placing them on the roof. That's why professional installation is almost always recommended.

Here's why:

- Professionals will help determine if your home gets enough sunlight to generate enough solar energy.
- The next step is ensuring your roof is in good shape and the right size to support the solar panel system you need.
- A professional installer will then work with you to determine the size and type of solar panel system best associated with your home's needs based on location but also how much power you need to generate.
- When the time comes to install the system, the installation team ensures the bracketing system is placed just as directed by the manufacturer, protecting your warranty on it.
- The solar panels themselves are then placed properly, also protecting the warranty.
- All components that allow for the powering of your home, including battery systems and inverters, are also carefully installed and set up.
- Your electrical system is verified to be safe and properly installed, functioning, and efficient.



How Do You Find the Right Solar Installer?

Just as you do some research to determine the best solar panels for homes like yours, you also want to learn as much as you can about the installation company. Who are they? Are they certified? What brands of solar panel systems do they install?

You also want to look for referrals and gather recommendations from others. You want to be sure you are buying a quality product, having it installed properly, and having access to the support you need should there be a need to get it.

Some of the best companies will provide you with the entire process. That includes helping you to choose the most appropriate system for your home and then install it. They also provide service, and support, should there be a problem with the system down the road. If you need to upgrade later, they can continue to help you.

How Long Does The Installation Process Take?

The amount of time it takes to install a home solar panel system is dependent on the overall size of your home and your needs. Most of the time, the typical installation takes under six hours by a professional company. There could be a number of weeks to wait prior to installation if there is a situation where the panels themselves are on back order.



Cost Savings with Solar Panels

One of the most significant benefits of solar panels is the potential for cost savings. By generating your own electricity, you can reduce or even eliminate your monthly electricity bills.

Additionally, each state offers Local tax credits and incentives to homeowners who install solar panels, further reducing the overall cost. **You can do some research yourself, or get a free no-obligation solar estimate at www.solarusaquotes.com.** A solar representative will prepare a custom proposal for you, and your home that includes all the cost savings, tax credits, and incentives in your state.

If you have solar panels installed on your rooftop in 2025, **you may want to take advantage of federal solar tax credits** when filing next year. These credits, along with the incentives outlined in the [Residential Clean Energy Act](#), can significantly reduce your installation costs.



What Is the Federal Solar Investment Tax Credit (ITC)?

The [Federal Solar Investment Tax Credit](#) (ITC) was created to encourage the adoption of renewable energy by making solar electricity more affordable and accessible. **The ITC helps lower the upfront cost of a solar panel system by letting you claim a tax credit for part of the installation cost.** By lowering upfront costs, investing in solar is more economical, allowing individuals to reduce their reliance on fossil fuels and live more sustainability.

Solar panel systems installed in 2021 and 2022 were eligible for a 26% tax credit. **But the U.S. government sweetened the pot by raising the ITC to 30% for systems installed from 2022-2034.** Panel expenses, inverters, racking and labor can all go toward your claim.

The Federal Solar Investment Tax Credit must be claimed for the year the installation was completed. So that means if you installed a system in 2025, you'd need to claim that credit on your 2025 tax return, which is due by **April 15, 2026**.

To be clear, you can't claim the credit for a system installed in 2022 (or any prior year for that matter) on your 2026 taxes. **If you're unsure about whether you're following the correct procedures, consult a tax professional.**

Benefits of the Federal Solar Tax Credit:

Significant Savings

A 30% reduction in solar installation costs can make a difference in affordability for many households.

Widely Available

The ITC covers not only residential homes but also commercial properties, expanding its appeal.

Long-Term Value

By lowering the upfront cost, the ITC shortens the payback period for solar panel systems, making them an attractive financial investment.

Who Qualifies for the Federal Solar Tax Credit?

To qualify for the tax credit in 2026, your solar system must be installed and operational within the preceding year 2025. The ITC is available only if you own your solar panel system. If you lease the system or enter a power purchase agreement (PPA), you will not be eligible.

How to qualify:

Own your system

Leasing or power purchase agreements (PPAs) don't qualify.

Install a new system

Pre-installed panels on a home you buy won't count.

Install on your primary or secondary home

Vacation homes qualify, but rental properties usually don't.

Complete installation in 2025

This ensures you can claim it on your 2025 taxes by April 15, 2026.

How to Claim the ITC: A Step-by-Step Process for Homeowners.

If you're a homeowner looking to take advantage of the ITC, proper documentation is paramount. Following these steps can help you ensure you receive the credit you're entitled to:

Homeowners:

- Keep all receipts and installation documents.
- Download the [IRS Form 5695](#) (Residential Energy Credits).
- Complete Part I for Residential Energy Efficiency Property Credit.
- Enter the solar PV system costs on line 1.
- Follow the instructions to calculate your credit amount.
- Transfer the credit amount to line 5 of **Schedule 3** (Form 1040).
- Attach Form 5695 to your federal tax return.
- Send in your completed tax return, Form 5695 and Schedule 3 to the IRS.
- If you're unsure about whether you're following the correct procedures, consult a tax professional.

How Does the ITC Work?

The ITC reduces the amount of federal income tax you owe by a percentage of the solar system's cost. For example, if your total solar installation costs \$20,000, you can claim a \$6,000 tax credit on your 2025 tax return. This credit is applied directly to your tax bill, significantly lowering or even potentially eliminating your federal tax liability for the year. If your tax liability is lower than the credit amount, unused credits can roll over to future years.

5 INSTALLATIONS TIPS FOR HOMEOWNERS

1. Location, Location, Location:

- **Sunlight Exposure:**

Prioritize areas with maximum sunlight exposure, particularly on the south-facing side of the roof in the northern hemisphere.

- **Shading:**

Minimize shading from trees, structures, or other obstacles that can reduce panel efficiency.

- **Roof Angle:**

A moderate roof angle (e.g., 20-30 degrees) generally provides optimal sunlight exposure.

2. System Sizing:

- **Assess Energy Needs:**

Analyze your current electricity consumption to determine the appropriate system size.

- **Avoid Oversizing:**

Over-sized systems can produce more electricity than you need, potentially leading to lower returns from selling excess power back to the grid.

- **Check with Your Utility:**

Consult with your local utility to understand their policies on net metering and excess energy credits.

3. Roof and Structural Integrity:

- **Roof Condition:**

Ensure your roof is in good condition, with a sufficient lifespan to withstand the weight of the panels and withstand environmental factors.

- **Structural Support:**

Assess the roof's structural capacity to handle the additional weight of the solar panels.

- **Professional Inspection:**

A professional installer can inspect your roof and identify any potential issues.

4. Future Maintenance and Upgrades:

- **Panel Durability:** Choose panels with a long lifespan and consider potential maintenance needs.

- **Inverter Longevity:** Inverters have a lifespan and may need replacement over time.

- **Future-Proofing:** Consider future upgrades, such as adding battery storage or expanding your system.

5. Choose a Reputable Installer:

Professional Installation:

- Ensure that your solar system is installed by a qualified professional, according to the Department of Energy.

Warranties and Service:

- Select an installer with strong warranties and a proven track record of customer service.

Advantages of Residential Solar Panels

Decrease in Electricity Costs

The primary incentive for many homeowners to adopt solar panels is the reduction or complete elimination of their electric bills. A solar panel system harnesses the sun's energy to generate power for your home, thereby decreasing reliance on the utility grid traditionally used for electricity.

The Benefits of Net Metering

This process, known as net metering, allows homeowners in eligible areas to receive credits on their electric bills for any surplus energy produced by their solar panels.

Environmental Benefits

Switching to solar panels can reduce your carbon footprint by using a cleaner energy source compared to conventional methods. Solar energy does not produce carbon emissions like some other energy sources. These carbon emissions contribute to environmental pollution, including air and water pollution. Over their lifetime, solar panels have approximately 20 times less carbon footprint than coal-generated electricity. After three years of use, your carbon footprint is eliminated.



Solar panel installation has both advantages and disadvantages. Property owners should consider potential drawbacks alongside benefits. While it changes home operations significantly; most people will see substantial benefits. Consider the full picture when exploring solar panel options.

Decreasing Reliance on Utilities

Many individuals are motivated to switch because it allows them to decrease their reliance on fossil fuels and the utility grid. Those who have experienced prolonged power outages may find significant value in an off-grid system, which reduces dependency on electricity supplied by local electrical utilities.

Solar Panels can increase your home's value

Solar panel systems may contribute to adding value to your home. It is important to consider your home's capacity to generate enough power to offset electric bills. In areas with lower solar efficiency, the added value of a solar panel system might be less than anticipated.

Switching to solar energy can be a cost-effective investment

There are various solar incentives available, along with financing options. State or federal government rebates can provide tax savings when switching to solar energy, potentially making it a more affordable investment.

They operate in cold weather

Most solar panel systems work efficiently in cold weather. Solar panels can be more efficient in winter, depending on sunlight. These durable systems handle winter conditions well.

Disadvantages of Residential Solar Panels for Homes

Solar panels have certain disadvantages, particularly in specific regions. It is beneficial to research their use in your area.

Some homes are not suitable for solar energy installations

While solar panels fit most homes, manufactured homes and townhouses often don't qualify. Manufactured homes and townhouses sometimes do not qualify, and you must own your home. You must own your home, and it needs good sun exposure. A professional installer can assess if solar panels suit your property.

Some roofs are not suitable for solar panels.

Although many homeowners are able to invest in solar panels, some homes may not be suitable for installation. For instance, if the condition of the roof is poor or if it is necessary to replace the existing roofing material with a different type, this could increase the overall cost of the process.



Installation is not always a do-it-yourself task.

It is recommended to work with a professional solar panel installer because the process can be complex and hazardous. You have the opportunity to collaborate with an installation team and gain detailed knowledge about each step of the process.



Investing in solar panels has many advantages. Most homeowners find the installation process quick and easy, and then they can enjoy the benefits.



How Solar Panels Affect Home Value?

Installing high-quality solar panels on can significantly increase the value of your home.

Many homeowners see a considerable rise when selling post-installation, though the extent varies by factors. Research indicates that homes equipped with solar panels and a solar power system tend to be valued higher than those without. The increase in value varies based on several factors, but generally, homes with solar installations sell for approximately 4.1% more, according to Zillow. Solar panels on homes represent an investment that can be appealing to buyers, especially for those who prefer not to incur the initial costs associated with installation.

Factors Affecting Solar Home Property Value

It is essential to understand that every home is unique. The value that solar panels add to your property depends on various factors. Elements such as current electricity costs, geographical location, and the age of the solar system may influence the perceived worth of the system to prospective buyers. Below are some of the most significant aspects to consider to better comprehend how solar panels impact your home's value.



Location

The value of solar panels varies by location. For instance, communities with higher levels of direct sunlight can generate more energy, making solar panels a more cost-effective investment. In these areas, homes can produce a significant portion or all of their energy needs from solar power, thereby reducing other energy costs. Additionally, some markets have a greater demand for eco-friendly energy alternatives, including solar power.

The Solar Energy Industries Association states that there are 10 states where solar power provides the greatest benefits. In these regions, the presence of solar panels on homes may influence home values.

- | | |
|-------------------|------------------|
| 1. California | 6. Nevada |
| 2. Texas | 7. Georgia |
| 3. Florida | 8. New Jersey |
| 4. North Carolina | 9. Massachusetts |
| 5. Arizona | 10. Virginia |

Solar can still be a valuable option in various states. To assess the value of solar panels can add to your home, it is advisable to research the local real estate market, and analyze recent sales of homes equipped with solar panel systems.

Power Costs

Higher local electricity costs increase the value of solar panels, making them more advantageous. Solar panels can greatly reduce or eliminate reliance on traditional power sources.

Solar panels store energy in batteries, allowing power use even after sunset, reducing dependence on the electrical grid.

For individuals residing in regions with elevated electricity costs, this feature is likely to appeal to potential home buyers. Notable examples of such areas include California, Colorado, and Florida. Take some time to compare your electricity costs to those in another state. It is recommended to compare your electricity expenses with those in other states to better understand their impact on your purchasing decision.



Modern Solar Systems

Modern solar systems are engineered for longevity, with some lasting between 20 to 25 years and others extending up to 40 years. Newer systems typically have a longer remaining lifespan compared to older ones. For prospective homebuyers, a solar system installed within the last 5 to 10 years is advantageous, as it retains most of its operational life. Conversely, a system older than 25 years may not significantly enhance a home's value.

Solar Panel Ownership

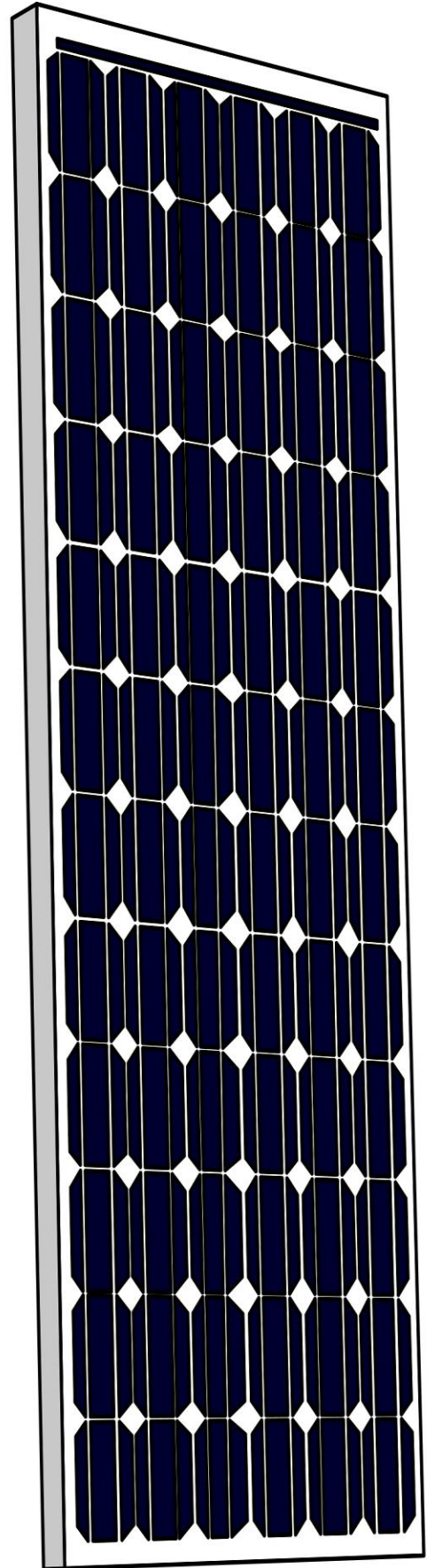
When evaluating the installation of solar panels on residential properties, it is essential to consider ownership. If you have purchased the solar panels outright, this can enhance your home's market value. Conversely, if you have a leased solar panel system, it may detract from the home's value. While these leases can be transferred to a new buyer, they may not provide a significant advantage to the new property owners.

How do they impact property taxes?

It is also important to consider the effect of solar panels on property tax assessments. The installation of a solar panel system on your home may enhance its value, potentially leading to an increase in taxes. However, some states have enacted laws that prevent such increases. To understand how this applies to your situation, please contact your local taxing authority for clarification.

Buyers are attracted to homes with Solar Panels

The interest in homes with solar panels varies by location. Many buyers are attracted to homes equipped with solar panels, and some may prefer not to purchase a home unless it includes them. However, the presence of a solar system is often considered an additional benefit rather than the primary reason for a purchase.



How Many Panels Do You Need?

Determine How Much Power You Need First

To determine how many solar panels are needed for the average home, the first step is to determine how much power you need. Solar panels can power everything in your home that relies on electricity.

The easiest way to determine this is to look at your current electrical bill. Most often, this will list the number of kilowatt hours (KWH) that your home uses each month. The size of your home, the location, and how energy efficient your home all plays a role in determining how much power you need. Look at the average daily energy usage from your bill. That will help you to determine how many solar panels you need.

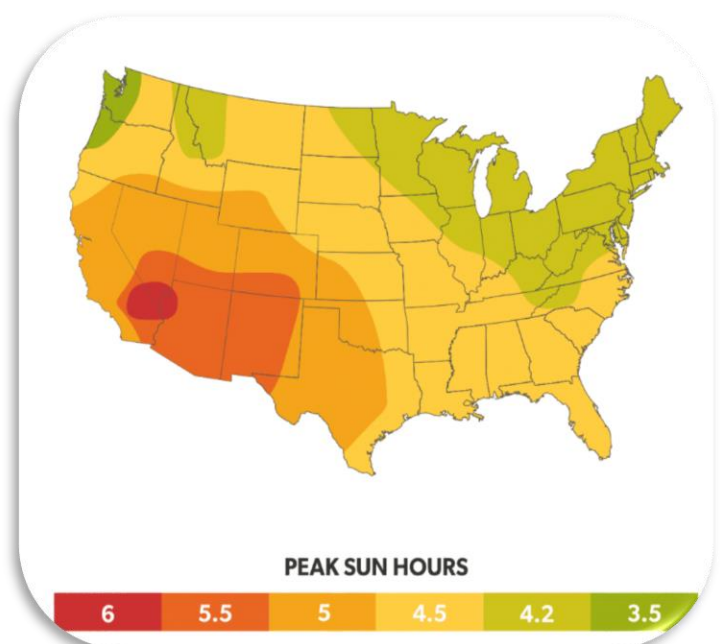
How Long Do Solar Panels Last?

There are differences between products. However, some solar panel systems can last for 20 to 25 years, sometimes longer. They are designed to be able to withstand the elements and are durable enough for many climates. Many times, solar panels come with a warranty that protects them for a set number of years. In some situations, panels last 50 to 80% longer than the warranty.

It's important to remember that there is no one to answer to how many solar panels you'll need. The number varies from home to home and on other factors such as geographic location, the types of panels you choose, and more. You'll want to consider these factors, and the ones below, long before you make the jump to buy solar panels.

How Peak Sunlight Hours Affect the Number of Panels Needed

One factor that plays a role in the number of panels you need is the amount of peak sunlight hours you need. Solar panels only generate electricity when they have direct sunlight. When the sun sets, they are not able to produce energy. Peak sunlight hours is the term used to describe the number of hours when your panels are in that direct sunlight path. Peak sunlight hours depend on where you live. Some areas, such as in the south, have many more hours of sunlight than those in the north.



Solar Panels are different sizes & weight

Solar panels come in various configurations and sizes, with varying levels of efficiency. Typically, a residential solar panel measures approximately 65 inches by 39 inches. While there may be slight differences among products from different manufacturers, each will provide specifications regarding the size of their solar panels.

What Is The Best Size?

The ideal solar panel size is one that meets your home's requirements. Generally, a 60 to 72-cell solar panel is suitable for residential properties and smaller commercial sites. There are also larger options available, including those with 96 cells. These larger panels usually measure about 17.5 square feet, but they may be too big for some home roofs.

There Are Multiple Sizes of Panels

Multiple sizes of solar panels are available and can be customized to fit your home's specific measurements. The three common sizes for most residential properties are 60-cell, 72-cell, and 96-cell solar panel systems. Typically, residential properties do not require the largest option, as the 96-cell panels may not fit properly on roofs unless the home is larger.



What is their weight?

Prior to investing in a solar panel system, it is essential to estimate your power requirements. This estimation will inform you of the number of panels necessary for your home. Consequently, this will allow you to understand the additional weight that will be added to your home with the installation of a solar panel system.

On average, solar panels weigh approximately 40 pounds each. A professional installer can assist in determining the total weight that solar panels may add to your roofing system.

Is your roof capable of supporting solar panel system?

Is your roof capable of supporting a system? To assess this, it is advisable to have a professional inspection of your home's roof to evaluate its structural integrity. There may be concerns regarding potential structural damage or the age of the roof.





In Closing: **Sunlight✓ Savings✓ Simple✓**

The installation of solar panels is rapidly expanding across the nation and has become increasingly affordable. This presents an excellent opportunity to consider investing in solar technology. It is projected that the number of homes equipped with solar panels will significantly rise over the coming years.

Request a complimentary, no-obligation solar estimate to assess potential long-term savings on your electric bill.

SolarUSAQuotes.com

