

Save Money: Go Solar in 7 Easy Steps

How much will I save? How much does it cost? Is my home suitable for solar? What do I need to know to start?

Get all your questions about going solar answered inside.



This complimentary ebook
brought to you by Gridbid

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Going solar can be a large investment. We know homeowners have lots of questions before they feel comfortable and informed enough to make the decision to invest in solar.

We put together this ebook to answer 7 key questions you might have about installing solar panels on your roof

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How much money will I save by going solar?

A solar power system will help you reduce your monthly utility bill by an average of 50% or more depending on the amount of sunshine your roof gets during the day, how much electricity is supplied by your solar power system and the cost of electricity in your area.

For example: If you live in California and your monthly power bill is \$125 with a usage of 1,188 kW per month of which 70% is supplied by your solar power system, you could **save \$83 per month** with a 4.8 kW solar rooftop system (66% savings). This means you would save approximately **\$992 per year**. In this example the payback time for your system would be 13 years and by the end of the solar panel payback time, your **yearly savings** would be approximately **\$1,965**.



“You could even earn money by selling solar energy back to the utility company.”

Given rising energy costs it is very likely that your savings will increase even more over time. The warranty period for most solar panels is 25 years. With a little luck your solar cells can last up to 35 years. This means even more savings because once your solar power system has paid itself off all the energy it produces will be profit.

Let's take a look at what you'll be saving

If you decide to go solar now:

- You will reduce your monthly electricity bill by an average of 50%
(or higher)
- You will be able to protect yourself from rising energy costs for at least 25 years
- Your solar power system will make profit once it has paid itself off
- You will become less dependent on fossil fuels and especially on dramatically increasing oil prices
- With solar energy you will also produce less carbon dioxide (CO₂) by burning less coal, gasoline and other fossil fuels and thereby you will help save our planet

How much does it cost to install solar panels on my roof?

The cost of a solar power system depends on a number of cost components: Equipment, installation costs, maintenance, permits, taxes, fees and interest (if you finance the equipment).

The average solar power system today costs between \$29,000 and \$39,000. (Estimated retail cost including components and labor for installation). Don't let these numbers scare you, it's not as expensive as you think.



“You can get up to 40% off the cost of a solar system in solar rebates from the government”

The costs that homeowners should be concerned with are net costs, which is the total amount paid for a solar power system with state and federal government, utility and manufacturer incentives being deducted. Government and utility rebates can add up to 40% with a federal tax credit of 30% available in all US states. The net costs of a solar power system vary from state to state. There is no one-formula-fits-all for this.

If you're looking for an estimate what a solar power system might cost you (if you choose to **self finance**), here's what we suggest:

Determine the net cost of your solar installation

Take the retail price for your solar power system

- (+) The total amount of permits and fees
- (-) The federal tax credit amount
- (-) Any state or local tax credit
- (-) State or local rebate
- (-) Utility rebate
- (-) Manufacturer incentive
- (-) Any other incentives



“The Investment Tax Credit for solar is currently set at 30%.”

For a **solar lease** the net costs of a solar power system are simply your monthly lease fee and any down payment (optional). With a solar lease you don't need to pay for installation or equipment.

For a **solar power purchase agreement (PPA)** the net costs are what you pay per kWh for the solar power your system produces. You don't need to pay for installation or equipment as well.

Are there any ways to reduce the cost of going solar?

If you are purchasing your own solar power system there are different types of subsidies available. You can get up to 40% off the cost of a solar system in solar rebates from the government, utility and manufacturer - depending on your system's productivity. A key form of subsidies are federal tax credit programs, with the Investment Tax Credit for solar currently set at 30%. Furthermore rebate programs - called "net metering" - are also offered by some local utilities (i.e. SCE, LADWP, PG&E and many more). However, government subsidies change often, so it might be a good idea to do an online search as well as ask your tax preparer and your solar installer about all the subsidies available for you.



"Net metering is the option to sell your excess power back to the utility and the utility company pays for the excess power."

Find out what rebates and subsidies are available in your state:

Visit <http://www.dsireusa.org> the Database of State Incentives for Renewables & Efficiency (DSIRE). It is a comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency and is funded by the U.S. Department of Energy.

On their website you'll find a map of the U.S. and by clicking your state you'll get a list of all financial incentives available in your area including:

- Leasing Programs
- Local Rebate Programs
- PACE Financing
- Performance-Based Incentives
- Property Tax Incentives
- State Grant Programs
- State Loan Programs
- State Rebate Programs
- Utility Grant Programs
- Utility Loan Programs
- Utility Rebate Programs
- Rules, regulations & policies that apply when going solar

Are solar panels a good fit for my roof?

The first step in determining whether or not your roof is eligible for solar panels is to assess your roof's:

- Size
- Orientation
- Shading

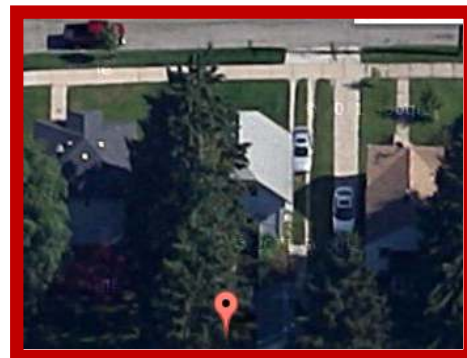
You can use images of your roof, or satellite images from Google Maps and physical measurements to locate an open space on your roof. The ideal orientation and shading is south facing with no shade throughout the day (and no trees south of the roof), but solar can work on a variety of similar orientations (SW, SE and even E or W) depending on the amount of sun you get each day.

You may use one of a number of free solar calculators available on the Internet to help determine the optimal tilt for your solar panels and how much sunlight to expect in your area.

If you'd like to find out how much you'll save by going solar you may create a roof profile on the [Gridbid website](#). This roof profile will allow you to auction your roof to get multiple offers from solar installers.



Good Roof



Poor Roof

What do I need to know in order to get a quote?

A solar quote will give you an accurate estimate of what costs to expect for your solar panel installation. To get quotes from installers you'll need to provide the following information:

- The average amount of your monthly electricity bill
- Your average monthly electricity usage (in kWh)
- The name of your electricity provider
- The location and composition of your roof
- The pitch of your roof (flat, inclined, very inclined)
- The average amount of shade your roof gets throughout the day

How will I pay for the project?

Solar lease

A solar lease allows homeowners to take advantage of a solar power system without having to put up a large amount of cash up front. A lease is usually a 20-year contract with a lease fee paid every month (fixed fee). Some leases have the same monthly fee for the 20 year duration, while others increase every 12 months. Homeowners' monthly costs also include an electricity bill for any additional power that was consumed from the utility. These costs combined are usually still lower than your old monthly utility bill by 10 - 35%.

A solar lease gives you different options:

- You can choose to make a down payment
- Prepay for some of your electricity in advance which will result in a lower monthly bill
- Or fully prepay your solar lease and avoid paying monthly lease fees

At the end of the lease the homeowner has the option to extend the lease, buy, upgrade or remove the solar power system.

In the event that you sell your house during the 20-year-lease you can either transfer the lease to the new homeowner, buy out the solar panels or relocate the panels to your new home (additional costs apply).

Solar power purchase agreement (PPA)

A solar power purchase agreement is a contract between a solar services provider (e.g. a solar installer or utility) and a homeowner to buy a certain amount of power based on a set rate. The homeowner gives permission to the solar services provider to install solar panels on his/her roof and agrees to purchase the electricity that is produced by

the system. A solar power purchase agreement can range from 6 years up to 25 years and an interesting benefit of a PPA is that homeowners may buy their solar power system any time after year five.

➔ ***“A PPA is a performance-based, long-term arrangement where homeowners pay for the solar power the system produces (variable fee each month) and not for equipment, installation, maintenance or repair.”***

With both a solar lease and a PPA the solar services provider purchases the solar power system and takes care of the coordination of the project as well as all financing, design and permitting aspects. The solar services provider is also responsible for installation and maintenance and therefore benefits from financial advantages such as tax credits and government rebates.

Which has more benefits?

Whether you decide to go for a solar lease or a PPA, you'll benefit from the same solar energy advantages:

- ➔ Lower and predictable electricity rates
- ➔ No high upfront costs
- ➔ No system performance risks
- ➔ No permitting processes to worry about
- ➔ Increase in property value

Mortgage based financing: Energy Efficient Mortgages (EEMs)

An Energy Efficient Mortgage (EEM) is a mortgage that credits the energy efficiency of a home in the mortgage itself. Borrowers get the opportunity to finance energy-saving measures as part of the mortgage. Borrowers can also apply for another, larger loan amount if they qualify for certain requirements.

A home energy audit needs to be conducted in order to get an EEM financing approved. EEMs are typically used to buy a new energy efficient home.

Third party financing

A solar power system is owned, operated and maintained by a third party (utility, city, solar installer, etc.). The homeowner gives permission to the solar services provider to install solar panels on his/her roof and agrees to purchase the electricity that is produced by the system for a predetermined period of time.

A typical long-term contract can range from 6 years up to 25 years. A lease or a solar power purchase agreement (PPA) are the most common forms of third party financing.

Loan financing

There are a number of banks and financial institutions in the US that are willing to give homeowners loans for solar power systems. Rates and collateral are dependent on the institution and the homeowner's credit score. If you are interested in loan based financing, speak to your local bank or ask your installer if they have relationships with any institutions.

Self financing

Purchasing your own solar power system allows you to benefit from the various solar incentives available from governments, utilities and manufacturers. If you are able to afford your own solar power system and it has estimated returns that are attractive, then self finance might be your best option. Plus you do not have to deal with monthly fees or a loan appearing in your credit report.

How long does a solar project take?

The process of installing a solar power system for your home can take 90 days or more. Delays should be expected waiting for permits, rebate approvals or equipment.

Make sure you check up on the timing of the costs (including permits, fees, taxes and total costs) with your solar installer, as well as the timing for rebates and tax advantages. Remember that it might take up to one year before you file your income tax return and can expect any tax credits.

Bonus: Further reading

We recommend the following websites:

- California Solar Initiative (CSI)
<http://www.gosolarcalifornia.ca.gov>
- Database of State Incentives for Renewables & Efficiency (DSIRE)
<http://www.dsireusa.org>
- US Dept. of Energy
<http://energy.gov/savings>
- Energy Star
<http://www.energystar.gov>
- Solar Energy Industries Association:
<http://www.seia.org>

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- following us on [Twitter](#) and [Facebook](#)

Why Gridbid is a great choice for you

[Gridbid.com](https://gridbid.com) is the world's first online auction for rooftop solar where building owners post their roof information and solar installers submit competing offers to complete their solar system. Gridbid's goal is to help building owners get the best deal on solar and solar installers find new customers.

Next steps

Now that you know the 7 steps to save money by going solar, you can save even more money by auctioning your roof on [Gridbid.com](https://gridbid.com) for free. It only takes a few minutes and it's easier than you think. Find out [how much you can save](#) by giving Gridbid's rooftop auction a try.



“Posting an auction only takes a few minutes. It’s free and easier than you think”

Need more information first?

If you decide to auction your roof on Gridbid.com you'll receive multiple quotes from solar installers for free. Once the bidding has closed you may choose the bid or solar installer that you like best. However, there's no obligation to choose a winner, though we always hope you will receive a quote you would like to move forward with. Find out [how Gridbid works](#).

Benefit from Gridbid's installer ranking system

At Gridbid we select our solar installers in reference to relevant experience and high quality standards. We check up on their previous projects and make sure they use only high quality products.



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