



Introduction to Rooftop Solar

FACT SHEET

October 2025

Thanks to the rapidly declining cost of solar panels and several incentives, a solar, or photovoltaic (PV), system can be a good financial investment for homeowners. Here are some factors to consider before going solar:

How many panels do I need?

The size and cost of your system largely depends on your annual electricity usage and your property's sun exposure. Comparing as many solar options as possible can help you avoid paying inflated prices for your system. We recommend getting at least three quotes.

Most solar companies will offer a free off-site quote, where they request your annual electricity usage and look up your property's solar exposure to give you an estimate without a physical site visit. You can also check out [Project Sunroof](#) or [PV Watts](#). Your utility company may also have a solar calculator tool on its website.

If you use less energy, you'll need fewer solar panels to account for your electric load. Make sure you're not using more energy than you need by investing in energy-saving equipment and weatherizing your home. Check with your utility company to see what energy efficiency programs they offer. You may already be paying for such programs on your bill, so you should take advantage of them. Here are more ways to cut your energy use and lower your solar project cost:

- [Illinois Home Weatherization Assistance Program](#) (income-qualified)
- [Illinois Energy Efficiency Loan Program](#)
- [The Department of Energy's Guide to Do-It-Yourself Energy Audits](#)
- [CUB Heat Pumps Factsheet](#)

Is my roof ready for solar?

If you want to install solar panels on your roof, you'll need to consider a number of factors, which an installer should assess during an on-site (and possibly paid) evaluation. Your solar installer will walk you through it, but here are a few things to consider:

1. **How much of your roof is shaded?** Check out an aerial view of your home on Google Maps. If you can't see the majority of your roof, you may not get enough sunlight to justify the costs of installing your own system.
2. **How old is your roof?** Replacing your roof after installing a solar panel system creates additional costs, and most solar panels are warranted for 25 years, so if your roof is asphalt shingled and over 10 years old, consider roof replacement prior to installing solar panels.
3. **Can the size, shape and slope of your roof support solar panels?** A south-facing roof is most ideal for solar panels. East- and west-facing roofs are okay too, but would require 10-20% more panels than a south-facing system in order to produce the same output. North-facing roofs are not ideal, unless the roof is at a very low pitch (5-10 degrees).
4. **What type of material is your roof?** Asphalt, tile and metal roofs tend to be an easier surface for installing solar panels. Slate and wood roofs make for more expensive installations.
5. **Can you install panels somewhere other than your roof?** If you have open land that gets a lot of sun, a ground mount system could be a good alternative to installing a system on your house. Detached garages and other structures on your property could also be good options, depending on available space and local ordinances.

How will I pay for it?

There are several incentive programs to make solar more affordable:

The Federal Solar Investment Tax Credit: This tax credit deducts a percentage of your solar project costs from your federal income taxes, and now includes credits for system batteries. The credit is set at 30% through **Dec. 31, 2025**. The credit was originally set to expire in 2034, but recent legislation has changed the sunset date. You must own your panels to receive the tax credit. The system must be installed before the end of the year, and you must pay federal taxes to benefit. The Inflation Reduction Act did create a direct-pay option, but it only applies to non-taxable entities (not individuals). Learn more about the residential energy credit (Form 5695) on the [IRS website](#) or on the [EnergySage website](#).

On-bill Credits from your Electric Utility: Once you have installed your system, it's likely you will not always use 100% of the electricity it produces in real time. If your

system is connected to your utility's grid, excess electricity is sent back to the grid and you'll receive bill credits for that electricity in a process called "net metering." These credits help maximize your monthly bill savings and ensure you're credited for every kilowatt-hour (kWh) your system produces, which pays off the remaining cost of your system over time. Net metering also helps cover the cost of the electricity your household uses when your panels are not generating energy, like cloudy days or nighttime. Net metering credits are automatically applied to your utility bill—you will not receive direct payments from your utility company.

Your solar installer will usually take care of the net metering application on your behalf. Ameren, ComEd and MidAmerican are required by state law to offer net metering. These utilities allow unused net metering credits to rollover each month, but they "expire" every year (either April 30 or Oct. 30, depending on your choice and consumption patterns). If you have a municipal electric utility or cooperative, check their policy.

"Retail" net metering refers to when the customer receives net metering credits on all parts of their bill, including the supply, delivery and taxes and fees sections. For Illinois consumers who have solar panels installed before 2025, this full benefit will continue. But beginning in 2025, state law allowed Ameren, ComEd and MidAmerican to restrict net metering applications so that new solar customers only receive credits on the supply portion of their bill.

To learn more about net metering, please see CUB's net metering resources:

[For solar/renewable energy systems installed BEFORE 2025](#)

[For solar/renewable energy systems installed AFTER Jan. 1, 2025](#)

Note: Alternative electricity suppliers are required to offer net metering and to provide net metering credits at the same rate they are charging you for electricity. Such suppliers are also required to have contact information specifically for net metering concerns. While they are required to comply, alternative suppliers do not always meet these requirements. Often, it is simpler to cancel with an alternative supplier and participate in net metering with your utility company. Utility companies have larger net metering departments than the suppliers, making it easier for them to address your net metering questions.

Ameren and ComEd: Net metering customers will no longer lose banked credits (that have rolled over from a previous month) when switching suppliers.

Leases and Power Purchase Agreements: Many solar companies advertise leases or Power Purchase

Agreements (PPAs) at no upfront cost, where the company pockets the owner incentives, signs the customer up for a long-term contract and may increase the rate over time through contract escalator provisions. With a lease, the customer is charged a fixed amount, usually monthly. With a PPA, the customer is charged for the energy that the panels on their property send to the grid each month. Both arrangements typically allow the customer to buy the system at some point in the contract term, but it depends on the contract, and that's after the solar company has exhausted the federal and/or state incentives. CUB has received dozens of complaints from consumers who signed up for expensive lease deals. Before signing a solar lease, make sure to get at least three quotes, look into ownership options, and do your research.

Did you know...

Homeowners who get 3 or more quotes from installers save at least 10%.

Source: U.S. Dept. of Energy's National Renewable Energy Laboratory (NREL)

Illinois Solar for All: Income-qualified customers can get rooftop solar panels at no upfront cost and a guaranteed discount through a state solar incentive program called Illinois Solar for All. Most vendors through Illinois Solar for All require customers to sign up for a lease or lease-to-own agreement, but with the guarantee that they will only have to pay for half of what their panels produce, ever. So under Illinois Solar for All, if the panels on a participant's roof produced 800 kWh in a month, they would get utility bill credits for those 800 kWh but would only have to pay the solar company for 400 kWh, maximum.

Eligible participants must meet income eligibility requirements, which can be found at the [Solar For All website](#). For 2-4 unit residential properties, at least two households must qualify based on income, and for 5+ unit residential properties, at least half of the households must qualify.

Solar Financing: There are many financial resources available to help you pay for your solar investment. Two common types of loans are: bridge loans (covers the period between installing a system and receiving your incentives) and solar loans (offered by banks, credit unions and solar panel manufacturers). Check out [A Homeowner's Guide to Solar Financing](#) from the Clean Energy States Alliance, [Solar Financing FAQ](#) from EnergySage, and [Resources for Considering On-site Solar](#) from Illinois Shines, the state solar incentive program.

Solar Renewable Energy Credits and Illinois Shines: [Illinois Shines](#) is the state solar incentive program. This

program provides incentives to solar vendors to develop different types of projects. These incentives can be passed on to customers through the sale of Renewable Energy Credits (REC). A Solar Renewable Energy Credit, or SREC, is a unit that represents the environmental value of solar power. For every 1,000 kilowatt-hours that your PV system produces, one Solar Renewable Energy Credit is created, which can be sold through the Illinois Shines program to help pay for your system. Your solar installer can provide more information on how to participate in Illinois Shines and will help you determine how much of your project you can expect this incentive to cover.

Battery Storage: Until battery technology gets more affordable and efficient, using solar panels to completely disconnect from the utility's distribution grid won't be practical for most households. If you choose to keep your solar system entirely "off-grid" — meaning it's not connected to the power grid — you also wouldn't be eligible for state solar incentives or net metering. Due to the updated net metering policy, CUB has seen more residential solar systems with battery storage. Batteries increase the total cost of the system, but they can also help maximize savings. There is a [battery rebate available through ComEd and Ameren](#).

How do I find solar installers?

If you think rooftop solar would be a good fit for you, contact solar installers (at least three) in your area to get quotes for your project. Find residential solar installers near you by visiting the [Illinois Solar Energy Association website](#).

If I have solar panels, can I participate in "real-time pricing" and other pricing programs?

Rooftop solar owners can participate in real-time pricing programs (ComEd's Hourly Pricing and Ameren's Power Smart Pricing). But they cannot participate in the following programs: ComEd's Peak Time Savings, ComEd's Time-of-Day Pricing or Ameren's Peak Time Rewards. Read below for important information.

What should solar panel owners know about real-time pricing?

While most electric customers get charged at a standard rate that changes only a few times a year, ComEd's Hourly Pricing and Ameren's Power Smart Pricing programs charge participants at a rate that can change hourly. This has been a money-saving program for many customers, but here's what solar panel owners should know about real-time pricing:

- Real-time pricing is only recommended if you own your panels. If you are on a solar lease or Power Purchase Agreement, you will be charged a different rate than what you received in net metering credits on your utility bill.

- Always research how each utility handles net metering credits for solar panel owners:
 - For ComEd Hourly Pricing participants, excess net metering credits do not expire and are not zeroed out annually, as is the case for net metering customers on the fixed-price rate. (**Note:** This is true for consumers who installed solar panels before 2025. For customers who went solar beginning in 2025, their credits do not expire under any rate structure).
 - For Ameren Power Smart Pricing participants with net metering, excess credits will continue to expire annually, just as they do on the fixed-price rate. (**Note:** This is true for consumers who installed solar panels before 2025. For customers who went solar beginning in 2025, their credits do not expire under any rate structure).
 - When switching from a fixed-price rate to ComEd's Hourly Pricing program, the net metering credit applied to your bill switches from a kilowatt-hour credit to a monetary credit. (If a net metering customer decides to switch back to a fixed rate, their accumulated credits remain as a monetary credit on future bills, until used up.)
 - For Ameren customers, any switch from a fixed-price rate to Power Smart Pricing will no longer result in a loss of stored credits.

Can going solar affect my homeowners insurance?

Most insurance policies cover solar panels, but you should check with your agent to see if you will need additional coverage.

Can going solar affect my property tax?

Installing solar panels will increase your home value, but the resulting increase will not be taxed in Illinois. Make sure to check your property tax bill. If your assessment increased after installing solar, contact your local assessor office who is listed on your tax bill. Your assessor may request a completed [State of Illinois PTAX-330 property tax form](#).

What do I need to know when signing an Illinois Shines SREC contract?

SRECs cover some of the cost of going solar. Solar customers typically receive their SREC checks within 12 months of the date the system is completed. What do consumers need to know about their SREC contract?

- **How is my SREC calculated?** The Illinois Shines program allows utilities to buy SRECs on a 15 year

timescale. Your approved vendor will make an estimate of your solar production over the first 15 years. That number will be rounded down to the nearest whole REC and multiplied by the current REC price for the program. The incentive is then paid out in a lump sum, rather than through annual payments.

- **Do I apply for my SREC, or does someone do it on my behalf?** Your Approved Vendor will apply for the SREC incentive on your behalf. Typically the Approved Vendor is a third party that your installer works with, but sometimes installers process applications in house. The approved vendor will often take a cut of the incentive as a processing fee, which is usually around 12%.
- **What is the SREC application process?**

Part 1 is completed after you sign your contract and pay the collateral and application fee. Once Part 1 is accepted by Illinois Shines, your spot is reserved in the program. This means that even if the funding for the program is all used up, you will still receive your SREC, because your spot is reserved.

Part 2 is completed after your solar panels are installed and energized (connected to the grid and turned on). In the Part 2 application, your Approved Vendor will confirm that your system size matches the Part 1 application, or will amend it accordingly. If your system size has changed since Part 1, that will impact your estimated production, and therefore impact your SREC amount.

- **What are the collateral requirements?** Illinois Shines requires that the utilities collect 5% of the SREC payment as collateral in case your system does not deliver the contracted number of RECs. This 5% collateral needs to be maintained and replenished if there are shortfalls in production. If your system delivers the contracted number of RECs by the end of the 15-year contract term, you will receive a check equal to the 5% collateral at that time.
- **What happens if my system doesn't produce the estimated number of SRECs?** If your system does not deliver the contracted number of RECs you will be required to pay back the utility company

(through your Approved Vendor) for the RECs not delivered. It is unlikely you will ever have to pay a significant amount of money back to the utility company.

- **What if I'm in a muni or co-op?** You can still participate in the Adjustable Block Program and receive SRECs even if you are a municipal utility or co-op customer. This is relevant to anyone who is not a customer of ComEd, Ameren, or MidAmerican.

Complaints

Solar energy can save you money, but there are some companies that may try to take advantage of solar's popularity to sign you up for a bad deal, or misrepresent information about state programs.

CUB does its best to provide transparent information to consumers, but the consumer group does not administer the state solar programs. If you have questions or concerns about solar, including an advertisement you might have seen or a salesperson who came to your door, call CUB's Hotline: **1-800-669-5556**, Monday through Friday from 9 a.m. to 4 p.m.

You can find complaints regarding solar installers at the Better Business Bureau as well as the Illinois Shines Consumer Complaint Database.

If you believe you have been subject to fraudulent or deceptive sales practices, the Consumer Protection Division of the Illinois Attorney General's office may be able to help. Customers can contact the following hotlines:

Chicago: 1-800-386-5438

Springfield: 1-800-243-0618

Carbondale: 1-800-243-0607

Spanish: 1-866-310-8398

Note: Individuals with hearing or speech disabilities can reach the Attorney General's office by using the 7-1-1 relay service.

How do I learn more?

Read the Department of Energy's [Homeowner's Guide to Going Solar](#) and the Solar Energy Industries Association's [Residential Consumer Guide to Solar Power](#).