



# GUIDE TO GOING SOLAR

# **WHY SOLAR**

As energy costs rise and power outages become more frequent nationwide, more home and business owners are embracing solar – taking power into their own hands and transitioning to sustainable energy.



#### **HOW SOLAR WORKS**

Solar technologies harness free sunlight and convert it into electrical energy through photovoltaic (PV) panels. That energy can then be used to generate electricity on site immediately for the home or business. Alternatively, the energy can be captured and stored in batteries and used at nighttime – when the sun isn't shining – or during outages, when the traditional grid goes down.

### THE BENEFITS OF SOLAR

A solar energy system offers an array of benefits.

#### **Backup Power During Outages**

Coupled with solar batteries, solar energy systems provide reliable backup power during grid failures, ensuring a continuous supply of electricity.\*

### Financial Savings

Going solar can significantly reduce – or even eliminate – monthly energy bills. And on days when your system makes more energy than you need, surplus energy can be sold back to utilities, offering additional savings!

### **Environmental Benefits**

Solar energy is renewable and clean, which reduces greenhouse gas emissions and helps the environment.

# **SOLAR BATTERY SYSTEM**

Given that sunlight isn't always available when power is needed, many customers opt to include solar batteries with their solar panel systems. These batteries enable the capture and storage of solar energy for use during low-light periods or power outages, providing peace of mind and an uninterrupted power supply.\*

There are numerous solar battery systems on the market today, varying in configuration, power, size, and price.

At Adams, using our extensive solar knowledge and know-how, we've carefully curated a group of supplier partners that allows us to deliver a customized solar system solution that is best for you, meeting your energy needs and expectations and on a budget that works for you.

## **PANEL SELECTION**

Solar panels, equipped with photovoltaic cells, capture sunlight and convert it into electricity.

The "ideal panel" is going to vary from one customer to the next, depending on what you want from your system. There are a variety of options when it comes to panel materials, panel efficiency and price.

Additionally, you'll need to decide whether a roof-top installation or ground-mount system is best for you.





\* Based on your electrical load and battery capacity.

# **ADDITIONAL CONSIDERATIONS**

There are other factors to keep in mind when investing in a solar energy system for your home or business, such as your average energy consumption and your roof's configuration and condition.



#### AVERAGE ENERGY CONSUMPTION

Your current energy bill is a huge wealth of information that will help you and your solar contractor when designing your solar energy system. Your utility bill shows how much energy you use month to month.

When planning, keep in mind any major upcoming changes to the property that could impact your energy usage - such as a new pool or an addition.

### LOCATION AND CONFIGURATION

You'll also want to consider tree coverage around your home or business. If trees create excessive shade on your roof throughout the day, it could impede energy production.

Additionally, the shape, size and slope of your roof are also important considerations. South-facing roofs with a slope between 15 and 40 degrees typically perform the best for solar. If your roof doesn't have a southern exposure, you can still install a solar power system, as long as it is sized and configured to make up for the lack of direct sunlight.



### **ROOF'S AGE AND CONDITION**

Roof-top solar panels are quite light, but it is always a good idea to inspect your roofing structure to ensure there is no existing damage that might compromise your solar panel installation.

Rooftop solar panels are usually guaranteed for a couple decades, so it is worth considering the condition of your existing roofing before installing a rooftop solar array. Most solar panel installations will easily accommodate roofing material repairs or replacement, but if your roof is already 15+ years old, you may want to consider re-roofing before installing solar panels.





With current federal and state tax incentives and rebates, there's never been a better time to "go green." In fact, you may be able to cover a sizeable portion of your solar energy system costs with tax credits and rebates.

#### FEDERAL SOLAR INCENTIVES

Thanks to the federal investment tax credit (ITC), homeowners and businesses can subtract 30 percent of the cost of installing solar from their federal taxes. Additionally, there's no dollar limit on eligible expenses!\*

#### WISCONSIN-BASED SOLAR INCENTIVES

Residential solar customers in Wisconsin can receive a one-time \$500 cash rebate for a solar installation. (Those living in rural areas may qualify for up to a \$1,000 rebate.)

Additionally, in Wisconsin, solar panels are **exempt from property taxes**, which means homeowners and businesses don't have to pay additional taxes based on the added value of the solar panels.

#### **ILLINOIS-BASED SOLAR INCENTIVES**

Illinois offers several solar incentive programs. The Illinois Shines program provides credits for all your solar production, which you can sell for a profit.

Additionally, the Illinois Solar for All program reduces the costs of solar installations for income-eligible households. Illinois waives taxes on added home value from solar equipment. Your property tax will remain the same as before installing solar panels.

Additionally, there are various rebate programs offered by local utility companies and municipalities.

\* Talk to your accountant to confirm tax benefits for your situation. There is added criteria for businesses in 2025 and beyond.

#### **SELLING ENERGY TO THE GRID**

If your solar energy system produces more power than you need, you can sell excess electricity to the grid. Contact your local utility provider for additional details and options that may be available to you.

#### **SOLAR FINANCING**

Financing is a great way to fast track your solar energy system purchase, and Adams offers different financing options. Once we have an estimate for your overall project, you can apply for financing with no obligation.

Just as Adams guides you through the best product options for your unique needs, we are here to help with any financing questions. Step-by-step, we'll assist you through the process.

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Fortunately, you don't have to figure this out all on your own. Adams will work with you to maximize all the incentives that are currently available in your area.





### ADAMS WILL GUIDE YOU THROUGH

# **ADDITIONAL INFORMATION & FAQS**

Looking for additional information about solar?

#### **FREQUENTLY ASKED QUESTIONS**

#### • I'm located in the Midwest. Given our long winters, is solar possible?

Even in winter, the Midwest receives plenty of sunshine to help generate solar power for most homes. Additionally, while there are fewer hours of daylight in the winter, you can add a storage battery to preserve excess energy for overnight usage.

#### • How does a solar energy system impact the value of my home?

A solar energy system can increase the resale value of your home, as more home buyers are recognizing the many benefits of solar.

According to a study from the Berkeley Lab, homebuyers across the country have been willing to pay a premium of \$15,000 for a home with an average-sized solar array.

Plus, solar panel installations aren't assessed in home values, so they won't cause your property taxes to increase.

#### • How long does it take for solar panels to pay for themselves?

The average solar payback period is around five to 10 years, but this can vary based on numerous factors. If you plan to stay in your home for at least the next 10 years, a solar energy system can be a wise investment.

#### • How much maintenance is required?

Generally, solar panels require very little maintenance. Panels are designed to withstand hail, strong wind, and other rough weather.

You will want to ensure that your panels remain free of debris. Additionally, it is a good idea to keep an eye on your system's performance. If you live in an area where there is dust or dirt, it could build up on your panels and impact how much energy your system is able to capture.

Check out this online tool by the National Renewable Energy Laboratory to help you estimate the energy production and cost of a solar PV system for your home:

#### • What kind of warranty comes with my system? Solar panel manufacturers and storage battery suppliers provide a range of warranties, depending on the manufacturer and the system. Be sure to talk with your installer. Furthermore, some installers may offer additional warranty coverage that extends the scope of the coverage.

As an experienced solar energy system provider, Adams has extensive knowledge and expertise and will help you with each step of the process, making it seamless for you.

#### • How do I get started?

Contact a gualified solar advisor. Adams is gualified to fully evaluate your home to maximize your return on investment in switching to solar. Adams' licensed, certified, and experienced team will guide you through each step of the process in switching to clean, affordable solar energy.

#### • If I have existing solar panels and now want to add a storage battery, will I qualify for the federal tax credit?

Talk with your tax preparer.

PVWatts Calculator (pvwatts.nrel.gov)

You can claim the tax credit for battery storage even if you buy and install them a year or more after you install the solar system. Eligible storage batteries must store at least 3 kW.

## **CHOOSE YOUR SOLAR CONTRACTOR WISELY**

Selecting a reputable and experienced solar contractor is crucial for a successful solar installation.

- Make sure your contractor is licensed for your area
- Ensure your contractor can take care of all permitting and grid tie-ins, so you can sell excess solar power to your local utility
- Check references carefully
- ✔ Verify that your contractor has satisfactorily completed similar projects
- Check your contractor's rating with the Better Business Bureau
- ✔ Understand who will be working on your solar energy installation
- ✓ Ask about your installer's licenses and certifications





### **CONSIDER ADAMS**

Adams knows energy and electricity. We've been proudly working to power homes and businesses across Wisconsin and Illinois for 35+ years.

You can rest assured knowing that all our installations are handled by Adams' very own team of certified licensed electricians, who are committed to making a positive impact on the lives of the families and communities they serve.

# WHAT OUR CUSTOMERS SAY

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"Adams installed solar on our home, and it was a smooth, quick and professional job! **We could not be happier as our electric bills are way down.** Even on cold days, it usually generates more power than we use, so we are selling power back to We Energies!" - John H.

"Adams has been great to work with. Their staff was professional and prompt with their work. They have installed two solar systems for our business and another one is in the planning stage. We have used Adams for other projects as well with great results. **I will recommend this company to others.**" – Mark A.

> "Our residential solar installation is working well. Adams uses top tier solar panels, which was an important consideration. They took care of all the paperwork: applications and energy credits. Staff were very courteous and professional and addressed all our questions and concerns. **I would recommend Adams to anyone looking for a solar installation.**" – Nancy L.

"They did a wonderful job designing and installing our full solar system with battery backup. **Well worth the investment and peace of mind.** System proved itself in the recent ice storm and a few other power outages. System powers everything in our home and the battery backup does wonders...During regular days, it powers the house, charges batteries and we sell back surplus power. I wanted peace of mind and they delivered!" – Daniel Y.







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