

Frequently Asked Questions



How Solar Works

Will solar power work on my Central Ohio home or business?

YES! The two biggest factors are the amount of available sunlight and the amount of appropriate roof space. Ecohouse Solar will give you a quick assessment by looking at satellite imagery of your property. If it looks like a good candidate, we will schedule a free solar consultation where we evaluate if solar will fit with your architecture and can meet your energy needs. Ecohouse Solar will provide a detailed design and proposal including recommended system location, size, pricing and 30-year financial analysis.

What are the environmental benefits of solar?

Solar panels generate electricity from sunshine, which is always available for free. Solar electricity is clean and no fossil fuels are involved other than in the manufacturing and transportation of the equipment. Solar power replaces electricity from your electric utility which in Ohio usually comes from coal or natural gas power plants. By generating your own clean electricity using sunshine for the 30+ year life of the solar electric system, you will be offsetting as much carbon dioxide as planting thousands of trees.

What size solar system do I need?

The size of your solar electric system will depend on your energy needs, roof space and goals. Ecohouse Solar will custom design a solar power system to meet your specific needs and offset as much of your utility bill as you desire - up to 100%. Residential solar power systems are typically 5 - 15 kilowatts (kW) and commercial systems can range from 20-300 kW for a small- to medium-sized business.

What happens at night or when it's cloudy?

The amount of electricity your solar power system generates is directly related to the number of solar panels and the amount of sunlight they receive. It will produce less electricity when the weather is cloudy, and nothing at night or if the panels are covered with more than an inch of snow. Your solar power system will be connected to your local utility grid so that you will automatically draw power from the grid whenever you need it. Switching between solar and the utility grid happens seamlessly.

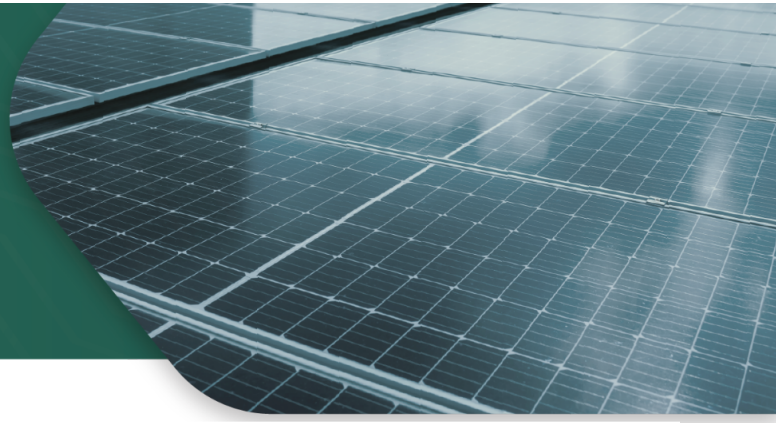
How reliable is solar power?

Solar systems are very reliable. They have proven to be dependable sources of clean energy for homes and business for the last 50 years. Solar technology is now used widely around the world and is the leading source for new electric capacity. Ecohouse Solar has high quality standards, building our systems to last for 30 years or more. You will receive a 25-year performance warranty with the solar panels, and Ecohouse provides a long term workmanship warranty.

How does solar work?

Photovoltaic (PV) cells in solar panels convert sunlight into direct current (DC) electricity. The DC power is then changed to alternating current (AC) by a solar inverter or series of inverters, so that the electricity is compatible in your home or office. Any excess solar power is exported to the electric grid, and you receive credit on your utility bill through Net Metering.

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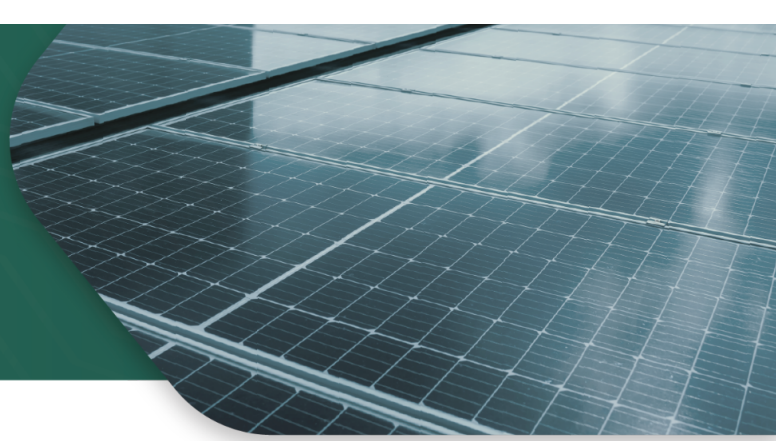
What maintenance is required?

Your solar energy system requires very little maintenance, because it has no moving parts. We suggest that you trim any trees that shade your solar panels, and also install a squirrel guard around the perimeter of the solar array, if there are squirrels in the neighborhood.

Do I need battery backup?

All Ecohouse Solar energy systems are connected to the electric utility grid so you always have access to a power source, as long as the grid is operating. In the event of a grid disruption, your solar system is designed to turn off. This is a safety requirement. A battery or generator is not necessary, but can provide backup power or allow the solar to continue operation if the grid goes down. If you have Ecohouse install a battery with your solar, this will also qualify for the solar Federal tax credit. However, batteries do not increase your amount of utility savings because of Net Metering.

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Installation Process

Is it difficult to switch over to solar power?

Ecohouse Solar makes it very easy to switch to solar. We take care of custom design, engineering, permitting, utility interconnection, installation commissioning, and inspections, so that you can start saving money and using clean energy as soon as possible.

What about permits to meet local building codes?

As part of our comprehensive service, Ecohouse Solar will obtain the required building and electrical permits and design your system to meet the local building codes and National Electric Code. We'll schedule and be there for the required inspections. Ecohouse Solar takes care of your project every step of the way.

What if my roof needs to be replaced after I've installed the solar panels?

Ideally, you should install solar panels on a roof that is in good condition. When an Ecohouse Solar representative comes out to inspect your building prior to installation, he or she will check to make sure that your roof is suitable for a solar installation. Should you need to replace your roofing later on, the solar panels will need to be removed and reinstalled. Ecohouse Solar offers this service for a reasonable fee.

How long will it take to get my solar system up and running?

The engineering and permitting, and utility interconnection process may take 60-90 days prior to the installation. A typical residential solar installation takes about 1-3 days to build, and a typical commercial installation may take 1-3 weeks or more from the day we begin the installation, depending on size and complexity.

What is the ideal orientation and angle for solar panels?

In Ohio, it's best to have the solar panels face South. They are still effective in East or West orientation, but they start to lose energy production when the orientation varies from South. The ideal angle is 30 degrees, however, this is far less important than the orientation. Solar panels can be on your roof or on a ground mounted structure.

Should I wait for new technology?

Now is really the best time to invest in a solar system given the combination of low solar equipment costs and the available Federal Tax Credit. Delaying your decision to go solar delays your savings and the associated environmental benefits. Furthermore, improved technology does not hinder the value of what is available and installed now.

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Financial Benefits

What does a typical residential solar electric system cost?

The average cost currently for a residential system in Central Ohio is \$15,000 - \$35,000 before the 26% Federal tax credit, and \$12,000 - \$25,000 after the tax credit. The cost per watt decreases as the system size increases. Adding battery backup adds to the cost of the PV system, and allows you to have power even when there is a utility power outage.

Do you have financing available?

Yes. Ecohouse Solar can help you obtain financing through the Clean Energy Credit Union, Sunlight Financial or a bank that you choose, so you can experience the benefits of solar power immediately – and lock in a lower energy cost.

How much will I save?

With solar, you are buying the source of your electricity and locking in the price for 30+ years. The amount you save will depend on the size of the solar system and the rate you are paying for electricity. The savings will increase each year as utility rates rise. Homeowners typically save \$1,000-\$2,500 per year.

What incentives are available?

Ohioans can take advantage of a 26% Federal income tax credit until the end of 2022. This tax credit then reduces to 22% for one year before expiring. If you own a rural business or agriculture business, you may also be eligible for a REAP grant through the USDA for 25% of the system cost. Businesses can also claim Bonus Depreciation or 5-Year accelerated depreciation for the cost of the system.