



Your Touchstone Energy® Cooperative



Things to Ask Yourself Before Investing in Solar Energy



Why do I want to invest in solar, and can I afford it?

Solar systems are a major investment. Oftentimes, we hear members say that they want to invest in solar for the green factor. They feel it's the right thing to do for the environment and their children or grandchildren's future. Offsetting their energy usage is an added bonus, but it isn't necessarily their objective. We also hear from those who feel their energy bill is too high or no longer want to pay an electric bill. No matter which side of the spectrum you fall on, you may want to proceed with caution to prevent a hasty decision and to avoid sales pitches that are too good to be true.

To reiterate, investing in solar is no small decision, and the price tag can be more than you expect. For a system that offsets the usage of a household with moderate usage, expect a starting cost of about \$24,000. Prices can range up to \$38,000 or more depending on the size and type of the system.

Am I currently using energy as efficiently as possible?

Before jumping into a solar contract, you should determine if there are ways you can reduce your energy consumption first. Does your home need new insulation? Have you sealed air leaks? Do you have an old appliance that could use an upgrade? Making simple upgrades to improve your home's efficiency or changing your habits are the most affordable, practical first steps that you should take.



Solar systems are sized to offset your energy consumption or usage. Reducing your consumption will reduce the size of system recommended, saving you money in the long run by not spending it on an oversized, unbeneficial system. To get a head-start, check out Use Energy Wisely, located at www.jackelec.com/use-energy-wisely or log into SmartHub to view the usage explorer. With usage explorer, you can narrow down your usage history to hourly and 15-minute intervals to better correlate your usage with your habits. You can also see if your usage corresponds with the temperature.

Jackson Electric staff can also assist you in reviewing your past energy usage and identify trends. Perhaps your summer or winter consumption is always higher. We can pinpoint ways to reduce your energy usage and/or refer you to consider a home energy audit to discover hidden energy consumers that may be costing you money.

Have I talked to my electric utility?



No matter which solar company you plan to work with, your first call should be to your electric utility to learn about their policies, requirements, and fees. Typically, there will be a monthly facility charge for your solar (DG) meter, a commissioning fee, an interconnection application and agreement, and proof of insurance. There's nothing like making an expensive investment and then finding out about interconnection fees or having your application denied because it doesn't meet your electric utility's policy. Grid-enabled solar systems are interconnected to your electric utility's equipment, so your utility's ultimate concern is for safety of its crew and member-consumers. When a solar system is grid-connected, energy is flowing both ways. When there's a power outage, it is essential that the solar system shuts down so that it doesn't back feed to the powerline, causing injury or worse to the line crew. Each utility has the ultimate decision in approving or denying your request based upon safety factors and regulations, often beyond their control, that must be followed.

Do I understand how solar energy works?

The simplest explanation begins with the solar panels themselves. Energy from the sun is converted into electricity. Next, the inverter converts the electricity from DC (direct current) to AC (alternating current). The energy produced by your panel is then delivered to your home to meet its energy needs. If more energy is generated than what your home needs, the electricity is sent back to the grid. Jackson Electric uses a separate DG (distributed generation) meter to track our member's production. At the end of the month, your production is subtracted from your consumption, kilowatt-hour per kilowatt-hour. Any excess production from your solar system is banked forward to the next month. Remember, the sun doesn't shine at night, and your solar system won't have as much production in the winter or on cloudy days. During these times, you'll likely be consuming more energy than your system can produce. Thus, your system will offset some of your usage but may not offset all of it. In other words, going solar is not going to cover 100 percent of your energy consumption, and you will still need to be interconnected to the power grid.



Do I want a ground or roof mounted system?

While it all boils down to personal preference, there are pros and cons of both ground and roof mounted systems.

Ground Mount Pros: More space to work with, easier to access and maintain, more angling/positioning options, easier to clean snow off in the winter to maximize production

Ground Mount Cons: Takes up more yard space, more materials may be required

Roof Top Pros: Doesn't take up yard space, may be less expensive to install

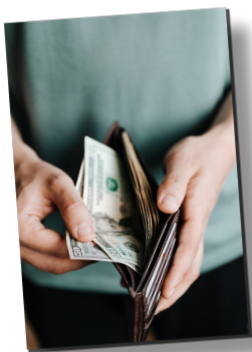


Roof Top Cons: Limited space due to roof size/other obstacles, holes in the roof, weight, snow removal, some solar companies may charge to take down the roof top solar system if you need to do maintenance on your roof

There's a fair argument for each side. Therefore, in making this decision, you'll want to consider if you have enough yard space for a ground mounted system or whether your roof is in good condition, amongst other considerations. Regardless of what type of system you install, make sure most obstacles (trees) are cleared so that your system can provide you with maximum production.

What will my savings be?

Please beware of the misleading statement that "you'll never pay an electric bill again" or "your electric utility will be writing you a check." Utilities may have differing policies. However, we can break down what your Jackson Electric billing statement would look like if you were to invest in a solar system.



Jackson Electric Cooperative will off-set (net meter) all consumption first and the remaining generation will be banked to the next month. An annual true-up billing will occur with the June usage, July billing statement. Excess production at the time of the annual true-up will be credited at the annual average avoided cost rate, which fluctuates and is not as much as the retail rate you receive by offsetting your usage. This is why it is very important for your system to be sized correctly to offset your usage, not overproduce. Overproduction will not benefit you, as you will be paying for a larger system than you need.

Regardless of what anyone tells you, you will be responsible for the facility charges, fees and taxes that you already see on your electric bill every month. Therefore, you will continue to receive an electric bill from Jackson Electric.

Don't forget to check with your tax preparer to see if you qualify for the Federal tax credit.

If you want to learn more about investing in solar energy, please contact our office at 715.284.5385. Jackson Electric and JacksonSolar, LLC are both under the same roof, and we would appreciate the opportunity to work with you on your solar energy investment.