EnergyUnited Renewable Energy Frequently Asked Questions

Q. What is a Photovoltaic System?

A. A photovoltaic system (PV) is an electric power generation system used to convert sunlight into usable electrical energy.

Q. What does a PV System consist of?

A. The two main components in a PV system are the array of solar panels and the power inverter.

—The array of solar panels is the means by which energy from the sun is converted into electrical energy. A solar array is composed of two or more solar panels mounted on a frame. The number of solar panels in a system is dependent on the quality and efficiency of the solar cells and the amount of power output desired. They are typically either roof-mounted or ground-mounted.

—The inverter converts and conditions the direct-current (DC) electrical power produced by the solar array, to alternating-current (AC) power that can be connected to the electric grid and used in your home. A high quality inverter will maximize the power output from your solar panels. Inverters also contain circuitry to protect the PV system and the electric grid in the case of abnormal conditions.

Q. Where can I get more information on solar energy?

A. Useful Links:

http://energy.gov/energysaver/articles/small-solar-electric-systems

https://www.energysage.com/solar/101/

https://www.letsgosolar.com/

Q. If EnergyUnited has a service interruption will my PV system keep my power on?

A. Not without a battery backup system. PV inverters are designed to disconnect from the grid whenever power interruptions occur to prevent back-feeding onto the electric system. This is a major safety feature of modern inverters and a requirement for those connected to EnergyUnited. However, if you have installed a battery backup system, you will have some standby power until the battery charge has dissipated. Otherwise, the system will remain off until grid power is restored.

Q. How much does a system cost?

A. The cost of a PV system varies, depending on the size of the system, the efficiency of the solar cells, and the quality of inverter. Prices are typically \$3-\$4 per watt installed. Federal tax incentives may reduce the cost of PV systems. For specific pricing information refer to a licensed retailer or installer.

Q. What size PV system do I need for my home?

A. There are many factors that determine the optimal size system to meet your needs. These include your budget, the amount of space available and the amount of electricity that you use. Before sizing your PV system, consider taking some energy efficiency steps to reduce your usage such as weatherproofing your house and buying ENERGY STAR[™] appliances. For more information on energy efficiency steps you can take, visit <u>https://www.energyunited.com/environment-safety/energy-efficiency-tips/</u>.

Once you have optimized your usage, to help better understand what size PV system you may benefit from, the government provides a useful tool for analyzing PV systems at the link below: <u>http://pvwatts.nrel.gov/</u>. A reputable solar installer can also help you determine the proper size system for your home as well as what the costs would be.

Q. Does EnergyUnited sell or install PV systems?

A. No. EnergyUnited does not sell, install, or manage any PV systems. However, we are happy to work with you and/or your installer to interconnect your system to our grid.

Q. How do I find someone to put in a PV System for me?

A. EnergyUnited does not recommend or endorse any PV installation company. For help finding an installer, visit <u>https://www.energysage.com/nccleantech/</u> or <u>https://www.solarreviews.com/</u>. (The websites mentioned above are suggested as they may be helpful to our members. EnergyUnited does not sponsor or have any involvement with any third-party website.)

Q. Does EnergyUnited offer any incentives for solar power?

A. No, but incentives are available in the form of federal tax credits.

—The federal government currently offers a 30% personal tax credit. For more information about federal government tax credits, visit: <u>http://energy.gov/savings/residential-renewable-energy-tax-credit</u>.

Q. Does EnergyUnited offer Net Metering?

A. Yes. EnergyUnited does offer a Net Metering program for all residential members. We also offer Net Metering for non-residential members under a new pilot program, which is open to the first 10 members to apply.

Q. What is Net Metering?

A. Net metering allows you to use the energy you produce to reduce your bill. When you are using more energy than you are producing, the meter will measure the amount of energy EnergyUnited delivers to you. When you are producing more than you are using, the meter will measure the amount of energy you are sending back to EnergyUnited. You will be billed for the kWh you use from EnergyUnited and are issued a credit on the bill for the kWh you send back to EnergyUnited.

Q. Is there a size limitation?

A. Residential members participating in EnergyUnited's Net Metering program are limited as follows: for Option A, systems shall be no larger than 10 kW or the member's peak demand, whichever is less, and for Option B, systems shall be no larger than 25 kW or the member's peak demand, whichever is less. Non-residential members participating in Net Metering are limited to systems no larger than 150 kW or the member's peak demand, whichever is less. Participation in the Buy-All, Sell-All program is limited to system less than 25 kW for residential services and 150 kW for commercial services. For systems larger than 150 kW, please contact EnergyUnited.

Q. Can I connect my system to the grid and just sell the power back to EnergyUnited?

A. Yes! EnergyUnited offers a Power Purchase program (*Buy All, Sell All*). Power consumption is billed as normal based on EnergyUnited's <u>current rate schedule</u>. Any power that you produce is measured through a separate electrical meter and sold to EnergyUnited at a wholesale power rate.

Q. How much does EnergyUnited pay for the energy I produce?

A. If you are participating in EnergyUnited's *Power Purchase* program, EnergyUnited pays an avoided cost rate for the energy. (See the Avoided Cost Rate listed on our website for the current rate.) If you are participating in Net Metering, EnergyUnited pays a credit for each kWh sent back to us. The rate paid is based on which Net Metering option you signed up for. (See NM-R or NM-CI Rider).

Q. How am I paid/credited for the energy that I produce?

A. On your bill every month, EnergyUnited will list the amount of power you delivered to the electric grid. You will receive a bill credit based on the applicable rate schedule or rider.

Q. Does EnergyUnited charge a monthly fee?

A. For members participating in the *Power Purchase* program, EnergyUnited charges a \$10.00 per month facility charge for systems less than 25 kW and a \$25.00 per month facility charge for systems greater than 25 kW. This is in addition to the monthly facilities charge you pay for your normal electric service. For net metering members in Option A, a standby charge of \$3.00 per kW (based on AC PV system size) will be added to your monthly bill. This is also in addition to the monthly facilities charge. Members enrolled in Net Metering Option B pay no standby charge.

Q. What is the standby charge?

A. The Standby charge is required for Net Metering Option A participants only. With this option, EnergyUnited pays a full retail credit for any excess energy sent back to the grid. Unfortunately, part of that credit is comprised of expenses that EnergyUnited has already had to pay to other parties for costs such as reserving generation and capacity. Because of this, the standby charge allows EnergyUnited to recoup that expense without passing it along to our other members.

Q. What if I won't produce a lot of excess energy and wish to avoid additional charges?

A. For this situation, Net Metering Option B would be best for you. You still receive a credit for any excess energy you do produce, but without incurring any additional fees above your normal rate schedule.

Q. Are there any upfront costs?

A. Along with your *Application to Interconnect*, EnergyUnited requires a non-refundable \$100.00 application fee for systems 25 kW or less and a \$250.00 non-refundable application fee for systems greater than 25 kW. Except in extreme cases, EnergyUnited does not charge installation costs.

Q. What is a REC?

A. A Renewable Energy Certificate (REC) is created for each 1MWh (1000kWh) of renewable energy that you produce. With both the Purchased Power (SGPPS) and Net Metering (NM) programs, the member retains ownership of any RECs produced by their systems.

Q. What about other technologies?

A. EnergyUnited allows installation of various types of renewable energy, as long as all interconnect requirements and specifications are adhered too.

Q. What are your interconnect Requirements?

A. For information regarding interconnect Requirements, see Interconnect Requirements

Q. What is the process to interconnect a system?

A. For information regarding the process of interconnecting, see Interconnect Process Document