

Frequently Asked Questions for SC Residents on Solar Energy

1. I am interested in solar. What are my options?

If you would like to install panels on your house, you may purchase or lease solar panels. A third option is community solar, offered through most utilities. It is suggested that you investigate multiple options to determine what is best for you.

2. What's the difference between buying and leasing solar panels and community solar?

Buying: You pay for the entire solar energy system up front or finance these costs through a loan. Buyers may be eligible for federal and state tax credits offered for solar energy, which can reduce costs considerably. As the owner you are also responsible for any damages and maintenance costs not covered under warranty. Solar system owners typically accrue more savings in the long term than those who lease.

Leasing: You rent a solar energy system, which is installed on your property, for a set period of time from a leasing company, typically a 20 year period. Most leasing companies offer a monthly payment plan. Since you do not own the system, you are not responsible for upkeep costs and do not receive federal and state tax credits and do not have large upfront costs for the system. Those who solar lease can begin receiving savings immediately, but typically accrue fewer savings in the long term than those who own. Please be sure to review the terms of your lease in case you decide to move prior to completing the full term of the lease, though it may be transferred to the new home owner.

Community Solar: Community solar programs are run through your utility. The utility builds a large solar farm and customers can purchase a share of the energy generated. The customer is typically reimbursed at a set rate for the electricity generated by their purchased allotment. Structures and fees associated with community solar vary based on utility. Community solar is a great option for those that rent or find their house is unsuitable for an installation based on construction, roof direction, shading, or various other restrictions. Rates and incentives vary by utility.

3. What types of incentives does my energy utility offer for solar?

You must contact your utility to determine if there are any current incentives that you may be eligible for. There are existing federal and state tax credits (not rebates), but you must have sufficient tax liability to take full advantage of the tax credits.

4. What is net metering and does my utility offer it?

Net metering is a mechanism which allows customers to offset part or all of their electricity use with a customer-owned renewable energy installation. Individual system size is currently capped for customers based on their average calculated energy use or 20 kW-AC for residential customers and 1000 kW-AC for non-residential customers. Current legislation sets total net metering caps at 2% of the previous five year average of each electrical utility's demand. To ensure that you can participate in net metering and that caps have not been met, you must directly contact your utility. Please note that under current regulation, net metering is available

to participants until 2025 and may end or phase out if the cap is reached before this date. Also, note that each utility may use a different mechanism to determine your average energy use and they may use a different net metering calculation method.

5. What are the current costs of buying and leasing solar energy?

The costs of solar are dependent on many factors unique to each individual home. Some of these factors include the roof size, pitch, and the amount of sunlight the roof receives. The current cost of purchasing a PV system in SC is just under \$3.50/W-DC. For an average sized system of 6kW, the total installed cost is about \$21,000, prior to federal and state tax credits. If you are eligible for full federal state tax and credits, this cost could be reduced to an average of \$11,200. Please check with your tax professional to ensure that you are eligible for these tax credits.

With solar leasing, residents typically save an average 20% off their monthly electricity bill and is calculated on combination of monthly fees to the solar leasing company and the new, reduced electricity bill. You will still receive a monthly bill from your utility, but you will also receive one from your leasing company. Tax credits are taken by the leasing company, not the homeowner.

6. Do I qualify for the Federal and State Tax credits?

You must have sufficient tax liability to qualify for the credits. If you have sufficient tax liability, you can only qualify for the Federal and State Tax credits if you purchase solar equipment.

Residential homeowners who lease solar energy systems are not eligible for tax credits.

Federal Tax Credit: up to 30% of your system's total installed cost. Federal tax credit is set to phase out beginning in 2020 and will be reduced to 10% from 2022-2024.

South Carolina State Tax Credit: up to 25% of the total cost of system. Maximum benefit is either \$3,500 or 50% of your tax liability for that year. This may be taken over a 10 year period.

Residential homeowners who lease solar energy systems are not eligible for tax credits.

7. How do I claim the federal Income Tax Credit (ITC) for solar installations?

Until 2020, there is a 30% federal tax credit for the cost of the purchase of your panels. If construction begins in 2020, the credit is reduced to 26% and if construction begins in 2021, it is reduced to 22%. If the construction of a system starts after 2021, but placed in service before 2024, the tax credit is reduced to 10%. When filing your annual federal tax return, fill out and attach IRS Form 5695 to your normal 1040 return.

Links to the forms to apply for SC state tax credits can be found at:

<http://www.energy.sc.gov/lpage?m=701>. This includes SC TC-38 and the "Solar Energy System Credit Certification" form.

7. Where can I find licensed solar installers?

The South Carolina Solar Council has a vetted list of in-state solar installers. Please visit <http://www.scsolarcouncil.org/resources/installer-list/> for additional details. It is recommended that you receive three separate quotes if you choose to purchase or lease a system. State

approved leasing companies can be found at
<http://www.regulatorystaff.sc.gov/electric/Pages/LeasingInformation.aspx>.

8. What maintenance is required for solar panels?

Solar panels generally require very little maintenance. Typically, a semiannual cleaning will do. Spray down the panels with a normal garden hose to remove dirt and debris. Your installer can provide specific recommendations for your installed system.

9. Are solar panels prone to damage?

Generally, solar panels are resilient to weather such as hail, snow, and strong winds. Most manufacturers test the panels at wind speeds upwards of 141 mph. The largest concern will be the likelihood of debris that could fall onto the panels. This is one reason why it is important to check for overhanging limbs and an annual inspection is recommended. Leasing companies are typically responsible for any repairs during the life of the lease. Home owners insurance and warranties may cover damages for purchased systems. Please check terms and conditions for both.

10. Can I finance my solar PV system?

Yes. When you talk to potential solar installers, be sure to ask about low interest loan options that may be available. It is not unusual to see APRs as low as 1.5%. Keep in mind, your utility also may offer low-interest loans.

11. I am still confused. Who can I contact to better understand what this means for me and my electricity bill?

Your utility should always be your first point of contact. If you would like to collect more background information before you contact your utility, please refer to the South Carolina Energy Office website (www.solar.sc.gov) and the South Carolina Solar Council (www.scsolarcouncil.org) website.