

Questions to Ask When Considering Installing Rooftop Solar On Your Home

Questions to ask the solar provider/salesman:

- How much solar, in kilowatts, is the company recommending?
- What is the cost per watt and total cost of the system? (Common costs in Oklahoma are about \$3 to \$4 per watt, which is \$3000 to \$4000 per kilowatt.)
- How much of the home's electric usage will be supplied by solar production?
- How much energy will the solar system push back onto the electric grid?
- How many solar panels do you recommend and where will the panels be installed?
- Will any trees have to be removed to get the sun exposure that the solar panels require? Who pays for that? Would removing trees cause my home's energy usage to go up?
- What is the anticipated savings per month or annually on the electric bill? Is this savings substantiated with records of actual house usage? Do these records include actual time of day usage of the home as well as time of day solar production? (You can only use solar during the day, while the sun is shining, and you will use off the electric grid after dark.)
- What is your estimate of the payback period? (Other ways to state this are: When will the accumulated savings on my electric bill equal and exceed the cost of this solar system? When will I break even?)
- Does the salesman know the utility's electric rates and how they change with solar?



- Did the salesman use actual data from my home, my electric bill, and Oklahoma sunshine statistics to generate their estimates, or did they simply provide standard sales data?
- Will the system be financed? What are the finance charges, interest rate, and loan payment period? (If financed, your payback period will probably be the length of the loan.)
- What are the tax incentives? Is the incentive a tax credit or reduction of my taxable income?
- Is the combined payment for the solar system and my future electric bill more than I am currently paying on my electric bill?
- How much will I be saving after I finally break even?
- What is the warranty period for the solar system? How will damage be reported, repairs be made, and costs paid?
- Will there be any maintenance costs associated with the solar system in the next 25 years, or possibly even within the time period they think it will take to break even?
- Can I call some of your other customers and references?
- Will I be able to tell when the solar system stops working?
- Will I be able to tell if the solar system is having the right impact on my electric bill?

Questions to ask the electric utility:

- What steps must be taken to get approved for a solar installation?
- Does the utility offer any installation incentives, rebates or credits?
- What are the electric billing rates and other charges for solar customers?
- What is the pay-back or credit rate for overproduction into the utility grid?
- Is the combined payment for the solar system and my future electric bill more than I am currently paying on my electric bill?
- Can the utility provide me any information concerning how the operation of the solar system will affect my electric usage and my bill?
- Can the utility provide me with actual time of day usage data for my home so that I can evaluate and calculate the solar offset (house using solar production instead of grid power) and overproduction potential of the proposed system? (Solar offset provides the greatest savings potential. Overproduction provides a bill reduction in the form of buy-back or credit, but often at a reduced amount per kilowatt-hour.)
- Does the utility have any statistical data on existing solar customers and how much they have saved?
- Will I be able to tell if the solar system is having the right impact on my electric bill?



Questions to ask yourself:

- Do I realize that I will still be connected to the utility's electric grid and will still be making monthly payments to the utility? [It is important to remain connected to the grid for 3 reasons: 1) the sun does not shine at night, 2) the grid will be able to provide power if the solar system fails, 3) the solar system may not be able to provide all of the house power needs even when the sun is shining.]
- Have I verified whether any utility charges will increase as a result of adding solar?
- Is the combined payment for the solar system and my future electric bill more than I am currently paying on my electric bill?
- How long will I live in the house? (i.e. Does it make sense to buy this system when I may not be living in the house at the time that it finally breaks even?)
- How long will I live? (i.e. Does it make sense to buy a system with a payback of 16 years or even much longer when I am over 65 years old?)
- How old is the roof and will it have to be replaced within the solar system lifetime of 25 years? If so, who will pay to remove the solar panels and put them back up?
- Will the solar panels cause any roof damage over the 25 years, and possibly let water damage occur in the attic or living area?
- Will the solar panels be damaged by hail or high winds?
- If a tornado damages the home, will the solar system be insured? If so, what is the cost of the additional insurance?

- Will the system still be working at the end of the payback period or loan period?
- Is the benefit of producing and using clean energy worth the high cost and long payback?
- What technology will be coming in the next 10 years, or even 5 years, that would eclipse this one?
- Will I be able to tell when the solar system stops working?
- Will I be able to tell if the solar system is having the right impact on my electric bill?
- Have I called some of the company's other customers or checked their references?
- Have I considered talking with another solar company?

Things to watch out for

Salesmen come from various backgrounds and motivations and have various levels of understanding about the product they are selling. This should bring up several questions.

Questions to ask about the solar salesman and the things the salesman says:

- Does the salesman seem to know the technical details of how solar systems work?
- Has the salesman sufficiently described the relationship between solar production and my home's electric usage?
- Is the salesman able to show that they have used the utility's rates in making calculations?
- If the salesman says that I will be able to separate from the electric grid, do I really believe it?

- If the salesman says that I will not have an electric bill in the future, do I really believe it?
- If the salesman says that the electric utility is not working in my interest, do I really believe it?
- If the salesman says that hail won't damage the panels, do I believe it?
- If the salesman says that batteries really make the difference for being able to separate from the grid or reduce my electric bill to zero, do I think it is true? Or, is it possible that the batteries will turn out to be just an extra expense?
- Has the salesman disclosed all of the cost and financing details? Have they helped me to see the entire cost, the length of payments, the amount of finance charges and the real payback period? Or are they vague in the details?
- Is the salesman more interested in having my spouse present than they are in the technical details of the system they are trying to sell?
- Is the salesman more interested in my credit rating than the specifications of the solar system?

