



Questions about solar? We've got answers.

Our Energy Experts answer frequently asked questions about **solar energy programs**.

What's a Solar Energy System?

There are two kinds of solar energy systems:

- **A solar electric (photovoltaic) system** makes electricity. You can use this electricity in your house and save money by reducing your kilowatt hour (kWh) usage.
- **A solar water heating system** preheats water that goes into your existing water heater. This reduces the amount of gas or electricity your water heater uses.

How Much Can I Save with Solar?

- **Solar photovoltaic:** It depends on how much electricity you use, and how much you hope to generate. A typical, 3-kilowatt system in an unshaded area will produce approximately 3,000 kWh per year. That amount is about 23% of the average customer's electric usage.
- **Solar water heating:** Residential solar water heating systems can save 2,000-2,800 kWh per year. That's 60% of the energy used to heat water in an average Oregon home.

More Information

These websites have more information about solar systems:

www.crpud.net/solar

www.solar-estimate.org

www1.eere.energy.gov/solar

www.oregon.gov/ENERGY/RENEW/Solar/index.shtml

www.solar4rschools.org/schools/st-helens-high-school

For specific questions about a home project, contact our Energy Experts at **(503) 366-5470** or experts@crpud.org.

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Is My Location Good for Solar?

Solar works best on south-facing roofs. East- or west-oriented low-slope roofs may be suitable as well. There should be little or no shading from trees, buildings, chimneys, or roof gables.

What is Added to My House or Building if I Install Solar?

Large panels will most likely be mounted on your roof.

Photovoltaic systems need 100 square feet of space for each kW installed.

These systems can have a wall-mounted inverter, about the size of a briefcase, or small inverters on the roof. They also have two smaller disconnect switches.

Solar water heating panels are often around 4 feet by 10 feet. A typical system has one or two panels. An 80-gallon storage tank is installed near the existing water heater. Solar water heating systems can also be used in conjunction with tankless water heaters, also called on-demand water heaters.



Can I Install the System Myself?

We only provide rebates for systems installed by an Oregon-approved contractor.

What's the Payback for a Solar System?

Your solar investment may add value to your home. The Appraisal Journal has estimated this value to be 20 times your annual energy cost savings. Using that data, a solar water heater typically adds more value to your home than your final out-of-pocket cost. You will also enjoy reduced energy costs each month. For solar photovoltaic systems, the added home value may be half of your out-of-pocket cost. The remaining cost would be recovered from electricity generation.

What are the Benefits of Investing in Solar Energy?

- Producing your own electricity may protect you from future increases in power prices.
- Solar equipment is exempt from property taxation. Installing a solar system increases the value of your home without increasing your property taxes.
- The environmental benefits of renewable energy are immediate and long-term.
- Solar energy contributes to cleaner water and fresher air.
- It encourages sustainable use of our natural resources for future generations.