

Residential Solar

Solar issues for Residents:

- A) Educate residents on solar energy (overview), Net Energy Metering, Community Solar, Community Choice Aggregation
- B) Benefits of solar energy production
- C) Frame issue of lease/purchase option
- D) Provide easy step by step guide of Building Dept requirements

What is solar power? - Solar panels are [photovoltaic \(PV\) cells](#) that are made primarily of silicon, aluminum and glass. These cells absorb the sunlight, and the light causes the silicon atoms inside the cells to move. The moving electrons travel along the aluminum and a direct current (DC) of electricity is formed. That direct current must be converted to an alternating current (AC) to power the devices inside your home. This is done by a DC to AC inverter.

Any resident in any zoning use district can install solar panels on their rooftop or in their yard. (Fast-track permitting)

What is Net Energy Metering? - [Net metering](#) is the system that utilities use to credit solar energy system owners for the electricity produced by their solar panels. With net metering, you only pay for the electricity that you use beyond what your solar panels can generate. Net metering policies differ from state to state.

What is Community Solar? - A community solar project is a solar power plant whose electricity is shared by more than one property. The primary purpose of Community Solar is to allow members of a community the opportunity to share the benefits of solar power even if they cannot (viz., renters) or

prefer not to install solar panels on their property. Project participants benefit from the electricity generated by the Community Solar farm, which costs less than the price they would ordinarily pay to their utility. In a nutshell, Community Solar offers a way for virtually anyone to go solar without installing solar panels on their roof or their property. Read more about Community Solar here:

<https://www.energy.gov/eere/solar/community-solar-basics>

What is Community Choice Aggregation (CCA)? Community choice aggregation (CCA), also known as municipal aggregation, are programs that allow local governments to procure power on behalf of their residents, businesses, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from their existing utility.

Read more about CCA here <https://solstice.us/solstice-blog/community-choice-aggregation/>

What are the advantages of solar power - Advantages of installing solar panels may include financial savings, increase in home value, and protection of the environment. Solar is a great way to reduce your carbon footprint. Buildings are responsible for 38 percent of all carbon emissions in the U.S. and going solar can significantly decrease that number. A typical residential solar panel system will eliminate three to four tons of carbon emissions each year—the equivalent of planting over 100 trees annually.

Should you Buy or Lease your solar panels?

The decision about how to finance your solar power system depends on your personal goals and situation. The main practical distinction between buying and leasing a solar PV system is in ownership. If you buy a solar panel system, you own the system, either outright (if purchasing with cash) or after repaying your **solar loan**.

If you **lease** the system or sign a Power Purchase Agreement (PPA), a third party owns the solar panel system. This distinction impacts the cost, maintenance, terms, financial offsets, and savings/returns on investment of your solar panel system. Note: Your property value will only increase if you own, rather than lease, your solar panel system.

There are practical differences in cost, maintenance, terms, opportunities for financial offsets, and savings/returns on investment, depending on the financing decision that you make. Let's take a closer look.

Installation Costs:

Solar Loan/Purchase - Solar power systems can cost \$15,000 to \$30,000 before rebates and incentives: Cash rebates can reduce the total cost by up to 50 percent. Most solar installers will manage the paperwork and adjust the purchase price to reflect the net amount. ***TAX IMPLICATIONS? Incentives?

Solar Lease/PPA - You get a solar energy system for little or no money down. You don't qualify for tax credits, rebates, or incentives – those belong to the third-party owner of the system.

Maintenance:

Solar Loan/Purchase - You own the system and are responsible for maintaining it. Solar equipment is durable and carries warranties, so you won't have much maintenance to worry about.

Solar Lease/PPA - The solar company owns and maintains the solar power system. Most leases include free apps that track the performance of your system.

Terms:

Solar Loan - Loans are generally available for 10- to 20-year terms, at which point you own the solar panel system outright. Interest rates range from 3 percent to 8 percent, depending upon various factors, including your FICO credit score and the length of the loan.

Solar Lease/PPA - Solar leases and PPAs are generally for 20 to 25 years, at which point you can renew your agreement or purchase the system outright.

Savings/Return On Investment (ROI):

Solar Loan/Purchase - You can save between 40 and 70 percent on electricity costs over the lifetime of your solar panel system, depending on your property and the incentives in your state. You receive free electricity for the life of the solar energy system (usually 25 to 30 years).

Solar Lease/Solar PPA (Power Purchase Agreement) - You can save between 10 and 30 percent off the prices you pay your utility for electricity, depending on your property and the incentives in your state.

IMPORTANT - Information you need to know when considering the purchase of a home with existing solar panels.

Solar panels: mortgage loan issue? Buying a home with a solar energy system in place can be a good thing. However, home buyers should know a few pertinent details about the solar panels prior to purchasing a home with solar installed.

It is important to know whether the solar panels were **purchased** or **leased**.

Even if the current homeowner purchased the solar panels, they may have been purchased with a loan. As such, the Seller is responsible for paying off any existing solar panel liens. Doing so means the Buyer should receive full ownership of the panels at the time of closing.

Obtaining mortgage loans with **leased solar panels** can be a bit more complicated.

If the home has leased solar panels, buyers need to be given the lease agreement details, including monthly fees and the contract term.

Solar leases are typically for a 20-year term and can be costly to buy out. Some solar panel leases have escalating payments. This could raise the Buyer's debt ratios.

In addition to learning whether solar panels are leased or purchased, it is important to ask these questions:

1. Which company **manufactured** the solar panels? Knowing the manufacturer can provide important information regarding any available warranties, as well as for how long various parts and equipment are covered.
2. Who **installed** the solar energy system? Knowing which company installed the panels is important, as many solar installers offer their own workmanship warranties. Installer warranties often cover a 10-year period.
3. What is the actual **size** of the solar energy system? This information helps determine how much electricity use the system can offset, as well as how much you can save on your energy bill.
4. What were the costs of **past energy bills**? A potential homebuyer may want to ask the previous owner for past electric bills to better understand the solar system's value.

It is important to note, however, Fannie Mae states that leased solar panels cannot be included in a home's valuation. The Federal Housing Administration ([FHA](#)) doesn't offer much guidance for evaluating leased solar panels at all.

Can solar panels prevent me from getting a mortgage?

While homes with solar panels should not generally prevent you from obtaining financing, there are a few critical details to work out prior to buying a house with **leased solar**.

For instance, the Buyer must agree to take over the lease unless the Seller agrees to pay off the lease upon or before the sale of the home.

If you are buying a home with leased solar panels you'll need to know what steps are necessary to transfer the lease. Buyers should request a copy of the lease contract, read and review it prior to making an offer to purchase.

Buyers need to qualify (credit check) with the solar panel lease company in order to assume the lease. This is generally a fairly easy process.

The Buyers must inform the [mortgage lender](#) that there is a solar lease in place. It's rare, but leased solar panels sometimes impact the lender's ability to lend on the property.

Whether you're a [first-time home buyer](#) or a move-up buyer [trying to go green](#), buying a home with leased solar panels may be a great decision. But each Buyer must determine what's best for their situation.

A Building Permit is required for the installation of solar panels. Information on the requirements and fees is contained in section 217-12 F of the Riverhead Town Code.