



CO-OP 101

Basic position:

- Florida's electric co-ops are owned by the residents that use them, and they are invested in the communities they serve.
- Florida's electric co-ops have one central mission: providing safe, reliable, affordable, and environmentally responsible power to our consumer-owners.
- Florida's not-for-profit electric co-ops support solar programs that support this mission.

SOLAR 101

Basic position on solar:

- Florida's not-for-profit electric co-ops support solar programs that are affordable and safely integrated into the grid.

STRATEGIC GOALS:

This solar information campaign by Florida's electric co-ops should accomplish three goals:

1. Inform the public about the pros and cons of solar
2. Establish the co-ops as an expert on solar
3. After August 30th, encourage consumer-owners to vote for Amendment 1

BACKGROUND

The solar industry has made several attempts to **avoid "reasonable health, safety, and welfare" regulations of solar generators**. One attempt was a proposed amendment to Florida's Constitution that would prohibit local and state government from regulating practically any aspect of solar generation or equipment, including safety and consumer protections. Electricity is an everyday part of our lives, but it is inherently dangerous when safety is ignored. In addition, the amendment would have left the state and local governments without any authority to punish solar scam artists. These attempts by the for-profit solar industry to avoid safety considerations and strip consumers of needed protections against fraud must be addressed in order to protect Floridians. One such option is to promote Amendment 1, which would cement into Florida's Constitution the government's ability to protect Florida citizens.

Solar can provide benefits to an electric co-op's consumer-owners when done correctly. This means safely and affordably integrating solar into the grid to benefit all of the co-op's consumer-owners. However, there are some side effects that come with using solar. Because solar is intermittent, it creates certain challenges to maintaining the grid and providing reliable electricity. For instance, solar power is not available during times of winter peak demand, which occurs on cold mornings before the sun rises.

There are several ways that consumer-owners can utilize solar and renewable energy. Consumer-owners can purchase or lease rooftop solar generators, and electric utilities can build or lease large-scale solar generators that provide electricity as part of the utility's energy mix. Additionally, consumer-owners can buy renewable energy virtually through community solar programs or renewable energy credits.

THREE KEY PRINCIPLES THAT YOUR CO-OP TRIES TO BALANCE WHEN CONSIDERING SOLAR POWER ARE:

SAFETY

- Our top priority is keeping you, our linemen, and first responders safe
- For consumer-owned solar, safety issues include reverse power flow, which could electrocute linemen and firefighters

AFFORDABLE

- We are committed to always delivering the lowest energy costs possible
- The cost of solar continues to decrease and we constantly monitor the cost and look for opportunities to incorporate solar into the co-op's energy mix
- The reasons for the drop in price include falling production costs as the market expands, the lower cost of materials, manufacturing efficiency, and innovative technological advancements

RELIABLE

- Large-scale solar generators managed by professionals are generally more efficient and have a lower cost per kilowatt-hour of electricity. Large-scale solar often includes trackers that allow the panels to follow the sun, and actually reduce the need for some peaking power in the late afternoon and evenings in the summer
- Until solar energy can be stored economically, there will be a need for traditional generation to provide back-up power for solar generation

TALKING POINTS:

When discussing solar, it's important to remember a few key points.

1. We are not talking about Amendment 1 until September. Before then, we will be informing the public about solar and establishing the co-ops as experts
2. Just like everyone else, co-ops are 100% for solar as long as it is safe, affordable, and reliable
3. There is a difference between rooftop solar and large-scale solar

There is a significant difference between rooftop and large-scale solar generators.

- Rooftop systems are normally owned or leased by the member.
 - When the member owns the system, they bear any related liability and expense for maintenance, including occasional cleaning of the panels.
 - When the member leases the system, they still may bear any related liability and expense for maintenance, including occasional cleaning of the panels.
- Capital costs to purchase a rooftop system are significant.
- Rooftop solar may fit some consumer-owners' needs, but there are several things to consider before installation, including:
 - Whether the tilt and direction of the roof promote efficient solar generation
 - Whether the roof is shaded or is subject to an inordinate amount of debris from leaves, pine needles, or birds

SOLAR DONE RIGHT



- o The condition of the roof and when it will need to be replaced (be sure your roof is in good shape before attaching an asset with an expected 25-year life span)
- o How will the rooftop solar affect homeowner insurance rates?
- Large-scale solar generators are built and maintained by utilities or independent generators for the utility. These large-scale systems are usually much more efficient than residential systems:
 - o According to a Cooperative Research Network paper, large systems are 30% to 50% less expensive – on a dollar-per-kilowatt basis – than rooftop systems.
 - o The benefits of large-scale generators come from economies of scale, specialized staff efficiencies, and more efficient production.

FAQS BY GENERAL PUBLIC:

What is solar power/how is it made?

Solar energy is created when light hits a system's specially-designed material. The light separates electrons from the material's atoms. The electrons then go into photovoltaic cells and are bound together, thus creating electricity.

Is it expensive?

The cost of solar is dropping rapidly. This is primarily due to technological innovations. However, since solar only produces power during daylight hours, it will need to be combined with traditional generation or energy-storage devices, and these costs must be included when comparing solar generation costs to traditional generation costs.

Are there cheaper alternatives to solar power?

If your primary goal is to save money by lowering your electric bill, the first step should be to have an energy audit of your home or business. The auditor usually will recommend several low cost conservation alternatives that you can implement, as well as more substantial programs that are often much more cost-effective than adding solar power to your home or business. Of course, avoiding the use of electricity through conservation programs is the most environmentally friendly option there is.

Can I lease a rooftop solar generator?

Yes, there are companies that offer leasing options. Leasing allows members to install rooftop solar generation without the large upfront cost. However, before entering into a long-term lease, consumers should make sure they understand all the conditions of the agreement. For instance, if you sell your home before the lease ends, will the buyers have to assume the lease, or will the seller be forced to continue paying for the lease?

Are you supporting Amendment 1?

Yes we are. Our co-op is focused on protecting our consumer-owners while safely providing affordable, reliable power. We believe Amendment 1 would greatly benefit you by cementing into the state Constitution your right to use solar, and by ensuring that state and local governments are authorized to protect consumers by preventing scams by big, for-profit solar companies.

Amendment 1 clarifies that consumers can lease, own, and use solar generation, and also promotes existing law up to Florida's Constitution. The Amendment states that:

“State and local governments shall retain their abilities to protect consumer rights and public health, safety and welfare, and to ensure that consumers who do not choose to install solar are not required to subsidize the costs of backup power and electric grid access to those who do.” This provision insures that governments can still impose reasonable regulations for health, safety, and welfare on all solar generation, and consumers can support the solar movement without placing undue burdens on those that cannot afford solar or that don’t want to pay more for another consumer’s choice to use solar power.

Are you part of the Smart Solar group?

No, although we both are in favor of Amendment 1.

Can you help me install solar at my house?

[Co-op name] will help by answering questions about installation and ensuring the solar panels are properly connected to the grid. However, we recommend that you consult professionals to make sure the installation meets the local building and safety codes.

Is there a discount for using solar?

There are some government incentives for installing panels on your roof. For more info about those, you can go to energy.gov/savings

Is it safe (for my kids/pets)?

Rooftop systems are safe if they are properly installed and maintained. It is very important to work with the solar installer and an architect or engineer to ensure the installation meets the appropriate building and safety codes. In addition, you need to coordinate with [co-op name] to make sure the system is safely tied into the grid. Additionally, it’s a good practice to inform your fire department if you have solar because it can affect their response. You should also thoroughly question the company you purchase the system from in order to get specifics. Large-scale solar generators are very safe, as they are designed and maintained by professionals.

What is community solar?

Community solar projects are large-scale solar generating stations in which the members can have a direct ownership in a share of the electricity generated from the solar panels, which will be delivered to them virtually. Community solar projects usually are large scale solar that is owned or leased by the utility and is operated and maintained by professionals. The arrangement gives interested parties the benefits of solar without the hassles of installing and maintaining rooftop solar. Community solar also offers economies of scale that lowers the price of solar.

What is a renewable energy credit?

Renewable energy credits are a virtual mechanism to support renewable power. This method allows professionals to take on the risk of producing renewable power and allows the consumer to get credit for the amount of renewable energy that is right for them. This option allows the consumer to take advantage of large-scale renewable projects that are generally more economical than small renewable projects, such as rooftop solar generators.

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