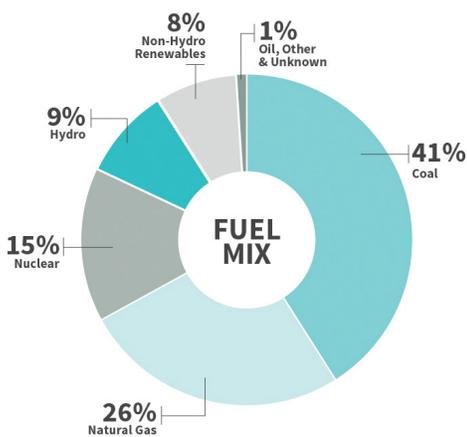
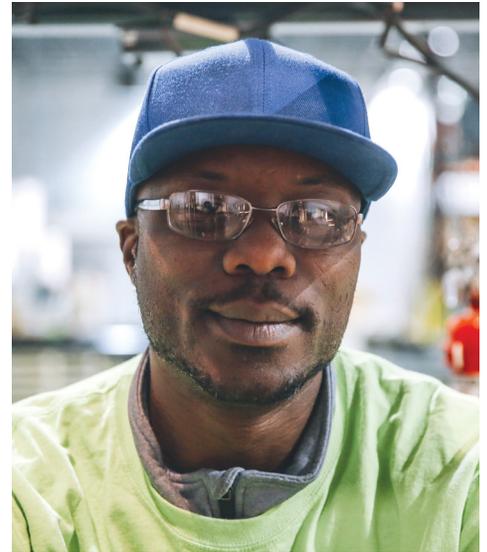


Ensuring Your Rural Electric Co-op Really Works for YOU: Renewable Energy



Source: NRECA Research

Rural electric cooperatives vary a lot on renewable energy.

For example, while a handful of co-ops around the country are headed toward generating around a third of their power from local solar projects within the next few years, there are hundreds of co-ops that still provide no solar at all. Nationally, co-ops get 8% of their power from solar and wind, compared to 67% from fossil fuels. But the economics of renewable energy are strong, and **the views and interests of co-op members can and do drive** co-op decisions on these resources. This backgrounder provides basic information on some of the different ways co-ops can be involved in renewable energy, drawing on examples from around the country.



If your electricity service comes from a rural electric cooperative, you are a part owner of the co-op together with all the residents and businesses the co-op serves. As a part owner, you have a voice how your nonprofit co-op can best serve you and your local community.

Home or Business Renewable Energy Systems

In much the same way that technology has changed how we can shop for products or communicate, solar and wind energy technologies are changing how we can produce energy—even enabling people to generate it themselves. Does your co-op support members who want to invest in a solar or wind system for their home or small business?

Offering rebates on equipment is one way that co-ops can be supportive, such as the up to \$3,000 rebate provided by [Guadalupe Valley Electric](#) in Texas for home solar systems or the up to \$1,500 rebate from [San Miguel Power Association](#) in Colorado for residential solar or small residential wind installations.

Providing proper value for the power produced for the grid by a home solar or wind system, through net metering, is also critical. Does your co-op value it the same as other power produced for the grid, at the “retail” rate? Or do they pay far less, which can severely undercut the economics of self-generation? Are those rate and other important [interconnection](#) details easily accessible online, such as on this [web page for Pedernales Electric](#) in Texas?



Community Solar

An alternative to installing solar panels on your own property is to purchase the power produced from a share of panels at a community solar installation, a group of solar panels housed at one location, and receive a credit for that energy generation on your electric bill. About 150 electric co-ops around the country have offered at least some access to community solar. Here are three examples that show some of the different ways co-ops are designing community solar:

- ➔ At [Walton EMC](#) in Georgia, community solar participants pay a flat \$25 a month charge for five panels' worth of electricity and receive a credit on their bill for their share of the electricity produced. Participants save money in months when the credit is greater than the monthly charge and pay more in months when it isn't. Over time, if the overall cost of electricity rises compared to the stable price of power from the community solar array, solar subscribers will save more and more.
- ➔ At [Western Iowa Power Cooperative](#), community solar participants pay upfront to own all electricity produced

“It’s reduced my electric bill—it’s paying for itself quite rapidly. I am just really tickled with what it has been doing and how it has been performing kilowatts-wise.”

—[Keith Troyer](#), a board member of [Farmers Electric](#) in Iowa, on the solar array he installed for his turkey and hog farm.

WATCH OUT FOR ANTI-SOLAR POLICIES

Unfortunately, some power companies and electric co-ops are attempting to impose steep mandatory monthly fees on those who invest in home solar or small wind systems—or trying to underpay for this type of renewable energy generation supplied to the grid. Often they improperly claim that such measures are needed to account for solar customers' share of distribution costs, which are things like utility power lines, substations, transformers or vehicles.

But in fact net metered solar is a net benefit to all on the grid. As [Southern Maryland Electric Cooperative](#) explains about its support for customer generation, the co-op *“doesn't lose money”* on distribution costs when customers install their own solar because the co-op *“only pays for the amount of energy customers use. When customers produce their own energy and use less energy supplied by the grid, their distribution costs are reduced.”*

over 20 years from the share of the array they purchase (each half-panel share costs \$450). Participants see the output from their share credited each month on their electric bill, and eventually are fully repaid for their initial investment. To help with the upfront costs, Western Iowa Power provides no-interest 12- or 24-month payment plans.

→ At [Wright-Hennepin Cooperative](#) in Minnesota, the co-op took yet another approach, offering members a choice of three options for community solar: one to pay up front to own the output of a share of panels, another to buy solar at a set rate per kilowatt-hour locked in for 20 years, and a third option to lock in a lower rate per kilowatt-hour by paying just a portion of the panel share upfront.



Utility solar and wind

In addition to community solar with individual subscribers, co-ops can also do “utility” solar or wind farms in which all co-op members together are supporting the renewable power added to the grid. With today’s low costs for solar and wind, these projects are popular from an economic standpoint—a way to protect against volatile fossil fuel prices with resources that have zero fuel costs and to inject economic stimulus locally with new energy development.

Sometimes these utility solar and wind projects are done by large “generation and transmission” (G&T) cooperatives, which are nonprofit wholesale energy suppliers owned by a group of local “distribution” electric co-ops. For example, a G&T co-op in Wisconsin

“The panels are located right here in the same community as the people who purchase the power from them.”

—[Greg Brooks](#), with [Walton EMC](#) in Georgia, on why the co-op’s solar projects have been so popular with members

“I see this as a long-term investment in helping me to control my energy costs.”

—[Matt Owens](#), a member of [East Central Oklahoma Electric Cooperative](#), on his decision to subscribe for 10 panels of community solar to help meet power needs for his hay and cattle operations

SERVING LOW-INCOME HOUSEHOLDS

There is growing experience with developing community solar projects to serve families living on low incomes. Some of these projects by co-ops draw on [local volunteers, donations and grants](#) to build small-scale solar arrays to serve low-income families. Many also involve partnerships, like the pilot [program](#) by [Cherryland Electric Co-op](#) and community action agencies in Michigan that is assigning shares of community solar to low-income families which will shave \$350 a year off families’ bills.

In [Colorado](#), seven different electric co-ops have drawn on state energy office funding and worked with [GRID Alternatives](#) to build community solar projects serving about 380 low-income households. Offering no-interest payment plans and selling panel shares in small increments are other tools co-ops are exploring in order to expand access. For example, [Trico Electric Cooperative](#) in Arizona offers a quarter-panel option.

“It was tremendous, what it meant for local businesses, for local workers. This project really utilized local vendors, and we’re a local company in our third generation of family ownership.”

—[Scott Glendenning](#), Area Manager for BARD Materials in Darlington, Wisconsin, on construction of a local wind farm for which his company supplied about 2,000 truckloads of concrete, sand and crushed stone

FREEDOM TO REALLY RAMP UP LOCAL RENEWABLES

Some distribution co-ops that want to prioritize development of local renewables face the problem of long-term contracts with G&Ts that severely limit how much local energy they can produce and may impose unfavorable rate structures for projects the G&T does allow.

[Kit Carson Electric Cooperative](#) in northern New Mexico faced this situation in its 40-year contract with Tri-State G&T that required 95 percent of power be bought wholesale from Tri-State. Frustrated with continually escalating power prices from the G&T’s largely fossil fuel generators, Kit Carson [negotiated an exit](#) from the contract and is buying power through a renewable energy wholesaler instead. The move also freed Kit Carson to proceed with building enough local solar in its area to meet about a third of its total demand by 2022—and to meet 100 percent of demand during sunny summer days.

“Part of the culture here in this area is the desire to keep things local.”

—[Virginia Harman](#) with Delta Montrose Electric Association, discussing the co-op’s [efforts](#) to develop renewables beyond its G&T’s five percent cap.



called [Dairyland Power](#) recently completed a large wind farm in the southwestern part of the state that generates power for more than 25,000 homes, involved hundreds of workers over six months of construction, and will inject millions of dollars in revenues for local governments. Dairyland also recently completed construction of [15 utility solar projects](#) located in the service areas of its member co-ops, each seeded with native grasses and flowers in and around the panels to create pollinator gardens for bees and butterflies.

Distribution co-ops can also do utility renewable projects, which is often critical to increasing reliance on local rather than wholesale power. For example, [Otero County Electric Cooperative](#) in New Mexico recently completed a solar project to power over 1,000 homes at a fixed price of less than 4.5 cents per kilowatt-hour over 25 years—likely the [lowest price ever](#) for these types of arrays interconnected to local distribution networks. “Since the clean energy produced by this project becomes part of our wholesale energy costs, the average annual savings of over \$250,000 will automatically be passed directly to OCEC members,” the co-op [said](#). When [Red River Valley Rural Electric Association](#) in Oklahoma built its first small utility solar array, the co-op [explained](#) that “the cost for the output for the system will be at a fixed rate, versus using fossil fuels where we have fuel costs fluctuating.” Red River co-op member Paul Riley told the [local news](#) “I’m proud of them for doing that. It’s going to save us money in the long run.”

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