



Next-Generation Rural Electrification

How Rural Electric Co-ops Can Repower America with the Inflation Reduction Act

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I. Executive Summary

Nearly a century ago, America’s rural electric cooperatives played a critical role in turning the lights on, for the first time, across the country. Now, with the passage of the **Inflation Reduction Act (IRA)**, rural electric co-ops have been handed a once-in-a-generation opportunity to reclaim this historic role—and build the modern generation facilities and grid upgrades needed to serve a new clean energy economy.



Preparing to power the next generation of rural America with clean electricity will be critical. That's because nearly every economic sector is preparing to electrify, creating a major chance for rural co-ops to serve an increasing electric load. Rural co-ops can upgrade their energy infrastructure, strengthen their balance sheets, and make electricity cheaper, cleaner, and more reliable for member-owners. But they only have until September 15, 2023 to take maximum advantage. Rural co-ops need to act immediately to submit high-ambition plans to the U.S. Department of Agriculture's (USDA) Empowering Rural America (New ERA) program to get [funds flowing](#). And then they should start realizing those plans using lasting funding streams that can greatly benefit their members.

This policy paper will outline **six new major federal funding opportunities** that rural electric co-ops can use to acquire new renewable energy assets and restructure existing fossil debt. By creatively "stacking" these federal dollars together, rural co-ops can carry forward the ambitious legacy of past electrification efforts—and in the process, design and own a thriving clean energy future. These federal IRA programs include:

1. USDA's **Empowering Rural America (New ERA)** program, providing \$9.7 billion in competitive grants and loans for renewable energy systems that eliminate aging, obsolete, and expensive infrastructure. This program has an **upcoming deadline of September 15, 2023**.
2. The **Powering Affordable Clean Energy (PACE)** program, offering up a total of \$1 billion in partially-forgivable loans for renewable energy projects. This program has an **upcoming deadline of September 29, 2023**.
3. **Direct pay clean energy tax credits**, including the **Investment Tax Credit (ITC)** and **Production Tax Credit (PTC)**.
4. Additional clean energy tax credit **bonus adders**, such as the [energy community](#) adder, [domestic content](#) adder, and [low-income](#) adder.
5. The U.S. Department of Energy's (DOE) **Energy Infrastructure Reinvestment (EIR)** program, which offers guaranteed loans to help retool, repower, repurpose, or replace uneconomic fossil fuel energy infrastructure in favor of clean energy.
6. The U.S. Environmental Protection Agency's (EPA) **Greenhouse Gas Reduction Fund Grants**, which is open to states, Tribes, municipalities, and air pollution control agencies to develop a greenhouse gas reduction plan. Rural co-ops



serving municipalities or Tribes can benefit by working with eligible entities to implement these plans.

These federal funding opportunities couldn't come at a better time. As global instability continues to rock energy markets, fossil fuel prices remain volatile, with rural communities bearing the brunt of those high costs. Fossil energy infrastructure across the country is aging, frequently battered by severe weather events. At the same time, uneconomic and [stranded assets](#), such as coal plants, are posing an acute financial risk for rural electric cooperatives.

Here's the good news: Renewable energy has burst onto the scene as a cheaper, cleaner energy alternative for rural co-ops. Renewable energy systems strengthen local energy security, while also creating new jobs and economic opportunities for rural community members. And as the clean energy economy rapidly develops across the country, partly as a result of a new regulatory landscape on the horizon, rural co-ops can take advantage of the briskly growing energy demand—and seize the opportunity to supply clean energy to rural America.

Now is the time for rural co-ops to jump ahead of the curve, harness this historic funding opportunity, and build out clean energy generation for a new era of rural electrification.

II. Electric Cooperatives: Powering Rural America

Rural co-ops taking advantage of these new programs will be acting in the spirit of the visionaries who first created them. The question before them is whether they will be just as innovative, forward-looking, and public-serving as they were when they were at the vanguard of rural electrification.

Established in the 1930s as part of President Franklin D. Roosevelt's New Deal, rural electric co-ops sought to bring [reliable and affordable electricity](#) to farming communities at a time when around [90 percent of rural America was living without electricity](#). At the time, private utilities were passing over investing in rural America because extending power lines to remote customers was, in their eyes, not worth the cost. When Congress passed the *Rural Electrification Act* in 1936, the federal government established a system of [low-cost loans](#) for farmer-based cooperatives to build out electricity infrastructure. In this way, the ambitious policies of the New Deal brought modern infrastructure to underserved, and often poor, rural communities. By 1953, more than [90 percent of American farms](#) had been electrified—flipping the switch to rural power and transforming agricultural life for good.



Almost a hundred years after their creation, [rural co-ops continue to supply electricity to more than 40 million](#) people across the United States, including communities that have been historically underserved. For example, rural co-ops [serve 92 percent of the nation's counties in persistent poverty](#). About 250 rural electric cooperatives also [serve](#) Native American nations.

Today, rural co-ops remain private non-profit entities owned by their members and [governed](#) by boards elected from the service territory. Rural co-ops are [statutorily democratic](#), with member-owners each receiving one vote in the board of director elections. In recent years, however, internal democracy has sometimes waned with varying degrees of member participation and the status quo remains ripe for democratic reinvigoration. Rural co-ops are federally supported by the USDA's [Rural Utilities Service](#) (RUS).

There are two key types of rural co-ops: **generation and transmission (G&Ts) cooperatives** and **distribution cooperatives**. The vast majority of rural electric co-ops across the nation, more than 800 of them, are distribution cooperatives, responsible for delivering power to their member's meters. Some distribution cooperatives can generate power, but many distribution co-ops focus their efforts on—of course—distribution and purchase their electricity from G&T co-ops. As in the name, G&Ts operate the generation facilities and transmission lines that supply electricity to distribution co-ops, usually through long-term “all requirements” contracts. To supply affordable and reliable electricity, distribution co-ops [banded together](#) to form G&T co-ops and pool their purchasing power for wholesale electricity. In this way, G&Ts function as the “[co-ops of co-ops](#).”

America's rural electric co-ops were forged in a time of large-scale economic and social transformation. Back in the 1930s, the visionary policies of the New Deal provided the sustained federal financing to bring about electrified and thriving agricultural communities. Now, the pressing dynamics of the 21st century demand a next-generation transformation of rural America's electricity system.

It's time for rural co-ops to meet the challenges of a new era—and secure modern, clean, smart, and affordable energy in thriving rural communities. But first, let's dig into those challenges.

III. An Expensive, Dirty, and Less Reliable Status Quo

America's rural electric cooperatives are [disproportionately powered](#) by coal and fossil gas. Coal is one of the [most expensive](#) and [polluting](#) energy sources available, especially when weighed against the alternative of clean, cheap renewable energy. At



a time when the Intergovernmental Panel on Climate Change (IPCC) [is calling for a “rapid and deep” transition](#) away from fossil fuels to address the climate crisis, many U.S. utilities are already moving to [replace coal plants](#) with clean, affordable renewable energy sources.

But rural electric cooperatives have been [lagging behind](#). Until recently, rural co-ops haven’t had strong financial incentives to encourage a transition to clean energy. While investor-owned utilities have started moving to cleaner and cheaper sources of energy, rural co-ops have often been [locked into long-term contracts](#) or financial obligations with coal-fired power generation. That’s made it harder for them to retire their existing coal fleet and transition to a clean energy future. And being tied to uneconomic stranded assets means member-owners are on the hook to pay the price.

Rural co-ops have also [struggled](#) to quickly raise equity for new renewable energy assets. A swift transition to a renewable energy future has proved [difficult](#), until now. Equipped with IRA federal funds, rural co-ops are now in a prime position to deliver cleaner, cheaper, and more reliable electricity to their member-owners—while strengthening their balance sheets for the coming decade.

IV. 5 Reasons Why Rural Co-ops Need Next-Generation Rural Electrification

1. Affordability: Rural co-ops can save on energy investment and distribution costs

Cleaner resource portfolios can strengthen the balance sheet of co-ops, while putting money back into the wallets of member-owners. Here’s why:

Renewables are the [cheapest form of power available today](#). The cost of renewable technologies has significantly fallen in the last few years, undercutting volatile fossil fuels to become the planet’s most affordable source of power. A recent [report](#) by the International Renewable Energy Agency (IRENA) finds that between 2010 and 2020, unit costs of solar energy decreased by 85 percent, onshore wind energy by 56 percent, and offshore wind energy by 48 percent.

That makes local wind and solar alternatives overwhelmingly cheaper than coal.

According to Energy Innovation’s [Coal Cost Crossover 3.0](#) report, nearly all coal plants are more expensive to run than replacing their generation capacity with either local solar or wind alternatives, especially following the IRA’s passage. That remains true



for every single major rural electric co-op G&T that Evergreen examined for this paper, bar one outlier. (The coal plant outlier, Dry Forks Station, is [barely less](#) expensive than a renewable alternative. Meanwhile, renewable energy would be cheaper for 99 percent of the nation's coal plants, and not just rural co-ops, [according](#) to Energy Innovation. See Table 1 in the appendix for this comparison).

As we know, the federal government is currently offering rural co-ops a huge discount on clean energy. There's \$9.7 billion and \$1 billion on the table for rural co-ops from the New ERA and PACE programs respectively. Stacked on top of that, rural co-ops can use direct pay clean energy tax credits to lower project costs, including the extra bonus adders. Woven together, these programs represent a historic opportunity for rural co-ops to receive unprecedented discounts on clean energy assets. And once operative, this allows cooperatives to pass on cost savings to their members through energy bill reductions.

That means renewable energy will put money back in the wallets of member-owners. Rural co-ops [sell the majority](#) (53 percent) of their power to households, who deserve more affordable energy bills. For farming member-owners, renewable energy means more affordable power in an agricultural context, where profit margins matter. And for community members, building out renewable energy means new local investments through grid construction and job creation.

The IRA programs will strengthen co-op's balance sheets: With the New ERA program and clean energy investment tax credits, rural co-ops can strengthen their balance sheets to build equity—and invest in clean energy. That will put rural co-ops in a position where they can make other important investments later in the decade.

Looking ahead, rural coops can financially benefit from high demand for clean energy in the ever-growing electrified economy. As electric vehicles (EVs), heat pumps, machinery, and other electric technologies proliferate across the country, America's grid will need to significantly grow to meet the electricity demand. To meet this demand and achieve our national climate commitments, we'll need to deliver between [two to three times](#) as much electricity as we do today, according to [IEA](#), [Rewiring America](#), and EIA. And that presents an unmissable opportunity for rural electric cooperatives, who can harness these IRA funding opportunities to meet the increasing demand for cheap and reliable clean energy from their member-owners.

Clean energy will indeed be in high demand. For example, larger industrial member-owners, which currently make up around [25 percent of electricity sales](#), may demand more clean energy as they decarbonize due to upcoming regulatory pressures. Other industrial and corporate member-owners may demand clean energy



due to obligations stemming from Environmental, Social, and Governance (ESG) and corporate social responsibility commitments. And as the cascading effect of the IRA's clean energy investments takes hold, clean energy is enjoying broad popularity, especially compared to dirty fossil fuels. Using the IRA funding on the table, rural co-ops can get ready to supply clean energy to their member-owners, and critically, *financially benefit* from that clean electricity boom.

The best rural co-ops can serve a wholly electrified rural economy that requires a higher load but also enables higher prosperity. Harnessing IRA funding, rural co-ops can attract low-carbon businesses that need clean power, such as hydrogen electrolyzers, clean industry powered by the relevant tax credits, those that use EVs, and more.

By the same token, rural co-ops that fail to apply for these federal funding opportunities will miss out on these profitable opportunities. If rural co-ops simply limit their fossil capacity factor, as opposed to using the IRA funding to fully retire coal plants and replace fossil energy infrastructure, they will remain exposed to volatile fossil fuel prices and stranded assets for years to come.

2. Reliability: Strengthen rural co-ops' reliability for a new century

As global instability ripples across energy markets, reliability remains a critical concern for power providers everywhere, including rural co-ops. Increased storm severity and frequency due to the climate crisis are compromising electricity provision across the country while existing infrastructure continues to age. Meanwhile, fossil fuel prices remain volatile, notably skyrocketing in response to the war in Ukraine and other external factors. And that's a [real problem](#) for fossil fuel-exposed rural co-ops, because member owners bear the brunt of this cost. But equipped with IRA funding, rural electric cooperatives are in a prime position to protect Americans from a dependency on expensive, unhealthy, and unreliable fossil fuels.

A diverse renewable portfolio means more price stability and reliability. Local renewable electricity can protect co-ops and their member-owners from volatile fossil fuel energy prices. The IRA funding, specifically the New ERA program, can also help co-ops get energy storage systems online, which will boost power reliability during periods of increased demand and grid disruptions. Better still, the Rural Utilities Service (RUS) has [announced](#) that it will specifically prioritize New ERA program applications that promote resilience, reliability, and affordability in its selection of successful applicants.



3. Rural co-ops can get ahead of regulatory requirements

New regulatory changes on the federal and state level will accelerate the clean energy economy and fundamentally increase the demand for clean power. Rural co-ops can get ahead of the curve, and financially benefit, by supplying cheap, clean electricity to larger industrial customers who will be affected by these new regulations.

Regulations will increase demand for clean energy: Right now, the U.S. Environmental Protection Agency (EPA) is proposing a set of new standards to reduce harmful air pollution for [transport](#). For example, EPA's proposed [federal pollution standards for cars and trucks](#) set out to ensure that [67 percent](#) of new light-duty vehicles and 25 percent of new heavy-duty vehicles sold in the U.S. are electric by 2032. This standard, along with other federal incentives, will accelerate the adoption of EVs and other low-carbon carbon alternatives—and rural co-ops can get their members ready for this transformation by supplying cheap and reliable clean energy. Similarly, [states](#) are issuing new laws around building electrification, and rural co-ops should be ready for the federal government to issue further regulations that promote a clean energy economy. Power providers will need to meet the increase in clean energy demand across the nation, and rural co-ops can be in a prime position to supply clean energy to their industrial member-owners as they decarbonize in response to these new regulations.

Gearing up for clean power compliance: At the same time, EPA has released proposed carbon pollution standards for new and existing fossil-fueled power plants through the Clean Air Act 111(b) and (d) rules. These standards are the Biden administration's most significant opportunity to clean up power sector carbon pollution and combat the climate crisis. There's no need for rural co-ops to be doing unnecessary work in the future. Equipped with historic levels of federal funding that's available right now, rural co-ops can streamline their work and get ahead of the incoming regulatory landscape. It's time to accelerate action on aging coal and polluting gas plants ahead of these regulatory changes.

4. Strengthening rural co-op democracy

Rural co-ops are owned by their members, and that means they must be responsive to member needs. Members are [calling](#) for investment in lower-cost, cleaner sources of power generation. These IRA funding opportunities enable rural co-ops to meet the moment without bearing a significant financial burden on rural households and other member-owners.



Equally, member-owners can be fully empowered to participate in this change. Rural co-ops are theoretically democratic institutions with a one-member-owner, one-vote system. That means member-owners, particularly residential member-owners, can take collective advantage of their people power. They can democratically elect board members, attend and influence annual meetings, and even run as a candidate for their board to advance a thriving, clean energy economy in their community.

5. Protecting rural Americans from fossil fuel pollution

Toxic pollution from coal-fired and gas power plants [inflicts harm](#) on local residents, workers, and the local ecosystem. As coal is burned, it [releases](#) a plume of airborne toxins and pollutants, including sulfur dioxide, nitrogen oxide, particular matter, mercury, and other heavy metals. Documented [health impacts](#) of coal combustion include asthma, breathing difficulties, cancer, heart issues, and brain damage. With low-income residents being [more likely](#) to live near coal-fired power plants, they must be protected from this ongoing environmental injustice. Transitioning to renewable energy, while retiring coal plants, will have significant health co-benefits for rural community members.

Beyond causing localized health impacts, fossil fuel pollution is responsible for irrevocably altering life in rural America through climate impacts. Extreme heat, altered rainfall patterns, and other climate impacts are [slated](#) to slow corn, soybean, and wheat crop productivity in the Midwest by 2030, hitting an industry that already operates on thin margins. Retiring coal plants is [necessary](#) to reduce carbon pollution and combat climate impacts—and now, rural co-ops are finally equipped with the financial tools to do just that.

V. Rural Co-ops Must Reject “Natural” Gas and Leapfrog to Renewable Energy

As rural co-ops retire their coal plants, they must leapfrog to building out clean energy alternatives and entirely skip over the costly pitfalls of “natural” gas. Here are a few key reasons why:

Fossil fuel prices are volatile: Increased LNG exports and the ongoing war in Ukraine sent natural gas prices soaring in 2022. Although the outlook for natural gas in 2023 has temporarily improved, a recent [report](#) from the International Energy Agency (IEA) warned that it’s no insurance against future volatility. By contrast, renewable energy is a proven source of cheap energy with [low volatility](#). And price volatility matters for member-owners. With residential member-owners making up over [half](#) of rural co-op



electricity sales, fossil fuel price volatility is readily affecting working rural families. On top of that, rural co-ops serve [92 percent of the persistent poverty counties](#) in the nation. All residential member-owners deserve affordable energy—and that begins with rural co-ops building out price-reliable renewable energy assets. Moreover, renewable energy has the co-benefit of advancing local energy security.

A costly, leaky climate hazard: For too long, Big Oil has gotten away with [marketing](#) fossil gas (or “natural” gas) as a “clean” bridge fuel. But fossil gas is a high-polluting fuel that spews potent, planet-warming methane emissions into the atmosphere. And in recent years, scientists have [found](#) that methane leaks from fossil gas infrastructure are far worse than previously thought. A new [study](#) found that the global lifecycle emissions of leaky natural gas are as *damaging* to the climate as coal.

Air pollution and health impacts: Natural gas also pumps pollutants like nitrogen oxide (NO_x) and particulate matter (PM) into the air—and into the lungs of nearby rural residents. Long-term [NO_x](#) exposure can result in respiratory issues, such as asthma and respiratory infections. Similarly, [PM](#) is linked to premature death in people with heart or lung disease, irregular heartbeats, asthma, and more. Rural communities deserve renewable energy sources that don’t contribute to toxic air pollution or serious health issues.

The problem with retrofits: Some rural co-ops may be tempted to install retrofits on existing fossil fuel plants. But retrofits don’t buffer against fossil fuel volatility or regulatory changes—and they could add private debt. Retrofits also raise serious environmental justice and health concerns. Moreover, retrofitted fossil power may not work for industries that need clean electricity for a number of reasons, including regulatory obligations or ESG and corporate responsibility pressures. Compared to fossil retrofits with less certain funding streams, the federal government is offering a “bird-in-hand” funding opportunity for investing in renewable energy assets now.

VI. How to Transform Rural Electrification: Funding Opportunities in the Inflation Reduction Act

The Inflation Reduction Act (IRA) brings a powerful catalyst for change. The full suite of federal programs on offer provides a **once-in-a-generation opportunity** for rural co-ops to bootstrap themselves out of their expensive and polluting past, and into **a thriving, clean energy economy that’ll strengthen their balance books**. Here’s how rural co-ops can meet this moment:



1. Starting this summer, rural co-ops must **quickly seize the IRA federal funding opportunities** to raise equity for renewable energy projects and renewable energy storage. At the same time, rural co-ops should use the federal loan modification opportunities to refinance stranded assets like coal plants and retire them once and for all.
2. When lodging applications for these IRA programs, rural co-ops must **level-up their ambition**, which means maximizing reliability, affordability, and pollution reductions.
3. Rural co-ops must **strategically “stack” these federal funding opportunities**. For example, rural co-ops can receive a mega-discount on building out new renewable energy projects by using the direct pay clean energy tax credits, bonus adders, and grants from the New ERA program.

Layered together, these federal funding opportunities will help rural co-ops acquire renewable energy assets with higher returns on investment, and place them in a strong [financial position](#) for the coming decades. Let’s take a close look at these federal funding opportunities.

A. USDA’s Rural Utilities Service Programs

USDA’s Rural Utilities Service is offering two funding opportunities to transform America’s rural electricity. They’re called the **Empowering Rural America (“New ERA”) program** and the **Powering Affordable Clean Energy (“PACE”) program**. Together, they represent the [single largest](#) investment in rural electrification since the Great Depression.

As well as supporting rural co-ops to build out new renewable energy projects, this infusion of federal funds is forecasted to be an economic boon in rural communities. For example, the BlueGreen Alliance [estimates](#) that federal loans for rural electric co-ops for clean energy will create more than 90,000 jobs over the next decade.

1. *The New ERA program: upcoming deadline of September 15, 2023*

The New ERA program offers financial assistance to rural electric cooperatives to transition to clean, affordable, and reliable energy. To realize this transformation, USDA’s Rural Utilities Service will provide a huge discount on renewable energy. With a total pot of **\$9.7 billion dollars** from the IRA on the table, rural co-ops can apply for grants that will cover up to 25 percent of their total project costs (with funding limited to \$970 million per utility), and low-cost loans or refinancing that can cover even more.



The New ERA program can provide much-needed equity infusions and subsidized debt for rural co-ops who have historically faced barriers to accessing capital for new investments. With this funding, rural co-ops should build out new renewable energy, as well as renewable energy systems, energy storage, transmission, and energy efficiency programs. The New ERA program also allows rural co-ops to restructure their existing debt for stranded assets, like coal plants. Using the New ERA program, rural co-ops should refinance coal plants with zero-interest or low-interest debt, helping them retire dirty and expensive fossil fuel fleets.

The New ERA program is competitive. That means that USDA's Rural Utilities Service will award grants and loans to *ambitious* proposals that meet the program's overarching goal to achieve the greatest reduction in greenhouse gas pollution. That includes direct reduction in greenhouse gas (GHG) emissions, avoided future GHGs, increases in renewable percentage of portfolio, and decreased carbon intensity of portfolio. USDA has recently released guidance on how they'll be making decisions, which can be found [here](#).

The New ERA program is designed to be flexible. The program prioritizes greenhouse gas emissions reductions, rather than requiring the use of specific technologies. That means rural co-ops can design their own future while transforming their operations for a new century.

Eligible entities: Only rural electric cooperatives can apply for the New ERA program, including: "rural electric cooperatives that serve predominantly rural areas," meaning at least 50 percent of its consumers in the service territory are rural; "existing or former USDA Rural Utilities Service borrowers, borrowers of the former Rural Electrification Administration, and wholly or jointly owned subsidiaries of the rural electric co-operatives."¹ In addition to these eligibility requirements, rural co-ops must also demonstrate that their proposed project is "eligible, financially and technically feasible, affordable, and reliable." More information can be found at USDA's website [here](#), or Evergreen's [blog](#) on RUS programs.

Deadlines: Unlike many other IRA programs, the New ERA funding is only available in this **one application opportunity**. To seize this historic funding opportunity, all interested rural co-ops must submit a letter of interest (LOI) to USDA before the extended deadline of **September 15, 2023**. Once the LOIs are evaluated by RUS, top-ranking rural co-ops will be sent an official invitation to submit an application. Applicants that receive a formal invitation will have 60 days, or a "time agreeable to the agency" to submit their application.

¹ Direct eligibility description from the PACE program [website](#).



How rural co-ops should best use the New ERA program:

- **Rural co-ops must level-up their ambition when submitting their LOIs and full applications.** As stated above, this is a *competitive program*, and that means that rural co-ops that offer the most ambitious applications will shine in the selection process. Per USDA's guidance, an ambitious application is one that prioritizes resilience, reliability, affordability, and greenhouse gas emissions reductions. Submitting an ambitious LOI and full application will long-term benefit the rural co-op's balance sheet, too. An ambitious plan will increase a rural co-op's ability to serve the growing clean energy economy—and profit from the burgeoning demand from electric vehicles, electrified buildings, and industrial electrification.
- **Rural co-ops should seize this opportunity to retire coal plants.** Using the New ERA loan modification option, rural co-ops should *entirely shed* old fossil fuel assets, not just limit their use.
- **The New ERA program is “stackable” with IRA clean energy tax credits.** Rural co-ops can use direct pay tax credits in conjunction with the New ERA program to finance new wind, solar, and energy storage. Many rural co-ops will be additionally eligible for the energy community and domestic content bonus adders that will make renewable energy even cheaper. It's important to note that New ERA applicants *cannot* apply for the PACE program (see below) with the same project proposal, but they can apply for the PACE program as long as they “are not applying for the same projects under both programs.”²

2. The PACE program - upcoming *deadline of September 29, 2023*

The IRA provides a total of **\$1 billion** in funding for partially-forgivable loans for renewable energy projects serving predominantly rural areas. [USDA will provide loans to finance clean energy projects](#), including wind, solar, hydropower, biomass, and geothermal. This funding can also be used for energy storage systems that will support these renewable energy projects. Applicants can apply from a minimum loan of **\$1 million** to the maximum available loan of **\$100 million**.

Who can apply for the PACE program? Unlike the New ERA program, which only allows rural electric cooperatives to apply, the PACE program has a broad range of eligible entities. These include state or local governments; for-profit organizations; Indian Tribes; Alaska Native Corporations; non-profits; institutions of higher education; and community-based organizations, distribution electric cooperatives, and generation and transmission electric cooperatives.

² See: New ERA and PACE program [Frequently Asked Questions](#) (FAQ), created by USDA.



The PACE program offers three categories of partially-forgivable loans, which depend on the characteristics of the applicant. Many rural co-ops will qualify for **up to 40 percent loan forgiveness**, if they serve energy communities, distressed communities, or disadvantaged communities. Some rural co-ops may qualify for **category 3, i.e. up to 60 percent loan forgiveness**, particularly if their service area is largely a Tribal area or Substantially Underserved Trust Area (SUTA).

<p>Category 1: Up to 20 percent of total loan forgiveness</p>	<p>For applicants that meet the minimum requirements.</p>
<p>Category 2: Up to 40 percent of total loan forgiveness</p>	<p>For applicants if half or more of the population served by this service are located within:</p> <ol style="list-style-type: none"> 1. “Energy communities” as defined by the IRA; or 2. Distressed or disadvantaged communities. <p>(You can use this DOE guidance to determine if you serve an energy community. Similarly, you can use this USDA map to determine qualification for a distressed or disadvantaged community.)</p>
<p>Category 3: Up to 60 percent of total loan forgiveness</p>	<p>For applicants if:</p> <ol style="list-style-type: none"> 1. The proposed service area is in Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of Northern Mariana Islands, or the 3 Compact of Free Association states (the Federated States of Micronesia, the Republic of Marshall Islands, or the Republic of Palau). 2. The proposed service area consists of 60 percent or more of a Tribal area or serves an Substantially Underserved Trust Area (SUTA). 3. The project is owned by an Indian Tribe or Alaska Native Corporation.

Source: [USDA Rural Utilities Service](#)

Deadlines: The LOI window for the PACE program closes on **September 29, 2023**, after which applicants will be officially invited to submit a full funding application.

How rural co-ops can best use the PACE program:

- Rural co-ops should use these partially-forgivable loans to build out new clean energy projects, which is, in many cases, overwhelmingly cheaper than operating [fossil](#) plants. They can also use this program to build out energy



storage for renewable energy projects, which will help maintain a grid's reliability.

- All applicants, including rural co-ops, **cannot** apply for the New ERA program and the PACE program using the same project. Applicants can, however, apply for both if they submit different projects to each program. For this reason, under-resourced rural co-ops may be better suited concentrating their application efforts on the New ERA program, but rural co-ops with capacity to design a different project proposal for the PACE program should seize both opportunities.

B. Clean Energy Tax Credits

It's absolutely critical that rural co-ops submit letters of interest for the New ERA and PACE program before the **deadlines this September**. Once they've applied for these programs, rural co-ops will be in the best position to get the IRA's **direct pay clean energy tax credits**. These include the **Investment Tax Credit (ITC)** and the **Production Tax Credit (PTC)**.³

Before the IRA, rural co-ops **faced significant barriers** to accessing clean energy tax credits. As nonprofits, rural co-ops did not pay federal taxes, a requirement to use previous forms of clean energy investment and production tax credits. But now, under the IRA, non-profit entities like rural co-ops can access a new "direct pay" option for the ITC and PTC clean energy tax credits. This means non-taxable entities can receive a direct payment from the IRS equal to the full value of tax credits.⁴

These direct pay clean energy tax credits will create an ongoing stream of funds for rural co-ops to deepen their investments in renewable energy projects while keeping them funded in the long-term. And as the clean energy economy scales across the country, rural co-ops that have built out renewable energy generation capacity will be in a prime position to serve—and financially benefit from—member-owners demanding clean energy in response to ESG commitments, decarbonizing business models, and regulatory changes.

What is the Investment Tax Credit (ITC)? This tax credit supports new investment in clean electricity installations, including solar, battery storage, geothermal, microgrid controllers, microturbines, interconnection costs, and more. The ITC allows rural co-ops to reclaim **30 percent of the project's value**, provided they can meet certain

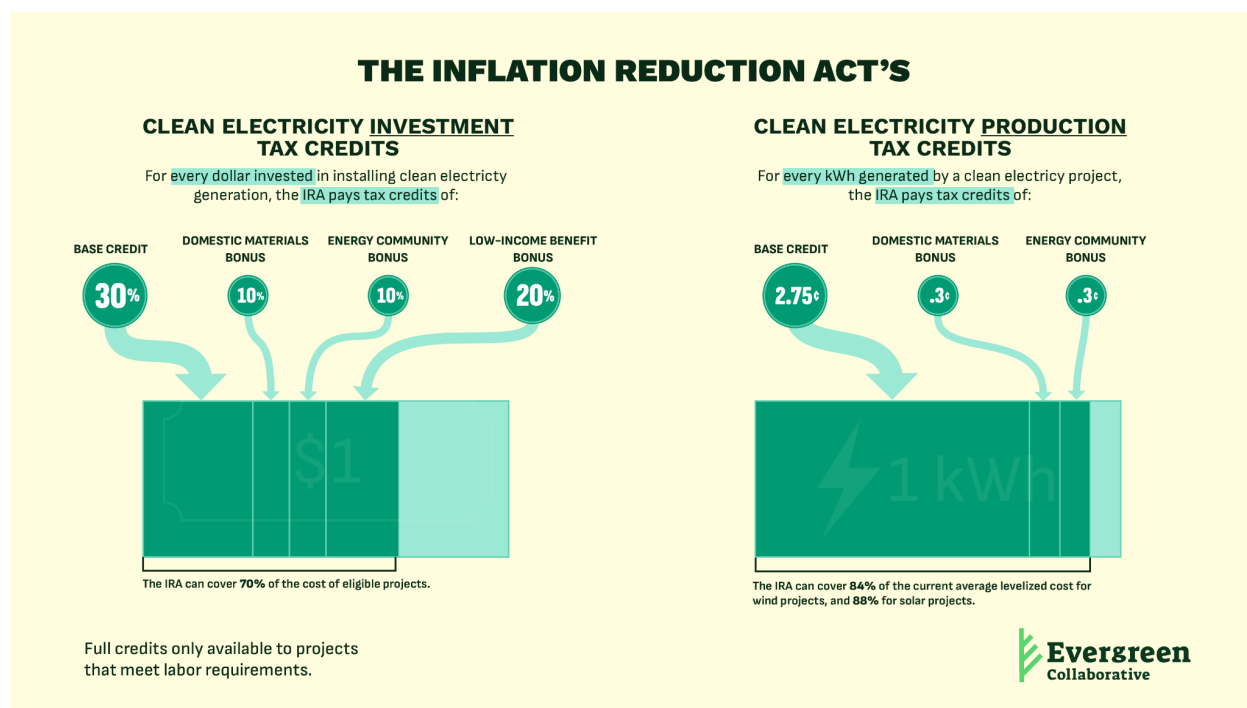
³ A given project can only receive the PTC *or* ITC, not both.

⁴ Under 45Y (Clean Electricity Production Credit) and 48E (Clean Electricity Investment Credit), in order to take the elective payment (i.e. direct pay) after 2025, you must meet the domestic content requirements, unless otherwise waived. See 45Y(g)(12).



labor standards such as prevailing wages. Crucially, rural co-ops can [use](#) the ITC as **upfront equity**. This can become a sizable amount if rural co-ops make use of the additional and substantial clean energy tax credit **bonus adders**.

On top of the 30 percent base ITC, eligible rural co-ops may be able to add three substantial bonus adders, including the 10 percent [energy community tax credit bonus](#) and the 10 percent [domestic content tax credit bonus](#), to receive up to a **50 percent direct pay ITC**. For smaller-scale solar and wind projects (i.e., less than 5Mw) constructed in 2023 and 2024 on Indian land or in low-income communities, another **10 percent bonus** to the ITC is possible—or 20 percent to the ITC if it's part of a qualified low-income residential building project. (Read more about how to qualify for these bonus adders below).



What is the Production Tax Credit (PTC)? This tax credit subsidizes the production of clean electricity. The PTC awards credits to clean energy sources on a per-kilowatt-hour basis. For every kWh of clean energy generated, the producer gets a [base credit](#) of 2.6¢/kWh, provided they meet certain labor standards such as prevailing wage. Similar to the ITC, the PTC has domestic content and energy community adders.

What are bonus adders? On top of the ITC and PTC clean energy tax credits, eligible rural co-ops can also layer on substantial bonus adders, such as the [energy](#)



[community tax credit bonus](#) and the [domestic content tax credit bonus](#), to receive an even larger discount.

- **Domestic content bonus:** Rural co-ops can receive a **10 percent adder for the PTC tax credit, and 10 percentage point bonus for the ITC tax credit**, for projects sourced with US steel and components.
- **Energy community bonus:** Rural co-ops can also receive another **10 percent adder for the PTC tax credit, and a 10 percentage point bonus for the ITC tax credit for projects sited in an “energy community.”** The IRA defines an energy community as one of three different geographical locations summarized below:
 1. A **brownfield site**,
 2. A **metropolitan statistical area or non-metropolitan statistical area** that has 0.17 percent or greater direct employment or 25 percent or greater local tax revenues related to the extraction, transport, or storage of fossil fuels AND has an unemployment rate at or above the national average unemployment rate for the previous year, OR,
 3. A **census tract** or directly adjoining census tract in which a **coal mine closed** after December 31, 1999, or in which a **coal-fired electric generating unit has been retired** after 2009.

Many rural co-ops are sited in census tracts or directly adjoining census tracts with coal mines or retired coal-fired electric generating units, which makes them an “energy community.” A renewable energy project sited in an energy community would qualify a rural co-op that is applying for the ITC or PTC for the energy communities bonus. On Table 1 on page 22, the authors of this report have analyzed which top G&Ts could qualify for the energy communities bonus adder. DOE has put together a helpful map showing which areas qualify as “energy communities” under the IRA, which can be viewed [here](#). For a full legal definition and map of “energy communities,” please refer to the IRA [here](#). You can also read Evergreen’s blog on energy communities [here](#).

- **Low-income adder:** Rural co-ops can receive the 10 percentage point low-income adder for the **ITC tax credit only**, provided that it’s a smaller-scale solar or wind energy project, less than 5MW, built between 2023 and 2024 on Indian land or low-income communities. Learn more about the Environmental Justice Wind and Solar Capacity bonus credit under Section 48(e) [here](#).

C. Other Federal Funding Opportunities



While the direct pay clean energy tax credits and the New ERA program present the biggest funding opportunities for rural co-ops, there are other IRA funding avenues that could be creatively used to transition rural co-ops to a clean energy future.

For example, the U.S. Department of Energy's Loan Program Office is offering [new, short-term loans](#) through the **Energy Infrastructure Reinvestment (EIR) program** to help retool, repower, repurpose, or replace uneconomic fossil fuel energy infrastructure in favor of clean energy. These low-cost, guaranteed loans could help rural co-ops tackle their legacy fossil fuel debt. Rural co-ops should investigate refinancing high-cost debt with lower-cost loans for fossil transition programs. You can learn more about the EIR program [here](#).

Elsewhere, the EPA is offering **\$4.75 billion in Greenhouse Gas Reduction Grants**. This short-term and competitive grant program is available to states, Tribes, municipalities, and air pollution control agencies to reduce greenhouse gas emissions. To be eligible, the stated entities must have developed a greenhouse gas emissions reduction plan by May 2023. EPA will first disperse \$250 million grants to help eligible entities design ambitious plans – and then, the EPA will follow up with \$4.25 billion in competitive awards to implement those plans. Rural co-ops could work with small municipalities or Tribes that they serve, or even states, to develop integrated emissions reductions plans.

VII. Policy Recommendations

The IRA is offering a once-in-a-generation opportunity to design and build next-generation rural electrification while helping rural co-ops finally retire dirty and costly coal plants. Rural co-ops that fail to apply for these funds would not only be doing a disservice to their member-owners' wallets and health—they'd also be passing up a huge financial opportunity to supply clean energy to a growing grid. Rural co-ops must seize this historic chance to update their energy infrastructure and strengthen their balance sheets. And now, state-level officials and the federal government must join rural co-ops in successfully implementing this opportunity.

A. State-level Officials

1. **States can be powerful messengers, sharing this historic funding opportunity with rural co-ops.** Governors' offices and state officials are perfectly positioned to play a key role in encouraging rural co-ops to apply for the New ERA program and the direct pay clean energy tax credits. Given the competitive nature of the New ERA program, states should ensure co-ops submit letters of

interest that are ambitious and eschew retrofits or capacity limits in favor of clean energy upgrades. After all, these IRA programs become local development dollars with local benefits, and states should be diving into these efforts as fast as possible. What's more, rural co-ops can actually provide a *lower cost of clean energy* to their commercial and industrial customers than private utilities can. For example, a large industrial customer can see the New ERA program as a 25 percent additional cost reduction for clean energy that is not available to other private utilities. As such, these IRA programs provide huge benefits to states that are focused on industrial development and decarbonization.

- 2. States must support overall grid modernization to a clean energy economy.** As the clean energy economy booms, states are also greeted with a huge redevelopment opportunity to upgrade and modernize the grid. This modernization will result in new jobs and economic development. For example, the BlueGreen Alliance [estimates](#) grid modernization alone will result in nearly 40,000 jobs from IRA loans and grants that make electricity transmission infrastructure more reliable, efficient, and accessible. As such, in addition to playing a key role in helping rural co-ops modernize the grid, states should also work in coordination with state public utility commissions (PUCs) on IOUs to ensure mutually supportive grid upgrades. States should keep their eyes trained on the long-term benefits of modernizing the grid, and prioritize it in planning processes.

States can also work together with rural co-ops on state Greenhouse Gas Reduction Fund plans to decarbonize industry and other sectors. After all, from factories to freight hubs, from fertilizer facilities to farms, sectors across the rural landscape are electrifying. State plans can align business development with clean energy provisions from rural co-ops, benefiting everyone. Such collaboration can support a wider state-based push to explicitly electrify industrial and other big sectors. Electrifying industrial sectors will increase their economic competitiveness while developing rural regions. And, as pointed out above, electrifying industrial sectors will increase demand for clean power, which rural co-ops can supply and profit from.

- 3. State officials can get ahead of planning for their obligations under the Clean Air Act (CAA).** Under the CAA, states must submit [State Implementation Plans](#) (SIPs) to EPA, outlining how a state plans to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS) for carbon monoxide, lead, nitrogen oxide, ozone, particulate matter, and sulfur dioxide pollution. Notably, EPA is currently revising the NAAQS for [particulate matter](#) and [ozone](#) as the



science demands. That means states have an incoming planning obligation and should seize this opportunity to help rural co-ops retire high-polluting coal plants. State officials should also begin planning for the proposed [111\(b\) and 111\(d\) rules](#) under the CAA, which apply carbon pollution standards for new and existing power plants. Under the 111(d) rule for existing plants, states are responsible for implementing these emissions standards and will need to submit state plans detailing compliance strategies by 2026. Now is the right time for officials to encourage rural co-ops, especially G&Ts, in their state to get ahead of these standards by harnessing federal IRA dollars to transition to renewable energy sources.

4. **States should push state-level 100 percent Clean Power standards and greenhouse gas reduction goals.** As the clean energy economy rapidly develops across the country, the demand for clean electricity will steadily grow. That presents an enormous development opportunity for states, as well as rural co-ops. As such, it will require a whole-state development plan to meet the burgeoning demand for clean energy. States that have not yet done so should pass 100 percent clean electricity standards for 2035 or earlier, looking to ambitious states like Rhode Island as examples. When designing their plans, states must factor in the decarbonization of rural co-ops.

B. Federal Government

1. **The Biden Administration must lead on an interagency strategy for clean rural electrification.** Drawing inspiration from the [Interagency Working Group \(IWG\) on Energy Communities](#), the Biden Administration should put together an IWG for Next-Generation Rural Electrification. This IWG would be guided by a clean energy rural strategy that pairs the regulatory tools with federal funding opportunities to drive a new wave of rural electrification. The IWG should draw clear links between federal funding opportunities like GGRF, as well as other EPA and DOE place-based funding streams, to help support rural co-ops across different regions transition to a thriving, clean energy economy. This IWG could also provide technical assistance to rural co-ops, and support their development as people-powered, democratic institutions.
2. **In the short term, the Biden Administration must fund more robust technical assistance to rural co-op applicants.** Submitting a LOI is the first critical step of the application process for the New ERA program. From there, rural co-ops will be invited to submit a full application with robust technical details. The full application process requires utilities to develop new relationships with



clean energy developers, go through siting and environmental review processes, and conduct complex technical assessments, and do so quickly. With relatively lean staff, some cooperatives may not have the ability to meet USDA's timelines without additional support. In addition, USDA will require additional staff to review and negotiate detailed applications, often with technologies that are relatively rare within the cooperative utility sector. It is imperative that the Biden Administration provide technical support to both cooperatives and USDA from agencies with deep bench experience, like DOE and the National Laboratories network. The federal government should commit additional resources to support technical assistance to rural co-ops, for current and future funding opportunities.

3. EPA must finalize strong 111 rules for the power sector and the revised NAAQS.

In May, EPA proposed carbon pollution standards for new and existing fossil-fueled power plants. The agency has said the rules will be final by April 2024. EPA must stick to this deadline and ensure that state plans implementing the rules for existing plants (due two years after the rule is finalized) are robust. EPA must also ensure strong enforcement of the rules, including by ensuring that utilities and co-ops are making progress toward achieving emissions reduction requirements and timelines.

Similarly, EPA must finalize stronger NAAQS for ozone and PM. At the same time, EPA should propose strong rules for all of the electrifying sectors, including heavy industry, which rural co-ops can support.

VIII. Conclusion

Rural co-ops must seize this once-in-a-generation opportunity to build out low-cost and reliable clean energy. They have everything to gain: improved their energy infrastructure, strengthened their balance sheets, and cheaper, cleaner, and more reliable power for member-owners.

Drawing upon the same spirit that originally electrified rural America, co-ops can usher in next-generation rural electrification. Equipped with IRA federal financing opportunities, they can build out renewable energy assets, confront coal plant debt, side-step volatile fossil fuel prices, and get ahead of a changing regulatory landscape. At the same time, rural co-ops can free themselves from volatile fossil fuels, while securing local energy security for their member-owners. By creatively stacking these federal dollars together, rural co-ops can harness the ambitious legacy of past electrification efforts—and in the process, design and own a thriving clean energy future.



Who to contact for technical assistance:

- **For the New ERA or PACE programs:** Co-ops who are interested in learning more about these opportunities and how to apply should contact USDA's Rural Utilities Service office: SM.RD.RUS.IRA.Questions@usda.gov

IV. Appendix

A. Examples: How to “Stack” Federal Funding Opportunities for G&Ts

The following table shows a selection of large G&Ts from across the country, and demonstrates that the cost of new renewable energy alternatives are overwhelmingly cheaper than coal. To show an example of how to stack benefits, this table also shows which G&Ts qualify for clean energy tax credit energy community bonus adders.

The authors of this paper have first collated the [highest-polluting rural co-op](#) G&Ts, drawn from the 100 largest power producers in the U.S. We have selected rural co-ops that have the highest carbon dioxide emissions and those that have coal plants in their fleet. These include Basin Electric, Buckeye Power, Great River Energy, Tri-State, East Kentucky Power Coop, Seminole Electric Coop, Associated Electric Coop, Arkansas Electric Coop, Oglethorpe, and North Carolina EMC. The authors have additionally added Big Rivers, Dairyland Co-op, Southern Illinois Power Cooperative, and Wolverine Power Co-op due to their coal assets.

Although this table only compares the cost of renewable energy against individual coal plants using data from Energy Innovation's [Coal Cost Crossover 3.0](#), the authors note that renewable energy remains significantly cheaper than fossil gas, too. Rural co-ops should, under no circumstances, resort to fossil fuel plant alternatives. (See page 9 of this report, which outlines why natural gas remains a high-polluting, price-volatile, and poor business decision for rural co-ops). Renewable energy is the [cheapest source](#) of power, and it is expected to remain that way. According to [IRENA](#), the global weighted average levelized cost of electricity (LCOE) of new utility-scale solar PV and hydropower was 11 percent lower than the cheapest new fossil fuel-fired power generation option in 2021, and 39 percent lower for onshore wind.

Rural electric co-op	Coal plant	How much cheaper is renewable energy than coal? ⁵	Example of “stacking” opportunities
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⁵ The data in this column is replicated from analysis in Energy Innovation's [2023 Coal Cost Crossover Report](#), and follows the same assumptions, including the IRA incentives.



Arkansas Electric Coop	Flint Creek - Benton County, AR	Coal going-forward cost: \$30.38/MWh Least cost resource is local wind, 47.3 percent less costly than coal	ITC/PTC energy community bonus adder: Flint Creek? No energy community census tracts nearby. Independence County? No energy community census tracts nearby. John W. Turk? Yes. There are numerous energy community tracts fully surrounding and nearby Hempstead County, AR. White Bluff? Yes. There are numerous energy community tracts nearby Arkansas County, Desha County, Drew County, Dallas County, Hot Spring County, AR, and more. PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
	Independence - Independence County, AR	Coal going-forward cost: \$38.66/MWh Least cost resource is regional wind, 48.8 percent less costly than coal.	
	John W. Turk Jr. Power Plant - Hempstead County, AR	Coal going-forward cost: \$32.24/MWh Least-cost resource is regional wind, 39.0 percent less costly than coal.	
	White Bluff - Jefferson County, AR	Coal going-forward cost: \$32.34/MWh. Least cost resource is local solar, 38.3 percent less costly than coal.	
Associated Electric Co-op, Inc. [G&T] Sales by state: Missouri	Thomas Hill - Randolph County, MO (100 percent owned by co-op)	Coal going-forward cost: \$25.65/MWh. Least cost resource is local wind, 25.9 percent less costly than coal. <i>Local solar</i> is 8.1 percent less costly than coal within 10km from the plant, <i>local wind</i> is 25.9 percent less costly than coal within 45 km from the plant.	ITC/PTC energy community bonus adder: Thomas Hill? Energy community census tracts within 50 miles. Nearest ITC/PTC energy communities to Thomas Hill, Randolph, MO are: (1) Census Tract 9 in Boone County, Missouri, due to a coal-fired electric generating unit retirement, (2) Census Tracts 2, 7, 10.01, 14.02, 15.06, 15.07, and 21 in Boone County, MO, because it directly adjoins a census tract with a qualifying coal closure. There are also numerous qualifying tracts near Jefferson City, Marshall, Nevada, and Kansas City. For



	New Madrid Co., MO (100 percent owned by co-op)	<p>Coal going-forward cost: \$29.89/MWh</p> <p>Least cost resource is regional wind, 33.2 percent less costly than coal.</p> <p><i>Local solar</i> is 30.2 percent less costly than coal within 15km from the plant. <i>Local wind</i> is 33 percent less costly than coal within 35k from the plant.⁶</p>	<p>more potential tracts, consult the Energy Community Tax Credit Bonus map here.</p> <p>New Madrid? Nearest energy communities are over the river in KY.</p> <p>ITC low-income bonus adder:</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
<p>Basin Electric [G&T]</p> <p>Sales by state: North Dakota, Minnesota, South Dakota.</p>	Antelope Valley in Mercer County, ND (100 percent owned by co-op)	<p>Coal going-forward cost: \$22.31/MWh.</p> <p>Least cost resource is regional wind, which is 32.6 percent less costly than coal.</p> <p><i>Local wind</i> is 18.6 percent less expensive than coal within 30km of the plant.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>Antelope Valley, ND and Leland Olds, ND: Yes. There are numerous energy community tracts near Antelope Valley in Mercer County, ND and Leland Olds, ND. These include, but are not limited to, Census Tract 9618 in Mercer County, ND due to a coal-fired electric generating unit retirement. Other tracts include Census Tract 9622 in Dunn County, ND; Census Tract 9633 in Stark County, ND; Census Tract 9401, 9608, and 9610.01 in McLean County, ND; Census Tract 9612 in Oliver County, ND; Census Tract 111.05 in Burleigh County, ND; Census Tract 9625 in McKenzie County, ND; and Census Tract 203.01, 203.03, 204, and 205 in Morton County, ND, because they directly adjoin a census tract with a qualifying coal closure. For more potential tracts in North Dakota, consult the Energy</p>
	Laramie River Station, WY (42 percent owned by co-op)	<p>Coal going-forward cost: \$21.56/MWh. Lease cost resource is regional wind, which is 46.8 percent less costly than coal.</p>	
	Dry Fork Station, WY (100 percent owned by co-op)	<p>This is the only outlier. Energy Innovation estimates that Dry Fork has operational costs of \$16.64 per megawatt-hour. By contrast, building a new wind farm in the region and operating it would have a cost of \$16.96 per megawatt-hour, a difference of 2 percent.</p>	
	Leland Olds, ND	<i>Data unavailable</i>	

⁶ As stated above, the data in this column is replicated from Energy Innovation's 2023 report, "[Cost Savings for Coal Plants Replaced by New Renewables](#)."

	(100 percent owned by co-op)		<p>Community Tax Credit Bonus map here.</p> <p>Dry Fork, WY: Yes. The area surrounding Dry Fork Station consistently qualifies as an energy community.</p> <p>Laramie River Station, WY: Energy community census tracts are nearby. Near Laramie River Station in WY, energy communities include Census Tract 9639 in Albany County, WY; Census Tract 9572 in Niobrara County, WY; and Census Tract 9566 in Converse County, WY because they directly adjoin a census tract with qualifying coal closure. For more potential tracts in Wyoming, consult the Energy Community Tax Credit Bonus map here.</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
Big Rivers [G&T] Sales by state: Kentucky	R.D. Green - Webster, KY (100 percent owned by co-op)	Coal going-forward cost: \$36.36/MWh Local solar is 43.2 percent less costly than coal within 5km from the plant. Local wind is 34.7 percent less costly than coal within 30km from the plant.	<p>ITC/PTC energy community bonus adder:</p> <p>R.D. Green? Yes. The surrounding areas are fairly consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p> <p>D.B Wilson? Yes. The surrounding areas are fairly consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p>
	D.B. Wilson - Ohio County, KY (100 percent co-op owned)	Coal going-forward cost: \$30.68/MWh Least cost resource is local solar, 32.7 percent less costly than coal. Local solar is 32.7 percent less costly than coal within 5km from the plant. Local wind is 16.1	

		percent less costly than coal within 35 km from the plant.	PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Buckeye [G&T] Sales by state: Ohio	Cardinal, Jefferson County, OH (100 percent owned by co-op)	Coal cost going forward: \$31.16/MWh Least cost resource is regional wind, which is 18.6 percent less costly than coal. <i>Local solar</i> is 11.1 percent less costly than coal within 25km from the plant.	ITC/PTC energy community bonus adder: Cardinal? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here . PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Dairyland Co-op [G&T] Sales by State: Wisconsin, Minnesota, Iowa	John P. Madgett, Buffalo County, WI (100 percent Dairyland ownership)	Coal going-forward cost: \$44.62/MWh Local solar is 33.5 percent less costly than coal within 20km from the plant. Local wind is 48.1 percent less costly than coal within 25km from the plant.	ITC/PTC energy community bonus adder: John P. Madgett? Yes. The surrounding areas are consistently designated as energy community census tracts. This includes Census Tract 9601, 9603, and 9604 in Buffalo County, WI; Census Tract 9502 in Pepin County; and Census Tract 4902 in Wabasha County, MN. To see the full map, consult the Energy Community Tax Credit Bonus map here . Weston 4? Nearby. The nearby areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit
	Weston 4 - Marathon County, WI (30 percent Dairyland ownership)	Coal going-forward cost: \$30.49/MWh Least cost resource is regional wind, 24.2 percent less costly than coal. Local solar is 15.3 percent less costly than coal within 10k from the plant.	

			<p>Bonus map here.</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
<p>East Kentucky Power Co-op [G&T]</p> <p>Sales by State: Kentucky</p>	<p>HL Spurlock 1,2, and 3 - Mason County, KY (100 percent owned by co-op)</p>	<p>Coal going-forward cost: \$34.31/MWh</p> <p>Lease cost resource is local solar, which is 31.8 percent less costly than coal.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>HL Spurlock? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p> <p>J. Sherman Cooper? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
	<p>J. Sherman Cooper 1 and 2: Pulaski County, KY (100 percent owned by co-op)</p>	<p>Coal going-forward cost: \$73.92/MWh</p> <p>Lease cost resource is local solar 71.9 percent less costly than coal. <i>Local</i> solar is 71.9 percent less costly than coal within 10km from the plant. <i>Local</i> wind is 52.3 percent less costly than coal within 20km of the plant.</p>	
<p>Great River Energy [G&T]</p> <p>Sales by State: Minnesota</p>	<p>Coal Creek - McLean County, ND</p>	<p>Coal going-forward cost: \$23.72/MWh</p> <p>Least cost resource is regional wind, 26.2 percent less costly than coal.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>Coal Creek? Yes. The surrounding areas are consistently designated as energy community census tracts.</p> <p>Spiritwood Station? The nearest energy community census tracts are near Bismarck, ND.</p>
	<p>Spiritwood Station - Stutsman County, ND</p>	<p>Coal going-forward cost: \$101.40/MWh</p> <p>Least cost resource is regional wind, 82.3 percent less costly than coal.</p>	



<p>Oglethorpe Power Corporation</p> <p>Sales by State: Georgia</p>	<p>Scherer - Monroe County, GA (60 percent owned by co-op)</p>	<p>Coal going-forward cost: \$47.07/MWh</p> <p>Local solar is 57.7 percent less costly than coal within 10km from the plant.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>Scherer? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
<p>Seminole Electric [G&T]</p> <p>Sales by State: Florida</p>	<p>Seminole - Putnam County, FL</p>	<p>Coal going-forward cost: \$34.83/MWh</p> <p>Least cost resource is regional solar, 44.9 percent less costly than coal.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>Seminole? Nearest energy community census tracts are near Jacksonville and Inglis, FL.</p>
<p>Southern Illinois Power Cooperative [G&T]</p> <p>Sales by State: Illinois</p>	<p>Marion 1,2, and 3 - Williamson County, IL (100 percent owned by co-op)</p>	<p>Coal going-forward cost: \$33.08/MWh</p> <p>Least cost resource is regional wind 42.4 percent less costly than coal.</p> <p>Local solar is 31 percent less costly than coal within 10km from the plant. Local wind is 33.6 percent less costly than coal within 15km from the plant.</p>	<p>ITC/PTC energy community bonus adder:</p> <p>Marion 1,2, and 3? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here.</p> <p>PACE program: Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.</p>
<p>Tri-State G&T</p>	<p>Craig (Yampa) - Moffat County, CO</p>	<p>Coal going-forward cost: \$28.45/MWh</p> <p>Least cost resource going forward is local solar, \$38.4 less costly than coal</p>	<p>ITC/PTC energy community bonus:</p> <p>Craig? Yes. Moffat County, CO is fully surrounded by energy community census tracts.</p>



	Springerville - Apache County, AZ	Coal going-forward cost: \$39.44/MWh Least cost resource is local solar, 66.4 percent less costly than coal.	Springerville? Apache County, AZ is fully surrounded by energy community census tracts.
Wolverine Power Marketing Co-op [G&T] Wolverine Power Supply Co-op Sales by State: Michigan	J.H. Campbell 3, MI	<i>Data not available</i>	ITC/PTC energy community bonus: J.H. Campbell 3? Nearby. There are some tracts near Allegan County, MI. More broadly, huge chunks of Michigan qualify as energy communities, particularly in northern MI, as well as in southern MI near Hillsdale and Battle Creek. To see the full map, consult the Energy Community Tax Credit Bonus map here . PACE program? Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
	Kyger Creek	<i>Data not available</i>	Kyger Creek? Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .

Disclaimer: This data should not be relied upon as official tax advice.

B. State-based example: Distributional co-ops in Michigan

This table shows the distributional co-ops in Michigan, and if they qualify for the ITC/PTC energy communities bonus and the PACE program's loan forgiveness rate of up to 40 percent.

Michigan Distributional Co-op	Eligible for ITC/PTC energy community bonus adder?	Eligible for PACE program?
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Alger Delta Cooperative Electric Association	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Cherryland Electric Cooperative	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Great Lakes Energy Cooperative	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
HomeWorks Tri-County Electric Co-op	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Midwest Energy & Communications	Nearby. There are energy community census tracts near St. Joseph's County, Branch County, Calhoun County, and Hillsdale County. To see the full map of eligible census tracts, consult the Energy Community Tax Credit Bonus map here .	Potentially, depending on where the proposed project is sited. If half or more of the population included in the proposed service area is located within an energy community, then yes.
Ontonagon County REA	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.
Presque Isle Electric & Gas Co-op	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is



		located within an energy community.
Thumb Electric Cooperative	Yes. The surrounding areas are consistently designated as energy community census tracts. To see the full map, consult the Energy Community Tax Credit Bonus map here .	Yes. Up to 40 percent total loan forgiveness if half or more of the population included in the proposed service area is located within an energy community.

Disclaimer: *This data should not be relied upon as official tax advice.*