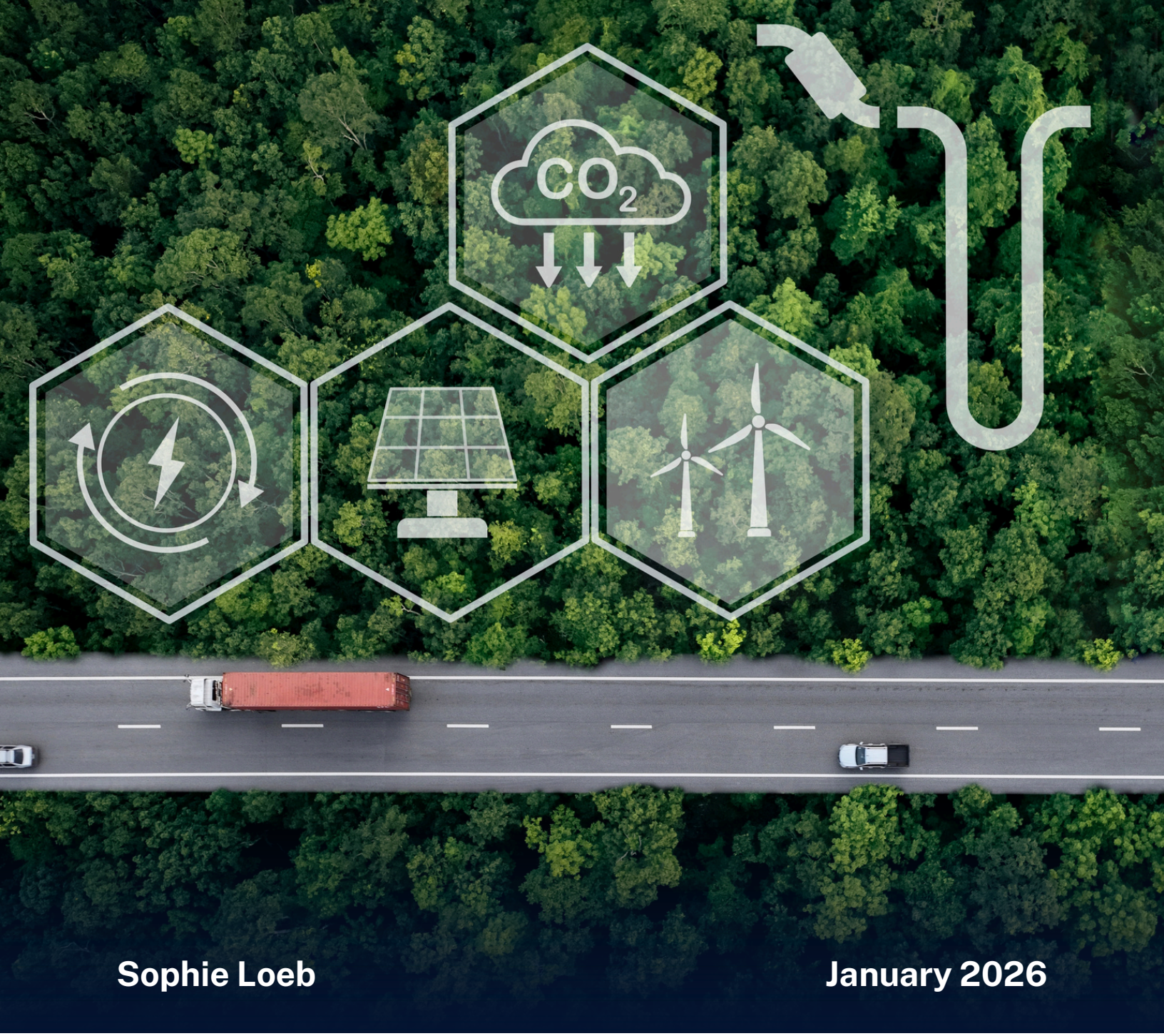


Sophie Loeb

January 2026

ELECTRIC COOPERATIVES:
ONE POTENTIALLY POSITIVE PATH FOR ADVANCING A CLEAN, EQUITABLE ENERGY TRANSITION

Center for Progressive Reform

Electric Cooperatives: One Potentially Positive Path for Advancing a Clean, Equitable Energy Transition

Author

Sophie Loeb, Policy Analyst

Editors

Spencer Green, Senior Editor and Research Advisor

Brian Gumm, Communications Director

Designer

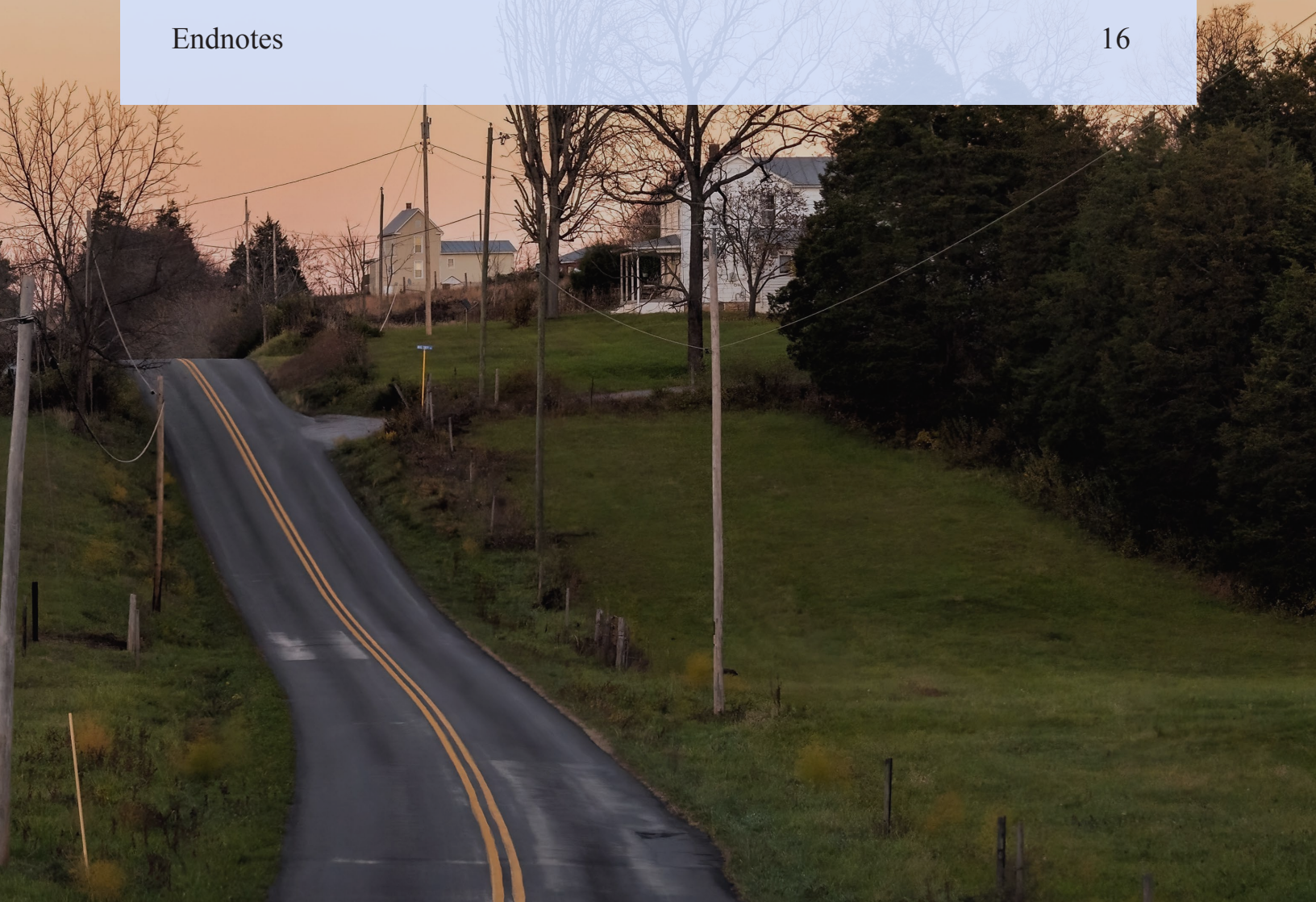
Rachel Mayo, Communications and Marketing Content Specialist, Center for Progressive Reform

About the Center for Progressive Reform

The Center for Progressive Reform is a nonprofit research and advocacy organization that works in the service of responsive government, climate justice, and protecting against environmental harm. We work toward collective solutions to social problems, including policies developed by a robustly democratic government using all the tools at its disposal. We draw on the expertise of a national network of leading scholars and a professional staff to shape legislative and agency policy at the state and federal levels and to work in coalition with the broad and diverse landscape of today's social movements.

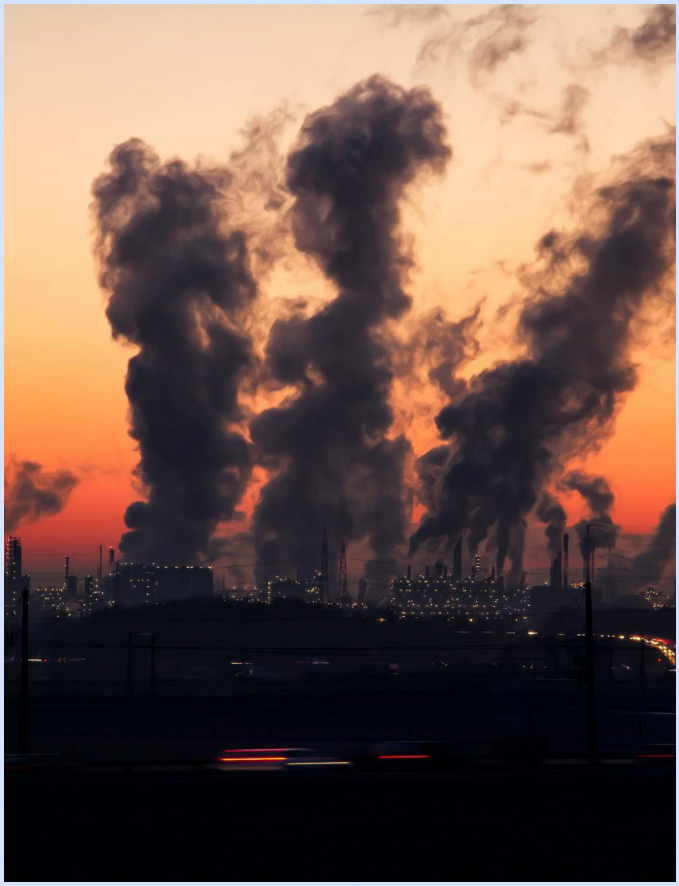
https://progressivereform.org

Contents



Executive Summary

Burning fossil fuels like methane gas, coal, and oil is the leading contributor to the rapid and unprecedented warming over the last 200 years.[1] These fuels release carbon dioxide and nitrous oxide, which trap heat, warm the planet,[2] and are linked to adverse health outcomes such as respiratory illnesses (including asthma), cancer, and heart disease.[3] [4]



Warming from fossil fuel emissions is directly related to more catastrophic events like intensifying droughts, floods, and extreme heat.[5] There is growing scientific consensus that we have already surpassed 1.5 degrees Celsius of warming, the limit that would have prevented even more dire and irreversible climate consequences like permanent ice sheet melting, loss of entire ecosystems, and intensifying ocean warming. At the current rate, we are on a trajectory for 2.5 degrees Celsius warming by the end of 2100.[6]

In 2025, scientists noted the planet's first catastrophic climate "tipping point," or point of no return — namely mass coral reef die-off from rising ocean temperatures. These die-offs imperil the livelihoods of hundreds of millions of humans and animals who depend on ocean ecosystems for food, natural buffers, and economic systems.[7] These catastrophic — and again, often irreversible — climate effects also have disparate impacts on racialized and historically oppressed communities, including communities of color, immigrant groups, the working class, LGBTQ+ communities, and those with limited proficiency in their region's dominant language or languages.[8] [9] This is true across educational attainment and age categories.[10] [11]

In the United States, the energy sector is second only to transportation as the highest contributor to carbon dioxide emissions and climate warming,[12] [13] and 74 percent of all human-produced greenhouse gas emissions come from burning fossil fuels for electricity.[14] While the U.S. has seen a decrease in carbon dioxide emissions from the electricity sector since the 1990s due to investment in renewable energy resources like solar, wind, and geothermal technologies, energy-related carbon emissions *increased* by 7 percent in 2021, in part due to increased electricity demand as more of the economy electrifies.[15]

More recently, the rise of hyperscale artificial intelligence data centers has also skyrocketed demand for electricity. Energy use from these data centers is projected to increase from 183 terawatt hours (TwH) in 2024 (or 4 percent of U.S. total electricity consumption) to 426 TwH by 2030 — an increase in demand of 133 percent.[16] Currently, data centers receive 40 percent of electricity from methane gas resources, with methane gas projected to continue as the largest energy source for data center electricity into 2030.[17] Without additional renewable energy investment, data centers could produce 2.5 billion metric tons of carbon dioxide by 2030.[18]

Mitigating the disproportionately catastrophic climate and health harms from burning fossil fuels for electricity calls for bold action, especially as demand for electricity continues to increase. One of these is decarbonization — the process of reducing or removing fossil fuels from production by switching to renewable energy resources in energy and economic systems.[19] Researchers have found that scaling up renewable energy resources to 90 percent by 2035 and net zero emissions by 2050 is technically feasible with substantial increases in solar, wind, and battery storage technologies.[20] Clean energy grids can reduce energy costs and are reliable in the absence of fossil fuel resources, even with projected electricity demand from multi-sector electrification.[21]

The predominance of investor-owned electric utilities (IOUs) — which provide electricity to a majority of U.S. households — complicates, disincentivizes, and impedes clean energy investment and development.[22] This is due to a mix of historical industry capture and political power, regulatory information asymmetries, and the profit motive of private energy production and distribution.[23] Decarbonization within the IOU space is consequently lagging behind where it needs to be.[24] For more information, please read our earlier brief, Advancing a Clean, Equitable Energy Transition through Alternatives to Investor-Owned Utilities.

Member Scholar and University of Pennsylvania Presidential Distinguished Professor of Law and Energy Policy Shelley Welton echoes the need for a new approach in the energy space, noting that while regulation of privately owned utilities may have worked in the last century to "incentivize low prices and adequate" supply, "this century, however, climate change creates the need for more deliberative, experimental management of electricity to meet the additional aim of decarbonization while maintaining affordability and reliability."[25]

This calls for creative solutions, and one of these is electric cooperatives — alternatives to IOUs that, if democratically run and operated, could have a strong positive impact in ushering in a just, equitable clean energy transition.

Electric cooperatives already serve a vital role in bringing electricity to sparsely populated and historically energy burdened regions (the private market failed to address energy connection in rural areas in the 20th century as there wasn't significant financial incentivize for economic scale in sparsely populated areas, leaving service gaps and high costs to customers, and ultimately prompting state intervention).

Still, there are limitations to electric cooperatives. They are often embedded in long-term fossil fuel contracts with substantial debts or are contracted with IOUs with resource mixes that don't meet decarbonization goals. They can have a history of unequal and unfair representation in elected board structures, and they are often largely self-regulated outside of the traditional energy regulatory space.

But particularly in the rural communities they are based in, electric cooperatives can be agents of decarbonization if they embrace funding opportunities to move into a clean energy future, improve fair representation across elected boards, listen to their member-owners' desires for clean energy resources, collectively pressure suppliers to adopt cleaner energy resource mixes, or exit distributor contracts entirely.

Electric Cooperatives: An Overview

Electric cooperatives have played a vital role in rural America since their founding in the 1930s. In 1935, President Franklin D. Roosevelt created the Rural Electrification Administration (REA); in 1937, the REA drafted the Electric Cooperative Corporation Act, a model law for forming nonprofit electric cooperatives.[26] Prior to the administration and model law, electrification had been concentrated, with only 10 percent of rural farms connected with electricity.[27] The REA provided loans to finance electricity generation and transmission in rural areas, and ultimately, helped connect 90 percent of U.S. farms with electricity by the 1950s.[28]

It's important to note the prior failure of private utility companies to serve the electricity needs of rural America. Private utility companies submitted proposals to the federal government to electrify rural areas in the 1930s, but these proposals were too costly and did not provide adequate coverage. These utilities also claimed they had little financial incentive to electrify vast areas without adequate demand for electricity. Without favorable terms with the private utilities, the federal government turned to a long-standing economic instrument in rural communities: the cooperative, or co-op. Agricultural cooperatives allowed farmers to pool their resources to lower costs for farming inputs like equipment, seed, and fertilizer.[29]

With a familiar model to work with, electric cooperatives seemed like a natural fit for farmers. Once organized, co-ops could secure low-interest loans from REA for transmission lines and wiring. In addition, the REA provided credit for wiring appliances and funds to purchase electrical appliances, helping to create sustainable demand, and ultimately, an economy of scale to keep costs low across the rate base. Co-ops mostly purchased electricity from private utilities but were also enabled to construct their own electric generation if the utilities failed to provide an affordable source. The co-op model proved highly successful at connecting rural America to the grid and consequently increased economic productivity. Today, the REA is called the Rural Utilities Service and is housed in the U.S. Department of Agriculture (USDA).

Even though electric cooperatives are touted as some of the best outcomes of the New Deal, their modern-day mission and governance model face challenges that will be outlined in this brief. How cooperatives adapt to the 21st century could make them powerfully positioned to promote energy equity and justice to rural Americans — in line with their original democratic intentions — or prove that those intentions are now a thing of the past.

Challenges for Electric Cooperatives in Providing Energy Equity and Justice

Electric cooperatives are not-for-profit energy providers, typically based in rural areas, that are collectively owned by their members and managed by a board elected by those members. They do not have shareholders to return profits to, and while they must recover business costs, they can reinvest all excess revenue back into their communities in the form of capital credits. Electric cooperatives are governed by seven "Cooperative Principles" including: open and voluntary membership; democratic member control; members' economic participation; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for community.[30]

Electric cooperatives are organized into either *distribution cooperatives or generation and transmission cooperatives (G&Ts)*. In the U.S., there are more than 800 distribution cooperatives, which provide electricity directly to consumers and own distribution infrastructure. These distribution cooperatives can join with each other to develop G&Ts, which sell wholesale electricity from their own generation or from public or investor-owned power sources back to distribution cooperatives.

Rural electric cooperatives play a vital role in promoting energy equity, as they bring electricity to some of the most energy-burdened communities in the country, representing 3.5 million people living on 56 percent of the U.S. land mass. These cooperatives serve more than 90 percent of counties classified as experiencing high poverty (meaning more than 20 percent of the population lives in poverty).[31] However, there is room for further improvement with regard to an expansion of renewable energy sources, as well as improved governance structures.

Due to structural disenfranchisement — unaccountable elected boards, lack of transparency in meetings, misuse of member capital, lack of representation of community served on elected boards, and more — cooperatives can have a spotty track record of meeting member-owners' needs.[32] Member apathy and lack of engagement driven from this track record can then self-reinforce with low voter turnout at board member elections. The Institute for Local Self-Reliance found that more than 70 percent of cooperatives have voter turnouts of less than 10 percent.[33] These same imperfect governance structures require reform to fully embrace cooperatives' role in a clean energy transition.

Currently, electric cooperatives are not leaders in renewable energy development. Reasons for this include historically limited access to capital, power purchase agreements with IOUs, imperfect governance structures, and legacy debt from coal plants.[34] As of 2021, cooperatives still generated power from a mix of mostly coal and methane gas, with a higher portion of coal (32 percent) than the overall U.S. generation mix (22 percent).[35] Further, many state legislatures allow electric cooperatives to "self-regulate," which makes federal or state decarbonization mandates difficult to impose.[36]

Cooperatives have higher operating and grid maintenance costs because they serve fewer customers per mile of power line, which is often why cooperatives hold on to old fossil fuel-based infrastructure and struggle to invest in renewable energy.

Additionally, while renewable energy resources are declining in cost, and demand is increasing among member-owners for a transition away from fossil fuel resources, cooperatives must still address the issues of "stranded assets" — increasingly uneconomical coal-fired plants.[37] One cooperative, Seminole Electric, noted that closing a coal fired plant would leave member-owners with significant debt — 75 percent of its debt already comes from retrofitting and building coal plants, but closure would mean even less revenue to compensate for the loss.[38]

Cooperatives cannot attract huge sums of capital investments to upgrade old fossil fuel infrastructure in the same way that IOUs in the private sector can, but rather must rely on loans or increasing membership rates to fund investments. Increasing member rates can be unpopular given the high energy burden in communities using electric cooperatives. Cooperative members already pay more for energy than IOU customers — in 2019, average energy costs were 23 percent higher for cooperative members in 39 states.[39]

Opportunities for Electric Cooperatives to Provide Energy Equity and Justice

With a move toward what Alexandra Klass (Member Scholar of the Center for Progressive Reform and James G. Degnan Professor of Law at the University of Michigan Law School) and Dr. Gabe Chan (Associate Professor at the University of Minnesota) call "Cooperative Clean Energy," cooperatives could contribute to nationwide decarbonization in an equitable way.[40] [41]

Under the model, cooperatives can embrace their guiding principles as self-regulating and self-governing entities to promote energy equity and democracy while also advancing a clean energy transition.[42] One component of Cooperative Clean Energy is "bolstering support for internal governance that represents all cooperative members equitably."[43]

Grassroots advocacy efforts of some southeastern cooperatives are an example of member-led efforts to "promote participation, equity, and racial diversity" in cooperative governance to advocate — both internally and externally — for a clean energy transition and member accountability."[44] Southeastern cooperatives serve a high percentage of Black members but have a very low percentage of Black board members, which is misaligned with cooperative guiding principles of open, accessible, and inclusive membership. Groups like the New Economy Coalition, We Own It, Partnership for Southern Equity, and the Advancing Equity and Opportunity Collaborative all work to improve community representation on electric cooperative boards, increase member engagement for a clean energy transition, and organize cooperative members into advocating for democratic — and more socially and racially just — clean energy systems.[45]

Organizations across the Southeast ranked regional cooperatives in their Southeast Electric Co-op Scorecard on energy efficiency markers, their transition to renewable energy, governance structures, and efforts to minimize energy burden for their low-income members.[46] While North Carolina cooperatives holistically rank as "missing the mark" with a score of 24 out of 100, one cooperative, Roanoke Electric, was noted for some of its improvements.[47]

Roanoke Electric is a leader in democratic, social, and environmental reforms within the cooperative space. The cooperative has socially inclusive programs like a Black farmer fund and energy efficiency upgrades for low-income customers.[48] The energy efficiency upgrade program — or Pay as You Save model — helps credit-constrained members upgrade without any debt.[49]

Distribution cooperatives can also advocate for cleaner energy resources by applying economic pressure on suppliers, in some cases leaving their suppliers entirely if contracts are no longer in their best interest. But longstanding contracts with G&Ts have kept some distribution cooperatives from negotiating lower costs or pursuing renewable energy alternatives, including generating their own

renewable power. About 65 to 70 percent of energy comes from "all-requirements" contracts that lock in a rate for multiple decades, and often a rate that is no longer the lowest cost given the decline in renewable energy prices.[50]

In New Mexico and Colorado, some cooperatives have demanded more access to renewable energy resources and generally more say in the procurement process by completely leaving their supplier, the Tri-State Generation and Transmission Association. Kit-Carson, Delta-Montrose Electric, United Power, and La Plata Electric Association each paid millions of dollars in exit fees to leave the Tri-State, citing the slow pace of decarbonization, reliance on coal, and desire from members to have more energy independence and localized solutions.[51] Kit-Carson cooperative, for example, now gets 60 percent of its energy from renewables, with a goal of reaching 100 percent.[52]

While these distribution cooperatives left and entered into other contracts, the impact was also such that Tri-State Generation increased its renewable energy goals, adding 1 gigawatt of wind and solar and closing its remaining coal-fired plants by 2030.[53] Distribution cooperatives, then, can leverage their buying power and influence to advocate for more renewable energy resources.

Electric cooperatives also have the advantage of a nonprofit structure that can improve renewable energy investment if federal funding is adequately tapped into. As nonprofits, cooperatives can often benefit from federal funding that for-profit entities cannot. A study from UC Berkeley, for example, demonstrated that the Inflation Reduction Act's (IRA) Empowering Rural America program (New ERA) would have helped co-ops secure enough renewable energy resources to retire their entire coal capacity by 2032.[54] [55] The direct pay for nonprofit entities like cooperatives would have cut carbon emissions by 80 to 90 percent and reduced electricity costs by 10 to 20 percent compared to 2021 levels.[56] In total, the funding would have reduced greenhouse gas emissions by 127 million tons.[57]

Unfortunately, only 43 cooperatives received portions of the $9.7 billion in ERA funding. Many other cooperatives have had funds frozen by the second Trump administration or are no longer eligible to receive these investments that would have reduced pollution and upgraded the power grid in rural communities.

Other funding sources under the IRA have helped cooperatives transition to renewable resources. The Powering Clean Affordable Energy program (PACE), with 60 percent loan forgiveness for clean energy projects, and the Rural Energy for America program (REA), have provided billions in investments for agricultural renewable energy projects. The Midwest Electric Cooperative Corporation, La Plata Electric Association, and Trico Electric Cooperative received millions from PACE to build their own solar generation and battery storage projects — capital-intensive projects that will allow the respective utilities to become more energy independent, less reliant on fossil fuel resources from their distributor, and better able to support resilient, local community investments.[58]

Some PACE and REA awardees unfortunately experienced fund freezes, and in some cases outright contract cancellations, under the Trump administration in 2025.[59] Still, cooperatives and the communities they serve should continue to advocate for this type of subsidized funding to help facilitate cooperatives' clean energy transition.[60]

These examples from the IRA are bittersweet, and though they may represent *current* failures or backslides, they still represent opportunities unique to electric cooperatives when supported by a competent and functional government. They are presented as arguments in favor of building the infrastructure communities will need to have at the ready when we have a government that is willing to adequately support them.

Regulatory Challenges and Opportunities for Electric Cooperatives

For electric cooperatives, the landscape can be complex and lax around state decarbonization mandates and general regulation. Until 2016, this left cooperatives with minimal bargaining power to choose their energy sources. These combined regulatory challenges have complicated a just transition for electric cooperatives.

Cooperatives are self-regulating, meaning they are not subject to the same rate regulation or clean energy mandates as IOUs are. Though states retain authority to regulate cooperative rates and energy resources, they largely do not do so.[61] For example, 30 states have decarbonization mandates, but most are lenient or do not impose the requirements on cooperatives.[62] This leaves cooperatives to voluntarily adopt decarbonization goals; fortunately, due to member-owner demand, this is a growing phenomenon.[63]

While the transition to renewable energy increased across cooperatives from 17 percent of generation in 2016 to 22 percent in 2021, methane gas generation has increased to 29 percent from 26 percent over the same period, suggesting a gap.[64]

Because of their cooperative governance structures and lack of investors to collect profits, there is less incentive for cooperatives to need stringent economic regulation. Consequently, cooperatives are also largely exempt from federal and state economic regulations such as customer rate regulations. Cooperatives in 23 states are regulated by public service commissions (PSCs), while eight G&Ts are under Federal Energy Regulatory Commission (FERC) rate regulation.[65] Only cooperatives that are engaged in wholesale markets or cross-state commerce are subject to FERC ratemaking oversight. In other states, cooperatives set rates through a board member approval process.[66]

Cooperatives also have distinct transmission regulatory exemptions under FERC that can either be limiting or collaborative, depending on perspective. For example, in 2024 the National Rural Electric Cooperative Association (NRECA) and the American Public Power Association (APPA) pushed back on the Energy Permitting Reform Act transmission provision, which called for mandatory interregional planning.[67] NRECA and APPA argued that this imposed FERC jurisdiction over typically exempt transmission planning regions. While some cooperatives and municipal utilities have already trended toward regional transmission planning in tandem with IOUs, others may reject this, as it may infringe on their self-regulation.[68]

On a positive note, in 2016, FERC issued an important ruling that reduced regulatory hurdles to cooperative clean energy procurement. The ruling enabled cooperatives to expand beyond the 5 percent self-generation limit for local and renewable energy resources.[69] The rule enabled

cooperatives to sign power-purchase agreements with independent power producers despite restrictive contracts with their respective G&Ts.

In particular, the ruling allows cooperatives to embrace distributed energy resources, particularly community solar, especially as many of these renewable energy sources are cost-competitive, if not less expensive, than other wholesale power sources.[70] Cooperatives have been able to leverage these declining renewable energy costs to either procure more independent renewable energy resources, negotiate/pressure their G&T to procure more renewable resources, or leave their contracts entirely.[71]

Conclusion

Electric cooperatives provide significant opportunities to promote an equitable and just clean energy transition. With their legacies as instruments of investment in rural communities and current servicing of energy-burdened communities, cooperatives are well positioned to boost rural communities into a clean energy future.

By embracing their core cooperative principles, cooperatives can overcome unequal representation in cooperative boards and engage their membership in democratic decision-making. This democratic decision-making, in turn, can promote a faster and more equitable clean energy transition.

Though cooperatives are largely self-regulating, and often not under the purview of state decarbonization laws, cooperatives can meet the challenge of climate change voluntarily. Especially as federal regulations have loosened since 2016, cooperatives are even better positioned to embrace a clean energy future.

Even as federal funding has been reduced, communities with electric cooperatives should engage in local organizing efforts within their cooperatives to advocate for clean energy procurement from the inside. Cooperatives can also pressure their G&Ts to more expeditiously adopt clean energy resources, and they can also advocate for federal subsidies to offset renewable energy infrastructure costs once government returns to more adequately and responsibly addressing community needs.

Endnotes

[1] National Aeronautics and Space Administration, Evidence (September 2025) Evidence - NASA Science.
[2] Ariel Mobius, Climate Portal, Ask MIT Climate, How do greenhouse gases trap heat in the atmosphere? (February 2021) How do greenhouse gases trap heat in the atmosphere? | MIT Climate Portal.
[3] Where greenhouse gases come from - U.S. Energy Information Administration (EIA).
[4] U.S. Energy Information Administration, Energy and the environment explained
Where greenhouse gases come from (June 2024) Air pollution and its impact on cancer incidence, cancer care and cancer outcomes - PMC.
[5] United States Environmental Protection Agency, Climate Change Indicators: Weather and Climate (March 2025) Climate Change Indicators: Weather and Climate | US EPA.
[6] Meg Jones, World Economic Forum, Nature and Biodiversity (June 2025) Scientists expect global heating to exceed 1.5°C, and other nature and climate stories you need to read this week.
[7] Planet's first catastrophic climate tipping point reached, report says, with coral reefs facing 'widespread dieback'.
[8] Social Vulnerability Report | US EPA.
[9] Goldsmith, L., Raditz, V., & Méndez, M. (2022). Queer and present danger: understanding the disparate impacts of disasters on LGBTQ+ communities. Disasters, 46(4), 946–973. Queer and present danger: understanding the disparate impacts of disasters on LGBTQ+ communities - Goldsmith.
[10] International Panel on Climate Change, Climate change widespread, rapid, and intensifying – IPCC (August 2021) Climate change widespread, rapid, and intensifying – IPCC.
[11] United States Environmental Protection Agency, Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts (2021) Social Vulnerability Report | US EPA.
[12] Global electricity demand to keep growing robustly through 2026 despite economic headwinds - News - IEA.
[13] Congressional Budget Office, Emissions of Carbon Dioxide in the Electric Power Sector (December 20222) Emissions of Carbon Dioxide in the Electric Power Sector | Congressional Budget Office.
[14] U.S. Energy Information Administration, Energy and the environment explained
Where greenhouse gases come from (June 2024) Where greenhouse gases come from - U.S. Energy Information Administration (EIA).
[15] Center for Climate and Energy Solutions, U.S. Emissions (September 2025) US Greenhouse Gas Emissions by Gas and Sector, 2021.
[16] What we know about energy use at U.S. data centers amid the AI boom.
[17] *Id.*
[18] Data center emissions probably 662% higher than big tech claims. Can it keep up the ruse? | Technology | The Guardian.
[19] N. Boccard, Economic Implications of Wind Power Intermittency, Encyclopedia of Energy, Natural Resource, and Environmental Economics, Elsevier (last visited September 12, 2025) https://doi.org/10.1016/B978-0-12-375067-9.00100-5.
[20] A new era for rural electric cooperatives: New clean energy investments, supported by federal incentives, will reduce rates, emissions, and reliance on outside power - ScienceDirect.
[21] Phadke, Amol, Nikit Abhyankar, Jessica Kersey, Taylor McNair, Umed Paliwal et al (2021). 2035 Report 2.0: Plummeting Costs and Dramatic Improvements in Batteries Can Accelerate Our Clean Transportation Future, Goldman School of Public Policy, University of California Berkeley.
[22] Sophie Loeb, Advancing a Clean, Equitable Energy Transition through Alternatives to Investor-Owned Utilities, Center for Progressive Reform (November 2025) https://progressivereform.org/publications/advancing-clean-equitable-energy-transition-through-alternatives-investor-owned-utilities-policy-brief/.

[23] *Id.*
[24] *Id.*
[25] Shelley Welton, New York University Law Review, Public Energy, Vol. 92:267 (April 2017) PUBLIC ENERGY
[26] History - America's Electric Cooperatives.
[27] A Light Went On: New Deal Rural Electrification Act.
[28] History - America's Electric Cooperatives.
[29] Electrifying Rural America | Richmond Fed.
[30] Understanding the Seven Cooperative Principles - America's Electric Cooperatives.
[31] National Rural Electric Cooperative Association, Electric Cooperatives and Persistent Poverty Counties (June 2024) Electric Cooperatives and Persistent Poverty Counties.
[32] Energy Democracy Y'all, Southeast Electric Co-op Scorecards (last visited September 9, 2025) Southeast Electric Co-op Scorecards | Energy Democracy Y'all!
[33] Report: Re-Membering the Electric Cooperative | Energy Democracy.
[34] Jeff St. John, Canary Media, How $7.3B will help rural co-ops build clean power—and close coal plants (September 2024) How $7.3B will help rural co-ops build clean power—and close coal plants.
[35] *Id.*
[36] Alexandra Klass and Gabriel Chan, North Carolina Law Review, Cooperative Clean Energy 100 N.C. L. REV. 1 (2021) COOPERATIVE CLEAN ENERGY*.
[37] Report: Re-Member-ing the Electric Cooperative | Energy Democracy.
[38] *Id.*
[39] Generation and transformation: Bringing cooperative G&Ts into the clean energy future | Utility Dive.
[40] John Farrell, Institute for Local Self-Reliance, Why Aren't Rural Electric Cooperatives Champions of Local Clean Power? (August 2014) Why Aren't Rural Electric Cooperatives Champions of Local Clean Power?
[41] Alexandra Klass and Gabriel Chan, North Carolina Law Review, Cooperative Clean Energy 100 N.C. L. REV. 1 (2021) COOPERATIVE CLEAN ENERGY*.
[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] *Id.*
[46] Southeast Electric Co-op Scorecards | Energy Democracy Y'all!
[47] *Id.*
[48] Roanoke Cooperative, Clean Energy Solutions (last visited September 9, 2025) Roanoke Cooperative.
[49] State scorecards | Energy Democracy Y'all!
[50] Report: Re-Member-ing the Electric Cooperative | Energy Democracy.
[51] Colorado cooperative reaches $136.5M agreement to exit Tri-State service | Utility Dive.
[52] Will Kit Carson show the way in green hydrogen, too? - Big Pivots.
[53] Colorado cooperative reaches $136.5M agreement to exit Tri-State service | Utility Dive.
[54] Jeff St. John, Canary Media, How $7.3B will help rural co-ops build clean power—and close coal plants (September 2024) How $7.3B will help rural co-ops build clean power—and close coal plants.
[55] Nikit Abhyankar, Umed Paliwal, Michael O'Boyle, Michelle Solomon, Jeremy Fisher, Amol Phadke, A new era for rural electric cooperatives: New clean energy investments, supported by federal incentives, will reduce rates, emissions, and reliance on outside power, The Electricity Journal (2023) https://doi.org/10.1016/j.tej.2023.107334.
[56] *Id.*
[57] A new era for rural electric cooperatives: New clean energy investments, supported by federal incentives, will reduce rates, emissions, and reliance on outside power - ScienceDirect.
[58] Powering Affordable Clean Energy in Rural Areas: Showcasing Three Rural Cooperatives | Article | EESI.

[59] Rural Businesses, Farmers Lose While USDA's Rural Energy Program is Frozen - National Sustainable Agriculture Coalition.
[60] U.S. Department of Agriculture, New ERA Project Announcements (last visited September 9, 2025)New ERA Project Announcements | Rural Development.
[61] Alexandra Klass and Gabriel Chan, North Carolina Law Review, Cooperative Clean Energy 100 N.C. L. REV. 1 (2021) COOPERATIVE CLEAN ENERGY*.
[62] *Id*.
[63] Power to the People: Organizing Rural Electric Cooperatives | The Forge.
[64] A New Era for Rural Electric Cooperatives.
[65] National Rural Electric Cooperative Association.
[66] Taking the power back: How the publicly-owned utility model could impact nationwide transmission buildout - Niskanen Center.
[67] *Id*.
[68] Fostering Collaboration Would Help Build Needed Transmission.
[69] New Ruling Opens Up 400 GW Renewables Market - RMI.
[70] *Id*.
[71] 'Local Control, Cheaper Prices, and Flexibility:' Rural Electric Distribution Co-op Goes Independent | The Daily Yonder.