SERIES

The Future of the US Grid

The Tri-Crisis and the Potential of a Federal Grid Authority

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The power grid is the backbone of everyday life. It connects homes, hospitals, schools, and more to electricity. Yet, after decades of underinvestment, the US transmission system is reaching the limits of its capacity in a moment when the needs of the grid are shifting rapidly—creating a tri-crisis.

First, extreme weather is hitting the grid. Winds have ripped through wires and fires out West have incinerated miles of transmission.[1] Second, to decarbonize the power sector, renewables need to come online, but there are massive backlogs to get the new projects online. In the Midwest, grid operators curtailed an average of 800 MW of wind generation per hour in 2023, due to inadequate transmission connections and storage.[2] Third, after decades of flat demand, the US is experiencing load growth from a combination of electrification for decarbonization and the buildout of AI data centers.

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[1] Climate Central, "Weather-Related Power Outages Rising," Climate Matters, April 24, 2024, https://www.climatecentral.org/climate-matters/weather-related-power-outages-rising.

[2] US Energy Information Administration, "Why Are Midwest Grid Operators Turning Away Wind Power?" Today in Energy, June 26, 2024, https://www.eia.gov/todayinenergy/detail.php?id=62406.

The combination of these three interconnected crises is dramatically increasing electricity costs and lowering reliability all across the country. For instance, PJM, the nation's largest regional transmission organization that covers the Mid-Atlantic and parts of the Midwest, reported that transmission constraints inflated energy costs by $6 billion in the first half of 2026.[3]

The US needs to build transmission infrastructure at a dramatically higher pace, scale, and geographic scope to ensure the power system is resilient, affordable, and decarbonized.

To date, grid planning has been fragmented and inconsistent—varying widely across the country.

This will require fundamental structural changes to how the US builds and plans the grid to meet the needs of the 21st century. To date, grid planning has been fragmented and inconsistent—varying widely across the country. "There is no single entity in charge of organizing the grid, the way the federal government oversaw the development of the Interstate Highway System in the 1950s and '60s," The New York Times noted in 2023, continuing, "the electric system was cobbled together over a century by thousands of independent utilities building smaller-scale grids to carry power from large coal, nuclear or gas plants to nearby customers."[4]

The bottom-up nature of the US's electrification history is indicative of how the system is planned and governed today. Energy planning ranges dramatically by state. In states like Georgia, utilities are fully vertically integrated, meaning that one utility plans, owns, and operates all the electricity assets for their territory from the gas plant or solar array down to the line that connects electricity to a household. On the other extreme, there is Texas, with the most deregulated electricity system in the United States. The Electric Reliability Council of Texas (ERCOT) acts as an independent service operator, managing both competitive wholesale and retail energy markets.[5] This means that utilities in the region only provide the physical grid infrastructure and attendant operating support, while

[3] Tim McLaughlin, "Largest US Grid's Transmission Constraint Costs Surge to $6 Billion in 2026," Reuters, August 21, 2026, https://www.reuters.com/business/energy/largest-us-grids-transmission-constraint-costs-surge-6-billion-2026-2026-08-21/.

[4] Nadja Popovich and Brad Plumer, "Why the U.S. Electric Grid Isn't Ready for the Energy Transition," *New York Times*, June 12, 2023, https://www.nytimes.com/interactive/2023/06/12/climate/us-electric-grid-energy-transition.html.

[5] Federal Energy Regulatory Commission, "ERCOT," last updated January 27, 2025, accessed October 27, 2026, https://www.ferc.gov/industries-data/electric/electric-power-markets/ercot.

ERCOT decides what, how, and when energy is deployed.[6] Much of grid planning has devolved to the state level, which has made it hard to comprehensively tackle the existential shifts to the sector that the 21st century requires.

The Biden administration passed the Inflation Reduction Act (IRA) to accelerate the clean energy transformation. Under the IRA, public spending was primarily employed to encourage private investment in green infrastructure.[7] The bill extended and expanded helpful financing mechanisms, but, too often, new projects did not make it to completion. Some energy advocates argue that the biggest stumbling block to unleashing massive clean energy projects from the IRA was, and continues to be, permitting snags.[8]

Building out a national, public grid would advance multiple objectives, such as more affordable electricity, greater system reliability and resilience, and an accelerated phaseout of fossil fuels.

We, the authors of this series, take a more comprehensive approach to diagnosing the broken grid. Clean energy projects have been stymied by supply chain snarls, interest rate increases, ineffective and uncoordinated grid planning, community pushback, and a privately controlled electricity transmission system that is managed at cross-purposes with public objectives like affordability and decarbonization. The repeal of the Inflation Reduction Act sets a new challenge for policymaking post-Trump: how do we accelerate investment in clean power generation in a popular and politically durable fashion?

We need a Federal Grid Authority to build the grid of the future. Federal coordination and public investment in transmission is critical. Building out a national, public grid would advance multiple objectives, such as more affordable electricity, greater system reliability and resilience, and an accelerated phaseout of fossil fuels. This proposal draws on New Deal precedents and pairs national planning and public investment to deliver near- and long-term material benefits to ordinary people.

It is essential to develop a policy agenda for progressive grid governance that can meet the needs of working people suffering from the broader

[6] Electric Reliability Council of Texas, "About ERCOT," accessed October 27, 2026, https://www.ercot.com/about.

[7] Patrick Bigger et al., "Stop Greed, Build Green: A Working Class Climate Strategy," Climate and Community Institute, April 15, 2026, https://stopgreedbuildgreen.climateandcommunity.org/posts/whitepaper/

[8] Seaver Wang, "Permitting Reform Unlocks More Clean Energy Than Trump Blocks," The Breakthrough Institute, October 8, 2026, https://thebreakthrough.org/issues/energy/permitting-reform-unlocks-more-clean-energy-than-trump-blocks.

crises of affordability and escalating climate disasters. This essay introduces a joint series on the Future of the US Grid by Climate and Community Institute, Open Markets Institute, and Common Wealth. This series will probe the central problems of the US grid today by key leaders in the field and explore why and how building the decarbonized, resilient, and affordable electricity system of the future requires a large-scale, comprehensive, planned industrial policy approach to infrastructure buildout through public direct investment and coordination at multiple scales.

This brief introduces the tri-crisis of the grid and the need for a public planning approach to resolve it. The wider series will delve deeper into the problems with the existing transmission system and proposals for how to begin to resolve them. We will conclude the series with a policy framework for a Federal Grid Authority and an action plan based on the learnings from the series.

The tri-crisis: pressures on the grid

The US grid system is experiencing three massive pressures: increasing extreme weather, more diverse and dynamic clean energy sources trying to plug into the grid, and new major demand growth from both electrification and AI development. Each of these pressures is likely to increase in the coming years. Without structural overhauls to how the grid operates, these strains will dramatically increase costs and diminish reliability for this fundamental service. Electricity is an essential input in modern society, lighting public spaces, powering industry and transportation, and keeping homes safe, comfortable, and stocked with fresh foods. The price of electricity affects the cost of living and shapes potential inflation dynamics and growth prospects throughout the entire economy.

Extreme weather

In 2024, the US experienced 27 extreme weather events that resulted in over $1 billion in damages.[9] This included a wildfire in New Mexico, multiple

[9] 2024 was the last year for which data can be provided: "In alignment with evolving priorities, statutory mandates, and staffing changes, NOAA's National Centers for Environmental Information (NCEI) will no longer be updating the Billion Dollar Weather and Climate Disasters product." NOAA National Centers for Environmental Information (NCEI), "U.S. Billion-Dollar Weather and Climate Disasters," 2025, accessed October 28, 2026, https://www.ncei.noaa.gov/access/billions/.

hurricanes across the East Coast, and a multi-regional heat wave. All of these extreme events have major impacts on the grid system. For instance, during Hurricane Helene in 2024, the strong winds, historic flooding, fallen trees, and debris knocked out over 5,000 utility poles and damaged over 500 transformers for utility Georgia Power alone.[10] This left hundreds of thousands of households and businesses without access to vital electricity, often for days at a time.

Heat waves are also making resource adequacy complicated and leading to an increase of blackouts and brownouts across the US. When a heat wave hits a region, buildings require far more air conditioning capacity to keep temperatures livable, if not comfortable.[11] At the same time, heat strains the grid. Transmission grid efficiency drops and wind turbines lose 25 percent of their efficiency.[12] According to the North American Electricity Reliability Commission (NERC), the majority of North American regions are going to run into resource shortages during extreme weather, especially heat waves.[13] The effects of losing power during heat waves can be decimating. The Federation of American Scientists points out that a concurrent heat wave and blackout in Phoenix, Arizona could put 1 million people at risk of heat-related illness, potentially overloading hospitals with over 50 percent of the population needing medical attention.[14]

In cases like wildfires, not only can transmission and grid infrastructure be harmed by fire, but it can also help spark them. Between 2016 through 2020 in California, the grid caused 19 percent of wildfires.[15] Most notably, the

[10] Georgia Power, "Georgia Power Releases Key Estimated Damage Statistics from Hurricane Helene as Restoration Progress Continues," press release, September 29, 2024, https://www.georgiapower.com/news-hub/press-releases/georgia-power-releases-key-estimated-damage-statistics-from-helene.html.

[11] Autumn Burton and Grace Wickerson, "Economic Impacts of Extreme Heat: Energy," Federation of American Scientists, April 8, 2025, https://fas.org/publication/economic-impacts-of-extreme-heat-energy/.

[12] JoAnna Wendel, "Extreme Heat, Hurricanes, Wildfires: How Summer's Extremes Disrupt the Power Grid," Pacific Northwest National Laboratory, news release, July 29, 2024, https://www.pnnl.gov/news-media/extreme-heat-hurricanes-wildfires-how-summers-extremes-disrupt-power-grid#:~:text=Heatwaves%3A%20Less%20efficient%20power%20flow%2C%20more%20power%20demand&text=Natural%20gas%20turbines%2C%20for%20example,so%20does%20the%20water%20temperature.

[13] North American Electric Reliability Corporation, "2023 Long-Term Reliability Assessment," December 2023, https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2023.pdf.

[14] Burton and Wickerson, "Economic Impacts of Extreme Heat: Energy."

[15] California State Auditor, *Electrical System Safety: California's Oversight of the Efforts by Investor-Owned Utilities to Mitigate the Risk of Wildfires Needs Improvement*, Report 2021-117 (Sacramento: California State Auditor, 2022), https://information.auditor.ca.gov/pdfs/reports/2021-117.pdf.

private utility PG&E was found to have started multiple devastating fires due to their disinvestment in transmission infrastructure.[16] The resulting fires destroyed or damaged thousands of homes and killed more than 100 people. As The New York Times put it, "PG&E ignored fire risks in favor of profits."[17] The average age of PG&E's transmission towers was 68 years old, with the oldest towers dating back to 1910.[18] The utility had deferred maintenance or investments on their transmission system, even though they knew the risks of its aging infrastructure.

Regardless of global attempts to decarbonize, a certain amount of extreme weather is now baked into the future. This means that the grid has to be prepared to weather these new storms as well as limit the potential to spark additional crises. This will require a far more dynamic grid—and grid operators—that can respond to real-time condition changes, manage increasing risks, and plan for quick recovery. The prioritization of shareholder returns has, in cases like PG&E, superseded the increasing crises of extreme weather and called into question the planning and resilience capabilities of such utility management.

Renewables supply

Transitioning the grid to clean energy sources is critical to decarbonizing the economy, and in turn to helping stem additional extreme weather conditions. Clean electricity has risen over the past decade. According to Ember Energy, and based on US Energy Information Administration (EIA) data, in March 2025, clean power sources generated about half (50.8 percent) of US electricity for the first time ever.[19] This is a dramatic rise from a decade before when sources like solar and wind made up less than 10 percent of generation. While impressive, the transition still has been far too piecemeal and slow, a problem that can be attributed to industry and

[16] Olga R. Rodriguez, "PG&E to Pay $55 Million for Two Massive California Wildfires," *PBS NewsHour*, April 11, 2022, https://www.pbs.org/newshour/nation/pge-to-pay-55-million-for-two-massive-california-wildfires.

[17] Ivan Penn, Peter Eavis, and James Glanz, "How PG&E Ignored Fire Risks in Favor of Profits," *New York Times*, March 18, 2019, https://www.nytimes.com/interactive/2019/03/18/business/pge-california-wildfires.html.

[18] Dan Brekke, "Report: PG%E Knew High-Voltage Lines Posed Fire Danger, But Put Off Repairs," *KQED*, July 10, 2019, https://www.kqed.org/news/11760156/report-pge-knew-about-extensive-power-line-problems-but-delayed-repairs-for-years#:~:text=The%20oldest%20towers%20in%20the%20network%20were,line%20was%20among%20PG&E's%20oldest%2C%20having%20gone.

[19] Ember, "Fossil Fuels Fall Below 50% of US Electricity for the First Month on Record," April 4, 2025, https://ember-energy.org/latest-updates/fossil-fuels-fall-below-50-of-us-electricity-for-the-first-month-on-record/

political opposition, unfair market practices, broken planning systems, and aging physical infrastructure. In particular, the current grid setup has created major barriers to clean energy penetration.

The current grid is not configured to manage the realities of renewable energy. When it was created, this fossil fuel–based system was heavily centralized and reliant on relatively few large power plants. These plants required high upfront capital to develop, and then could increase and decrease their output to meet the demand needs on the grid. While power plants could be geolocated with coal, oil, or gas extraction, these inputs could also be moved by pipelines, trucks, or rail from the plants to demand hubs.

The physical arrangement of the grid no longer fits the realities of an increasingly renewable system.

Renewables are far more dynamic with different spatial considerations. Solar and wind can be more intermittent, requiring a different approach to supply and demand, as well as integrating other technologies like storage capacity that were less necessary in the fossil fuel supply. Furthermore, renewable assets may require more land—or specific types of land optimized for the technology that may be located far from cities and other load centers.[20] For instance, offshore wind has to be located on a coast and utility-scale solar requires more physical space than a gas power plant. The physical arrangement of the grid no longer fits the realities of an increasingly renewable system.

Transmission lines need to be built to new places and power sector planning has to consider intermittency and storage—which means a very different system optimized for very different technologies across regions. While utilities are usually eager to build transmission within their own service territory, building interregional lines opens up competition to build and leads to many utilities trying to block these long-haul transmission investments.[21] A poor transmission planning system in which interregional planning is not the norm has stymied effective renewable integration.[22]

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[20] Samantha Gross, "Renewables, Land Use, and Local Opposition in the United States," The Brookings Institution, January 2020, https://www.brookings.edu/wp-content/uploads/2020/01/FP_20200113_renewables_land_use_local_opposition_gross.pdf.

[21] Johanna Bozuwa and Dustin Mulvaney, "A Progressive Take on Permitting Reform: Principles and Policies to Unleash a Faster, More Equitable Green Transition," Roosevelt Institute and Climate and Community Project, August 2023, https://rooseveltinstitute.org/wp-content/uploads/2023/08/RI_Progressive_Permitting_Report_202308.pdf

[22] Bozuwa and Mulvaney, "A Progressive Take on Permitting Reform."

The different geographic conditions of clean energy technologies, and the urgent need to get them online, can also affect siting. Siting clean energy and transmission requires a complex combination of local, state, and federal permits to be executed.[23] Building clean energy and transmission infrastructure has run into permitting slowdowns for a number of reasons, including a lack of staff capacity and lack of interagency and interregional coordination.[24] Some projects have also run into community opposition.[25] Local opposition to transmission projects is often driven by mixed motives, including aesthetic, biodiversity, and economic grounds.[26] In some cases, a feeling of injustice can also be at play—this can be procedural or distributional.[27] For instance, one community bears the costs of a large, aesthetically displeasing transmission facility while the project's benefits flow principally to private developers and faraway communities that will obtain lower-cost, more reliable, or cleaner power.

Moreover, the way that new energy projects get online is broken and slows clean electricity deployment dramatically. Right now, grid operators evaluate interconnection requests project-by-project, assessing the cost for each new entrant.[28] With new commitments to renewable energy, requests to interconnect projects have soared, and the grid operators have failed to adapt their systems to the new energy economy. This has created frustrating slowdowns for renewable energy companies and uneven cost distributions for grid upgrades that has led to speculative actions and/or a graveyard of renewables projects that could not make it through the

[23] Shawn Enterline, Andrew Valainis, and Ben Hoen, "Laws in Order: An Inventory of State Renewable Energy Siting Policies," Lawrence Berkeley National Laboratory, Energy Markets and Planning, June 2024, https://emp.lbl.gov/publications/laws-order-inventory-state-renewable.

[24] Enterline, Valaines, and Hoen, "Laws in Order"; Jamie Pleune, "Playing the Long Game: Expediting Permitting Without Compromising Protections," *Environmental Law Reporter* 52 (2022): 10893, University of Utah College of Law Research Paper, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4220268.

[25] Brad Tyer, "Montana Transmission Lines Draw Opposition from All Sides," *High Country News*, March 18, 2011, https://www.hcn.org/issues/43-4/montana-transmission-lines-draw-opposition-from-all-sides/.

[26] Nicholas L. Cain and Hal T. Nelson, "What Drives Opposition to High-Voltage Transmission Lines?" *Land Use Policy 33* (2013): 204–13, https://energymaps.org/~/doc/Nelson-2013-What-Drives-Opposition.pdf. ; Jason Plautz, "Western transmission line breaks ground after 18-year wait," E&E News, June 21, 2023, https://www.eenews.net/articles/western-transmission-line-breaks-ground-after-18-year-wait/.

[27] David J. Hess, Rachel G. McKane, and Caroline Pietzryk, "End of the Line: Environmental Justice, Energy Justice, and Opposition to Power Lines," *Environmental Politics* 31, no. 4 (2022): 663–83, https://www.tandfonline.com/doi/full/10.1080/09644016.2021.1952799#d1e124.

[28] Bozuwa and Mulvaney, "A Progressive Take on Permitting Reform."

pipeline.[29] All this increases the cost to developers, either dooming projects completely or increasing the ultimate cost of power. As of 2023, there were more renewable projects awaiting interconnection studies than the generation capacity of the entire electricity system.[30] Without a publicly planned program for transmission buildout coordinated with emerging clean generation needs, the electricity transition is likely to falter.

The energy transition has both exposed flaws in how the US plans the grid and highlighted the need to rethink how and where the grid operates. Renewables and storage are changing grid dynamics and grid managers have either failed to step up to the challenge or have effectively worked to slow the transition. Whatever the case, poor transmission planning has reached a new zenith and generated media and public interest in the grid for the first time in a long time.

The energy transition has both exposed flaws in how the US plans the grid and highlighted the need to rethink how and where the grid operates.

Demand increases

Last, the grid is experiencing massive demand growth. This comes from two particular places: electrification and AI development. From the mid-2000s to the early 2020s, the US power sector demand remained relatively flat, with increasing demand during those two decades largely offset by efficiency improvements.[31] However, since 2020, new electricity demand has markedly outpaced efficiency gains—largely due to the AI boom, new manufacturing setups, and electrification.

Electrifying the economy is a critical step toward the energy transition. Right now, the power sector accounts for 25 percent of carbon emissions in the country. The rest comes from industry, transportation, residential and commercial buildings, and agriculture.[32] With the exception of some agricultural emissions, the clearest way to decarbonize these sectors is by

[29] US Department of Energy, "Tackling High Costs and Long Delays for Clean Energy Interconnection," blog post, May 11, 2023, https://www.energy.gov/cmei/i2x/articles/tackling-high-costs-and-long-delays-clean-energy-interconnection.

[30] Joseph Rand et al., "Queued Up: 2024 Edition—Characteristics of Power Plants Seeking Transmission Interconnection as of the End of 2023," Lawrence Berkeley National Laboratory, Energy Markets and Planning, April 2024, https://emp.lbl.gov/publications/queued-2024-edition-characteristics.

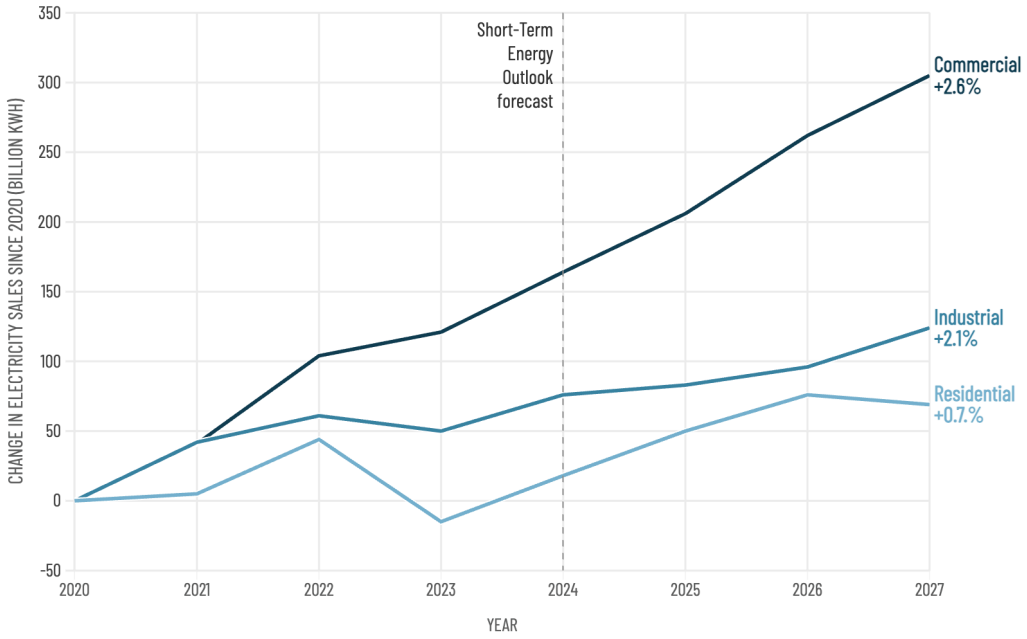
[31] US Energy Information Administration, "After More Than a Decade of Little Change, U.S. Electricity Consumption is Rising Again," Today in Energy, May 13, 2025, https://www.eia.gov/todayinenergy/detail.php?id=65264.

[32] US Environmental Protection Agency, "Sources of Greenhouse Gas Emissions," last updated June 9, 2026, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

electrifying them. For instance, getting buildings off gas or oil for heat or swapping internal combustion engine cars for electric vehicles (EVs) is the first step to being able to power them with clean sources. However, this is going to create substantial new demand pressures on the power sector. To handle the swap to EVs alone, one study expects that the US will have to invest between $75 and $125 billion in the grid.[33]

U.S. electricity sales to ultimate customers (2020–2027)

Changes in sales by sector since 2020



Note: Percentages represent average annual growth rates (2020–2027).
Source: US Energy Information Administration.[34]

Not only will adding a massive amount of the economy onto the electricity grid strain the current system, but it also makes its functionality more vital. Whereas in the past, residents may have been able to heat their homes via gas if the grid went down, when fully electrified this will not be the case. Electrifying the economy not only requires an expanded grid but also

[33] Michael Hagerty, Long Lam, and Sanem Sergici, "Electric Power Sector Investments of $75–125 Billion Needed to Support Projected 20 Million EVs by 2030, According to Brattle Economists," The Brattle Group, June 1, 2020, https://www.brattle.com/insights-events/publications/electric-power-sector-investments-of-75-125-billion-needed-to-support-projected-20-million-evs-by-2030-according-to-brattle-economists/.

[34] US Energy Information Administration, "U.S. Electricity Consumption is Rising Again."

requires a far more durable, resilient grid to ensure that people's increasing reliance on electricity is met with reliability.

The other biggest demand increases come from the new AI explosion and data center development. New AI programs or tools require a massive amount of electricity to operate, with AI powered by thousands of servers stored in data centers that need to be powered and cooled. Companies like Meta, Microsoft, Amazon, and Google are all making big bets on the potential of AI and are building out hundreds of data centers all across the US. According to a study by the Regional Plan Association, data centers could consume up to 12 percent of total electricity in the US by 2028—the equivalent of adding eight New York Cities to the grid.[35] A recent report by the Climate and Community Institute showed that AI development and extreme weather are the two major drivers of capital expenditure by utilities right now.[36]

New AI programs or tools require a massive amount of electricity to operate, with AI powered by thousands of servers stored in data centers that need to be powered and cooled.

The sudden surge in electricity demand by data centers is driving up electricity costs across the country. Utilities are building new transmission lines to interconnect these massive data centers while using old cost allocation systems that mean residential customers pay for data center expansion—while giving multi-billion dollar companies like Microsoft major discounts.[37] Bloomberg News analysis shows that prices in wholesale spot markets have gone up 267 percent for a single month compared to five years ago in places with significant data center activity like Northern Virginia, Dallas, or Silicon Valley.[38]

The demand pressures from the AI boom are also imperiling the transition to zero-carbon electricity. The explosion of power demand means that utilities are extending the life of coal plants and planning to bring more gas

[35] Kyle Mason et al., "The Rise of Data Centers in the Grid," Regional Plan Association, June 30, 2025, https://rpa.org/news/lab/the-rise-of-data-centers.

[36] Kristina Karlsson and Lucy Block, "The Black Box of Utility Capital Expenditure," Climate and Community Institute, September 15, 2026, https://stopgreedbuildgreen.climateandcommunity.org/posts/the-black-box-of-utility-capital-expenditure.

[37] Mike Jacobs, "Data Centers Are Already Increasing Your Energy Bills. We Have the Receipts.," *The Equation* (blog), Union of Concerned Scientists, September 29, 2025, https://blog.ucs.org/mike-jacobs/data-centers-are-already-increasing-your-energy-bills/.

[38] Josh Saul et al., "AI Data Centers Are Sending Power Bills Soaring," *Bloomberg*, September 29, 2025, https://www.bloomberg.com/graphics/2025-ai-data-centers-electricity-prices/?embedded-checkout=true; The CoreSite Team, "Top 10 U.S. Data Center Markets and Why They Are Hot," *Connect[ED]* (blog), CoreSite, 2026, accessed October 28, 2026, https://www.coresite.com/blog/top-10-u-s-data-center-markets-and-why-they-are-hot.

plants online to service the emerging industry.[39] For instance, Bloomberg reported recently that, due to new data centers, the power sector's greenhouse gas emissions are projected to be 42% higher in 2030 than in 2025.[40] The AI boom is also inciting community opposition writ large—anti-data center organizing has exploded in the past year.[41] The rise in anti-data center organizing could have spillover effects on clean energy and transmission development, particularly if it is seen to be in service of data centers.[42]

The tri-crisis is resolvable

The power grid's tri-crisis of increasing extreme weather, inadequate growth in clean energy supply, and massive demand expansion from electrification and AI development could, without action, severely damage the economy and people's health alike. The current system is not up to the task. Instead of a coordinated planning architecture for the grid taking the tri-crisis head on, planning remains disorganized—evidenced by, for instance, myopic interconnection policies—and misaligned—with the data center boom unleashing massive new gas buildouts.

This situation can be resolved, though, through a planned and coordinated grid strategy. With a stronger federal presence in grid planning, we could have clearer public interest goals, break through competitive loggerheads, and actively plan the future of the grid. This series of papers will explore:

- the realities of an increasingly dynamic grid from extreme weather and changing energy sources, and how shifting to a service-based model could shift energy planning paradigms;

[39] Dan McCarthy, "Chart: 96 Percent of New US Power Capacity Was Carbon-Free in 2024," *Canary Media*, January 10, 2025, https://www.canarymedia.com/articles/clean-energy/chart-96-percent-of-new-us-power-capacity-was-carbon-free-in-2024.

[40] Dara Kerr, "AI Brings Soaring Emissions for Google and Microsoft, a Major Contributor to Climate Change," NPR, July 12, 2024, https://www.npr.org/2024/07/12/g-s1-9545/ai-brings-soaring-emissions-for-google-and-microsoft-a-major-contributor-to-climate-change. ; Erin Roston and Olivia Raimonde, "New US Data Centers Projected to Emit More Carbon Than All of Mexico," *Bloomberg News*, October 28, 2026, https://www.bloomberg.com/news/articles/2026-10-28/us-data-center-buildout-risks-erasing-years-of-climate-progress.

[41] "Data Center Opposition Report," accessed October 28, 2026, https://datacenteropposition.com/.

[42] Jael Holzman, "Why Data Centers Are Turning People Against Renewables," Heatmap Plus, October 23, 2026, https://heatmap.news/plus/the-fight/spotlight/data-centers-renewables-opposition.

- emerging trends in demand growth, particularly with data center buildouts, and the role of government in actively determining the composition of demand in an energy-constrained context;
- community and labor considerations to ensure that transmission and clean energy technologies are developed with a high-roads approach that increase infrastructure acceptance;
- environmental, cultural, and climate regulations and how to create a watershed approach that revitalizes the federal government's role in siting and planning the clean energy buildout;
- the current transmission planning shortfalls—from deregulated to vertically integrated—and a pathway to more nationally coordinated transmission planning from a public benefit perspective; and
- existing and historic examples of federal energy development capacity by power marketing administrations and state agencies such as the Bonneville Power Administration and New York Power Authority.

We will end the series with a proposal for a Federal Grid Authority that stitches together the learnings from the papers and puts forward a comprehensive approach to the grid that takes on the tri-crisis head-on via a new Federal Grid Authority that can coordinate, plan, and build the grid in order to accelerate decarbonization and lower electricity prices across the United States.

The Climate and Community Institute is a progressive climate and economy think tank. We fight for a transformational agenda that will rapidly and equitably decarbonize the economy by focusing on material benefits for working people.

The Open Markets Institute works to help people relearn how to use competition policy to build stronger democracies, more just and equitable societies, more innovative and sustainable economies, and a more secure and peaceful world.

Common Wealth is a think tank designing ownership models for a democratic and sustainable economy.