



Tracking the Appalachian Impacts:

What's on the Line as Federal Funding Flatlines

By Diana Polson, Rike Rothenstein and Dana Kuhnline | Released: December 18, 2025

Executive Summary

The Ohio River Valley region of Appalachia, better known as coal country, benefited greatly from federal clean energy investments via the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). The Biden administration prioritized coal country and other energy communities for investment in order to modernize the region's energy infrastructure while transforming the region into a hub for cleantech manufacturing. In April 2025, Reimagine Appalachia and the Keystone Research Center released a report called "If You Fund It, They Will Come: How Federal Clean Energy and Manufacturing Funds Spurred Private Spending, Doubling Appalachia's Climate Infrastructure Investment in Coal Country." In that report, we found that federal legislation triggered an investment surge in our four-state Appalachian region, namely Kentucky, Ohio, Pennsylvania, and West Virginia, with more than \$23 billion in actual investment between 2022 and 2024, including both public and private funding for the manufacturing and deployment of greenhouse-gas reducing technologies. The report also found that even more investment (\$23.7 billion) was in the pipeline to be spent. These federal and private funds boosting our clean energy economy also brought new projects, new jobs, and a renewed hope for the region.

This report is the second in a series tracking federal climate funding, including the consequences of the Trump administration's clear intention and action to dismantle federal support for domestic cleantech manufacturing and modernizing coal country's energy infrastructure to meet the needs of the 21st century economy.¹ We discuss how cancellations of this once-in-a-generation federal investment particularly harms Appalachian communities, including four case studies of canceled and at-risk projects. We rely primarily on two data sources (the [Climate Program Portal](#) and the [Rhodium Group/MIT-CEEPR Clean Investment Monitor](#)) to get clarity on what federal funding has been announced for the region, what has been invested, what is outstanding, and what is on the chopping block. We also examine how actual investments, both public and private, have been impacted by the actions of the current administration.

¹ Reimagine Appalachia. "If You Fund It, They Will Come: How Federal Clean Energy and Manufacturing Funds Spurred Private Spending, Doubling Appalachia's Climate Infrastructure Investment in Coal Country." April 9, 2025. https://reimagineappalachia.org/wp-content/uploads/2025/04/If-You-Fund-it-They-Will-Come_04_2025.pdf.

Key Findings

From the Climate Program Portal data, we find:

- Our four-state region was awarded, via the IRA and IIJA, approximately \$19 billion in federal grant funding and \$6.1 billion in loans, which helped to fund 2,635 projects.
- The Climate Program Portal has identified more than \$2 billion in federal funds that have been confirmed canceled or proposed to be canceled in our four-state region.

While the Climate Program Portal tracks announced federal funding, including both grants and loans, the Rhodium Group & MIT/CEEPR Clean Investment Monitor tracks investments on a quarterly basis—actual expenditures, not just announced funding—federal plus private investments the federal funding leveraged. These data give us a good way to track how clean energy and manufacturing investments are changing with the shifting policy and economic landscape. We find:

- Federal climate infrastructure investments in the manufacturing and deployment of greenhouse gas-reducing technologies show a steady rise from quarter three of 2022 through quarter four of 2024. Notably, federal climate infrastructure investments began to wane in quarter one of 2025 as President Trump took office for his second term, and continued to dip in quarter two. Quarter 3 of 2025 saw an increase from quarter 2, but the overall trend for 2025 is a flat line from the previous year's transformative growth.²
- Actual quarterly clean energy investment, both public and private investment together, saw a similar trend.
 - o Clean energy and manufacturing investments reached new heights for our region in quarter three of 2024 (\$4.7 billion).
 - o Upon the election of President Trump, we see a slight dip in quarter four of 2024.
 - o Starting in quarter one of 2025, we see a significant decrease in coal country infrastructure investment (down to \$3.8 billion), an investment decline of about 15% in just one quarter.
- Job creation continues to be a key benefit of climate infrastructure investments in our region, but as the Trump administration turns away from modernizing the nation's and region's energy and manufacturing infrastructure, decreases federal funding, and establishes unpredictable tariffs instead, private investments will likely decline and projected climate infrastructure jobs in our region are at risk.
 - o Our region was set to create 92,282 jobs because of clean energy investments. Two-thirds (67%) of these jobs—that is 62,201 jobs—are still outstanding, meaning they have not yet been created, and we could lose them.

² Rhodium/MIT data tracks quarterly actual investments, while the Climate Program Portal reports announced investments (even if it hasn't been dispersed yet).

- o Rep. Brett Gurthrie's district (KY-02) leads the region in clean economy jobs because of the large investments to his district. KY-02 would have seen an estimated 13,648 jobs, but Trump administration action and the congressional actions may eliminate some of them: 5,232 have already come to the Representative's district, but 8,416 are still outstanding.
- o Also at risk are clean economy jobs in the districts of Rep. Andy Barr (KY-06) with an originally estimated increase of 6,383 jobs, Rep. David Joyce of OH-14 (5,079 jobs), and Rep. Alexander Moody of WV-02 (4,556 jobs).
- o In Pennsylvania, Rep. Glenn Thompson of PA-15 was expected to see the largest number of jobs in the state at 2,689, followed by Rep. Chris Deluzio of PA-17 with 2,541 jobs.
- o Outside of Appalachian counties, Rep. Jim Jordan has seen and will continue to see (if projects aren't canceled) significant job creation in OH-04, with 7,791 jobs, as will Bob Latta of OH-05 (5,451 jobs).
- o Both Republican and Democratic congressional districts in our region are benefiting from federal investments. Since Republican districts benefited disproportionately based on initial projections, they now face disproportionate risks of losing anticipated jobs.

Other data sources estimate the job losses moving forward, as well as potential other DOE-awarded projects at risk of being canceled. The impacts of the reconciliation bill, the so-called "One Big Beautiful Bill Act" will have particular impact on job growth. It will cause a loss of 57,000 jobs in our four-state region by 2030 and 71,000 jobs by 2035, according to projections from Energy Innovation.³

From Historic Growth to Flatline—Interpreting Key Findings in This Report

The data in this report tell a story of ongoing interest in clean energy and manufacturing development in the region. When capital became available, Appalachian communities were ready: federal support for climate infrastructure led to dramatic investment growth from 2022 to 2024. Choking off this support will hurt businesses, workers, and communities. It threatens to nip in the bud the region's best chance at economic renewal in more than half a century.

This report shows that federal and leveraged private investments had just begun expanding or creating new factories, deepening local supply chains, and leading to new clean economy jobs. In communities hard hit by the loss of manufacturing and extractive jobs in the past, these new investments provided a much-needed boost. They had begun to create a sense of optimism about the possibility of the region becoming a leader in the U.S. and global clean economy of the future, just as Appalachia led the energy and mass manufacturing sectors of the past.

³ Energy Innovation Policy and Technology LLC. "Final Analysis: Economic Impacts Of U.S. "One Big Beautiful Bill Act" Energy Provisions" July 1, 2025. <https://energyinnovation.org/report/updated-economic-impacts-of-u-s-senate-passed-one-big-beautiful-bill-act-energy-provisions/>.

The data in this report shows that the interest in sustainable development remains strong; we see a short term bump in Q3 of 2025 that is likely due to the rush to make use of clean energy tax credits that were terminated with the passage of the One Big Beautiful Bill Act (detailed in Appendix B).

The cuts in investment and derailed projects resulting from slashing federal climate infrastructure investments are not the death of the clean economy, only a national speed bump—possibly a big one, but one we will get over. The world is decarbonizing; the only question is whether the nation and our region will lead this shift and capitalize on it to make American industry more competitive. Solar and wind remain the cheapest and fastest forms of energy to build. As energy prices rise, especially with the voracious demands being placed on the nation's outdated electrical grid system by data centers, the expansion of a new energy economy becomes inevitable.

What is clearly jeopardized by the U-turn in federal policy is once-in-a-generation federal investments that targeted coal country and other energy communities, making Appalachia more attractive to private investors than it has been in decades. The Trump administration policies designed to end clean energy and manufacturing projects and eliminate future investments in coal country disproportionately hurt our region.

Federal climate infrastructure grants, loans and incentives gave the region a leg up to compete against more prosperous regions. The Biden administration's requirement of community benefit plans ensured a voice for Appalachian stakeholders to advocate for the creation of good union jobs for local workers, career pathways out of poverty, and improvements in the environment and public health. These plans would help ensure that the boost to incomes for local workers created would stay in the communities rather than get extracted by absentee corporations. Changes from the Trump administration to both end investments and to remove provisions ensuring benefits to local communities, workers and the land have flipped this once-in-a-century advantage for our region back to a status quo in which, once again, coal country gets left behind and remains in poverty.

Another loss is the ability to scale up affordable energy to meet historic growing energy needs, which comes alongside the need to scale up clean energy at the pace required by the increasingly urgent timeline of climate change. The Trump administration's attempts to stymie the growth of clean energy technology and manufacturing will have far-reaching impacts beyond the blow to the Appalachian economy.

Background and Context

This report focuses on clean energy and manufacturing. These sectors, while integral to the regional economy, are only a portion of targets affected by recent legislation and Trump administration actions, which also include healthcare, nutrition supplements, broadband implementation, education funding, disaster resilience funding, and many more.

In the sectors on which this report focuses, some of the earliest actions of the Trump administration undermined the Biden administration and congressional policies that led to a massive growth of clean energy and manufacturing investments Appalachia has seen in recent years. Massive cuts in federal funding threatened to curtail, and perhaps reverse, an enormous growth of clean energy and manufacturing sectors in our region from 2021 to 2024. These cuts, in effect, sought to snatch defeat from the jaws of a historic victory beginning to transform coal-country Appalachia. And while the compelling economics of clean energy and inexorable reality of climate change mean the transition to a clean economy will not, in fact, be defeated, the speed and payoff in jobs and community benefits of an accelerated transition have, without a doubt, been threatened.

Federal climate infrastructure investments grew primarily due to two pieces of federal legislation, passed in 2021 and 2022, which provided public funding for and incentives to expand private spending on the manufacturing and deployment of technologies that reduce greenhouse gas emissions:

- President Biden signed the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), on November 15, 2021. The IIJA provided \$550 billion in new spending to upgrade infrastructure in the U.S., including funding for roads, bridges, railways, public transportation, clean drinking water, and high-speed internet, as well as funding to address climate change and clean up hazardous sites. Some of this funding supports the manufacture/deployment of technologies that reduce greenhouse gas emissions.
- The Inflation Reduction Act (IRA) became law on August 16, 2022, with the goal of reducing energy costs for households and providing pathways to help communities update infrastructure and prepare for the coming challenges of climate change. The IRA lowers energy costs for households and businesses and invests in clean energy, manufacturing, and transportation technologies, like electric vehicles, wind and solar projects, battery plants, etc.

As found in our earlier report, these federal climate infrastructure bills stimulated big increases in investment. Federal investments in clean energy grew 17-fold between 2022 and 2024, with a total of \$11.5 billion in federal investments coming to our four states—Kentucky, Ohio, Pennsylvania, and West Virginia—within that 3-year time period. This stimulated a doubling of federal plus private investment in clean energy and manufacturing projects in our region from \$7.7 billion in 2022 to \$15.9 billion in 2023, with continued increases in 2024. The \$11.5 billion in federal investment in our four states from 2022 to 2024 represents a relatively small share of the total investment of just over \$40 billion tracked in the Clean Investment Monitor over the same period—with private investment in clean energy technologies somewhere between three and four times larger than public investment.⁴

By contrast, from January to October 2025, cancellations, closures and downsizes outnumbered new clean energy projects by nearly two to one.⁵ Ironically, there is a history of strong bipartisan support for nearly all of the projects threatened by the reversal of federal policies and, over longer periods of time, for investment in coal-country infrastructure and the workers who build infrastructure projects. Thus, the choice to undermine the clean energy, infrastructure and manufacturing sectors seems particular to the Trump administration, not to any political party. In fact, Republican Congressional districts in our four-state region stood to benefit significantly more than Democratic districts from targeted climate infrastructure investments.

⁴ ReImagine Appalachia. "If You Fund It, They Will Come: How Federal Clean Energy and Manufacturing Funds Spurred Private Spending, Doubling Appalachia's Climate Infrastructure Investment in Coal Country," April 9, 2025. https://reimagineappalachia.org/wp-content/uploads/2025/04/If-You-Fund-it-They-Will-Come_04_2025.pdf.

⁵ E2. "Clean Economy Works | October 2025 Analysis | E2." November 26, 2025, e2.org/reports/clean-economy-works-october-2025/.

The Impact of the One Big Beautiful Bill Act (OBBBA)

The One Big Beautiful Bill Act (OBBBA), also known as HR1 or the reconciliation bill, was signed into law on July 4, 2025. This legislation reshaped the topography of federal clean energy tax incentives that were created by the Inflation Reduction Act in 2022. This bill encompassed many provisions, including changes to Medicaid and Affordable Care Act coverage, Supplemental Nutrition Assistance Program eligibility, and many other aspects that will impact our regional economy. In this paper, we focus on the phase-out of tax credits for solar, wind, and consumer credits for renewable energy and energy efficiency improvements, and on cuts in other grants to clean energy and manufacturing projects. These credits and grants lowered energy costs and created jobs, while also establishing a foundation for our workers to build new technologies to power and revitalize our economy.

The OBBBA essentially splits the previously technology-neutral energy tax credits into two categories with different rules and timelines. Battery, nuclear, geothermal, and hydropower projects can still claim Inflation Reduction Act tax credits until 2036. By contrast, wind and solar tax credits now begin phasing down almost immediately. Consumer tax credits mostly end in 2025; industry and business-oriented tax credits phase out in 2026.

Tax credit changes are detailed in Appendix B of this report, but in sum, the OBBBA rolled back many of the clean energy tax credits that contributed to the dramatic increase in public and private investment we tracked in our earlier report.

Shortened timelines have resulted in a short-term increase in activity in the clean energy and manufacturing sectors, as many rush to initiate projects before tax credits expire. In fact, according to the Federal Energy Regulatory Commission (FERC), solar accounted for 75% of the 28 GW of new generation installed in Q1-Q3 of 2025, followed by wind at 13% and gas at 11%.⁶ Though the data show that federal clean energy investments in the region have flatlined in 2025, this flatline is likely inflated by a short-term bump due to this rush.

As a hint of what we might expect in the future, early analysis shows developers reducing the priority given to clean energy projects because of now-unsupportive federal policies. One example, profiled later in this report: the canceled upgrade to a lower-emission furnace at Cleveland Cliffs' steel plant in Middletown, Ohio (see Case Study 1). In August 2025, almost a third of developers surveyed by energy marketplace LevelTen said they plan to suspend or cancel projects because of the OBBBA⁷; the Solar Energy Industries Association has estimated that OBBBA will reduce solar deployments by as much as 18% in their 2025-2030 outlook.⁸

The newest projections reflect the inside knowledge of industry leaders: by 2035, total new clean electricity generation will be about 820,000 gigawatt hours (i.e., 820 terawatt hours) lower than if Biden-era policies had continued.⁹ (For comparison, this amount is more than the total 675 terawatt hours of energy generated by coal-fired power plants in the United States in all of 2023.¹⁰)

Residential solar has seen the same combination of temporary uptick (to take advantage of expiring credits) and plunging long-term expectations. For example, Solar Holler, a solar developer and installation company that operates in Kentucky, West Virginia, Ohio and Virginia, had seen 70% of its business access tax incentives for residential solar recently, with annual growth of 20-30%. Instead of continued growth in 2026,

6 Federal Energy Regulatory Commission. "Office of Energy Projects Energy Infrastructure Update," December 1, 2025. cms.ferc.gov/media/energy-infrastructure-update-september-2025.

7 LevelTen Energy. "New Report: Exclusive Data Quantifies the Post-OBBBA Clean Energy Tax Credit Rush and What Comes After," November 13, 2025. www.leveltenenergy.com/post/us-clean-energy-development-pipeline-report.

8 SEIA. "Solar Market Insight Report Q3 2025 – SEIA," September 8, 2025. seia.org/research-resources/solar-market-insight-report-q3-2025/.

9 Jenkins, Jesse, Jamil Farbes, and Ben Haley. "Impacts of the One Big Beautiful Bill on the U.S. Energy Transition – Summary Report." REPEAT Project. July 3, 2025. <https://zenodo.org/records/15801701>.

10 "Electric Power Monthly – U.S. Energy Information Administration (EIA)," November 25, 2025. <https://www.eia.gov/electricity/monthly/>.

the company expects its business to remain flat, due to expiring residential tax credits, and increased costs of solar panels stemming from the OBBBA's new Foreign Entity of Concern (FEOC) regulations (discussed in more detail below).¹¹

Looking forward, we can expect a continued drop in clean energy investments in the region, leading not only to fewer jobs but also to higher energy prices. Solar and wind energy are notable for their affordability and the speed with which utility-scale energy can be deployed compared to other energy sources. The loss of solar and wind projects due to the OBBBA and other changes noted in this report will slow deployment at a time when energy demand is increasing, in large part because of artificial intelligence and data centers. Data center use remained stable from 2014 to 2016, but increased to 1.9% of U.S. electricity consumption in 2017, and to 4.4% of total US electricity consumption in 2023; projections show this share could grow up to 12% of U.S. electricity consumption by 2028.¹²

Estimates forecast¹³ that OBBBA changes to energy policy could dramatically raise energy prices over the next decade. As shown in Table 1, the cumulative impact of these increases on households in the four-state region will rise to over \$14 billion by 2035.

Table 1

The OBBBA Will Significantly Increase Residential Energy Costs for Appalachia				
	Number of Households per State	Projected Annual Increase per Household by 2030	Projected Annual Increase per Household by 2035	Total Cost Increase Over 10 Years (Billions)
Ohio	4,917,309	\$94	\$190	\$4.95 billion
WV	740,840	\$130	\$160	\$0.81 billion
PA	5,361,724	\$53	\$160	\$3.7 billion
KY	1,865,456	\$200	\$630	\$4.99 billion
Total Cost over Four States:				\$14.5 billion
Source: ReImagine Appalachia analysis of U.S. census and Energy Innovation data, accessed at sites noted below. Number of households per state: https://data.census.gov/ . Projected annual increases due to OBBBA policy changes: https://energyinnovation.org/report/updated-economic-impacts-of-u-s-senate-passed-one-big-beautiful-bill-act-energy-provisions/				

We don't have to rely only on projections of future price hikes to see a concerning rise in consumer energy costs in the region, however. As Table 2 demonstrates, the U.S. Energy Information Administration shows dramatic increases in monthly residential energy costs already taking place.

11 Lakhani, Nina. 2025. "'Deeply Demoralizing': How Trump Derailed Coal Country's Clean-energy Revival." The Guardian, November 30, 2025. <https://www.theguardian.com/environment/2025/nov/29/trump-coal-country>.
12 Shehabi, A.; Newkirk, A.; Smith, S.; Hubbard, A.; Lei, N.; Siddik, M., et al. "2024 United States Data Center Energy Usage Report" December 2024. Lawrence Berkeley National Laboratory. <http://dx.doi.org/10.71468/P1WC7Q>
13 Energy Innovation Policy and Technology LLC. "Final Analysis: Economic Impacts Of U.S. "One Big Beautiful Bill Act" Energy Provisions" July 1, 2025. <https://energyinnovation.org/report/updated-economic-impacts-of-u-s-senate-passed-one-big-beautiful-bill-act-energy-provisions/>.

Table 2

Regional Residential Energy Costs Have Increased by as Much as 16% Since January 2025			
	Jan 2025 Avg Residential Price (cents per kilowatt hour)	Sept 2025 Avg Residential Price (cents per kilowatt hour)	Percent Increase from Jan to Sept 2025
Pennsylvania	17.58	20.46	16%
Ohio	15.64	17.61	13%
West Virginia	14.47	15.84	9%
Kentucky	12.6	13.56	8%

Source: ReImagine Appalachia analysis of EIA data, accessed here: https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=table_5_06_a

The Impact of Foreign Entity of Concern (FEOC)

OBBBA also affected prospective clean energy projects by changing policy related to Foreign Entities of Concern (FEOC). These changes ostensibly encourage installers to purchase materials from domestic manufacturers. In practice, delayed guidance and harsh penalties have created increased uncertainty around the sourcing of materials for grid-scale battery, geothermal, wind, solar and advanced manufacturing operations. New FEOC language restricts access to certain tax credits (45U, 45Y, 48E, 45X, 45Z, 45Q) for projects or entities involved with countries deemed adversaries, particularly China, Russia, Iran, and North Korea.¹⁴ This creates several complications for prospective developers. First, since guidance on the new FEOC rules is not expected until late 2026, developers looking to meet July 2026 start of construction deadlines risk losing tax credits and suffering financial penalties if they are found in violation of rules that have not yet been written.¹⁵ Second, FEOC rules will likely result in supply-chain issues, delays and subsequent cost increases, as China is the leading producer of solar and lithium-ion battery materials and components.

While supporting the growth of domestic manufacturing of a clean energy supply chain is a noble goal, regional manufacturers need long-term policy stable and predictable input availability and prices to invest with confidence. The dramatic changes in the OBBBA and the lack of clear guidelines have instead created enormous uncertainty for companies considering expanding domestic manufacturing in the clean energy sector.

Frozen and Terminated Environmental Justice and Community Grants

OBBBA dealt a further blow to IRA-funded investments aimed at bolstering economic development and reducing pollution in disadvantaged communities, such as the Greenhouse Gas Reduction Fund. The Climate Portal Program contains a list of programs and the changes to their status (this will be discussed in

¹⁴ BlueGreen Alliance, "An Update on Inflation Reduction Act Programs," September 2025. <https://www.bluegreenalliance.org/wp-content/uploads/2025/08/OBBBA-user-guide.pdf>.

¹⁵ DiGangi, Diana. "Clean Energy Developers Hope for Clarity in Upcoming FEOC Guidance," Utility Dive, September 8, 2025. <https://www.utilitydive.com/news/clean-energy-solar-wind-feoc-guidance-obbba-trump/759488/>.

greater detail later in this paper).¹⁶ Trump administration attacks on federal investments began even before the passage of the OBBBA, however.

The extent of the damage caused by these illegal grant cancellations, funding freezes and erratic executive orders is on a scale that is difficult to comprehend. For example, the February 2025 temporary freeze on all federal grant and loan spending impacted more than \$3 trillion in federally funded work.¹⁷ While most funding streams affected in this initial freeze were reinstated, thousands of programs have since seen funding disruption due to slow-walking of grant disbursements and outright cancellations. Table 4, in the next section of this report, details the regional impact of these cuts, which surpass \$2 billion in cuts to our four-state region, and \$48 billion nationwide.

One proposed cancellation of particular note targets the \$27 billion Greenhouse Gas Reduction Fund, \$500 million of which would have been available to Appalachian communities via the Greenbank for Rural America. The future of this fund, intended to mobilize financing and leverage private capital for clean energy and climate projects that reduce pollution in low-income and disadvantaged communities, remains in legal limbo.

These orders devastate future potential for the development of climate solutions, destabilize community organizations, and put important projects on pause. They also waste years of local leadership and innovation that went into developing and preparing to implement these proposals.

Damage to Federal Agencies: Spotlight on the Department of Energy

While the total impacts of the Trump administration actions against federal employees, federal agency infrastructure, and the communities they serve are too massive to detail in this report, changes to the Department of Energy (DOE) provide a snapshot of the damage that is replicated across federal agencies. The DOE is of particular importance because of its role at the cornerstone of U.S. clean energy development and industrial strategy. The agency has been key to U.S. global leadership in research, establishing programs to expand clean energy and manufacturing, and has also ensured that traditional energy communities, including Appalachia, have access to these new opportunities. All of this has been put at risk due to Trump administration actions.

In the first month of President Trump's second term, he signed multiple executive orders designed to expand fossil fuel production and dismantle efforts to expand clean energy technology and build a renewable energy workforce.¹⁸ This included an executive order directing agencies to stop approving permits for wind energy projects, which was struck down by a district court in December 2025.¹⁹

These orders were the first of dozens of arbitrary edicts that hampered the work of the Department of Energy and those receiving funding from the agency. A January 2025 Executive Order aimed at ending federal work on diversity, equity, and inclusion prompted the DOE to issue a memo to all recipients of DOE funding. Per the memo, this included all DOE grants, cooperative agreements, loans, loan guarantees, cost sharing agreements, and other DOE funding of any kind, and directed them to end all work that might incur costs related to community benefit plans, Justice40 requirements or other diversity, equity and

¹⁶ Jaclyn Lea, "What Is Getting Cut?," Climate Program Portal, July 11, 2025, <https://climateprogramportal.org/2025/07/02/what-is-getting-cut/>.

¹⁷ Matthew J. Vaeth, "Memorandum for Heads of Executive Departments and Agencies," Executive Office of the President Office of Management and Budget, January 27, 2025, <https://www.whitehouse.gov/wp-content/uploads/2025/03/M-25-13-Temporary-Pause-to-Review-Agency-Grant-Loan-and-Other-Financial-Assistance-Programs.pdf>.

¹⁸ Maya Gibbs, "Trump's War on Solar & Wind: A Timeline of Recent Federal Actions," Third Way, October 16, 2025, <https://www.thirdway.org/memo/trumps-war-on-solar-wind-a-timeline-of-recent-federal-actions>.

¹⁹ Maxine Joselow and Brad Plumer, "Federal Judge Finds Trump's Halt on Wind Energy Is Illegal," New York Times, December 8, 2025, <https://www.nytimes.com/2025/12/08/climate/trump-offshore-wind-federal-judge.html>.

inclusion principles.²⁰ This vague directive caused extensive concern among DOE-administered programs. Under the Biden administration, the DOE required nearly all funding opportunity applicants to include a proposed community benefit plan (CBP) and, if awarded, to implement that plan.²¹ These plans aimed to ensure community and labor engagement in project development, creation of quality jobs, and that federal investments gave priority to disadvantaged communities. Community benefit plans that include strong labor standards have been shown to increase project success by ensuring a pipeline of qualified workers and increasing community support of new developments.

Because the Biden administration required community benefit plans as part of grant award contracts, the call from the Trump administration to halt work related to community benefit plans put funding recipients in legal limbo—no matter how they proceeded, they would now violate either the DOE’s memo to halt CBP work or their contractual commitments to perform CBP work.²² While DOE directed grantees to re-negotiate contracts, this process has been slowed by staff cuts, funds have been slow-walked or withheld altogether, and many grants have subsequently been canceled or remain at risk of cancellation.

A Timeline of Canceled Department of Energy Projects

The DOE canceled \$3.7 billion in Office of Clean Energy Demonstrations (OCED) awards in May 2025. These 24 awards supported industrial companies to reduce emissions from cement, iron, glass and chemicals production. The Center for Climate and Energy Solutions (C2ES) found that the cancellation of those 24 projects could result in the loss of 25,000 jobs and \$4.6 billion in economic output.²³

In July, the DOE revoked a \$4.9 billion loan guarantee for the Grain Belt Express transmission line, an approximately 800-mile high-voltage direct current electricity transmission line designed to take wind power generated in Southwest Kansas to Missouri and Illinois; and then to eastern states using the existing grid. On October 2, the DOE announced the cancellation of an additional \$7.5 billion²⁴ in projects, some of which were funded by the Bipartisan Infrastructure Law. The administration indicated that future project cancellations are expected. On October 7th²⁵, a leaked document of projects under review for cancellation detailed billions more in cuts, including funding for West Virginia battery manufacturers Sparkz and Form Energy, solar on mine lands projects in Nicholas County Solar (WV) and Mineral Basin Solar (PA), the Appalachian Hydrogen Hub with proposed locations throughout Ohio, Pennsylvania, and West Virginia, and others. On October 20th, the DOE announced another \$700 million in canceled battery and manufacturing awards.²⁶

Of the 321 awards canceled on October 2, 2025, nearly 300 had already started work, and 134 projects had completed work before the awards were canceled; the majority of the canceled funding had not yet been received by awardees when the projects were canceled.²⁷

20 “DOE Issues Memorandum to Grantees Ordering a Halt to Environmental Justice Activities,” Sabin Center for Climate Change Law, n.d. <https://climate.law.columbia.edu/content/doe-issues-memorandum-grantees-ordering-halt-environmental-justice-activities>.

21 Department of Energy (DOE), “Guide to DOE Evaluation of Community Benefits Plan Costs,” August 2024, <https://www.energy.gov/sites/default/files/2024-10/Guide%20to%20DOE%20Evaluation%20of%20CBP%20Costs.pdf#>.

22 Holzman, Jael. “Trump’s Other Funding Freeze Attacks Environmental Justice.” Heatmap News, February 4, 2025. <https://heatmap.news/politics/trump-doe-justice40-community-benefit>.

23 Center for Climate and Energy Solutions. “Cost of OCED Cancellations: 25,000 Jobs & \$4.6 Billion - Center for Climate and Energy Solutions,” May 30, 2025. www.c2es.org/press-release/cost-of-oced-cancellations-25000-jobs-4-6-billion/.

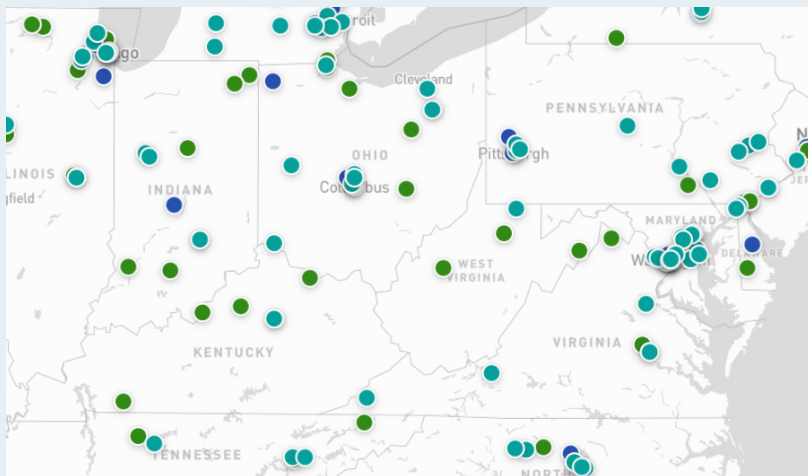
24 “Energy Department Announces Termination of 223 Projects, Saving Over \$7.5 Billion,” Energy.gov, October 2, 2025, www.energy.gov/articles/energy-department-announces-termination-223-projects-saving-over-75-billion.

25 Valerie Volcovici, David Shepardson, and Nichola Groom, “Trump mulls cutting billions in funds from list of clean energy projects,” Reuters, October 7, 2025, www.reuters.com/sustainability/climate-energy/trump-administration-mulls-additional-12-billion-clean-energy-funding-cut-2025-10-07/.

26 Christa Marshall, “DOE Cancels More Than \$700M in Battery, Manufacturing Projects,” E&E News by POLITICO, October 21, 2025, <https://www.eenews.net/articles/doe-cancels-more-than-700m-in-battery-manufacturing-projects/>.

27 EFI Foundation, “Unpacking DOE’s October Award Cancellations,” November 26, 2025, <https://efifoundation.org/wp-content/uploads/sites/3/2025/10/EFI-Foundation-Unpacking-DOEs-October-Award-Cancellations.pdf>.

Overall, more than \$23 billion in DOE-awarded projects are on the line, jeopardizing more than 330,000 jobs and \$4 billion in private investment. The ongoing status of 648 awards identified as potential termination targets is being tracked by BlueGreen Alliance.²⁸ BlueGreen Alliance created an [interactive map](#) of at-risk projects; a section of which showing the four-state Reimagine Appalachia region is shown below.



Concerted efforts by the Trump administration to shrink the federal workforce in the first half of 2025 did not leave the DOE unscathed. An estimated over 3,500 DOE staff left the agency since April 2025, with some offices, like the Office of Clean Energy Demonstrations (OCED) and Grid Deployment Office, seeing upwards of 70% staff reduction.²⁹ In late November 2025, those offices, which handled the development and deployment of billions of dollars for batteries, hydrogen fuels and electrical grids, among other projects, dissolved altogether, possibly illegally.³⁰ Congress authorized the OCED when it passed the Bipartisan Infrastructure Law, and specified appropriations for it in that law. Therefore, changes to this program's funding legally require congressional approval.

These legally dubious efforts to cull federal workers, led by the ad-hoc DOGE ("Department of Government Efficiency") initiative, did not lead to a reduction in federal spending. As of Fall 2025, some agencies are hiring back employees who took resignation offers and seeking new leases after leases were canceled in attempted cost-cutting measures.³¹ While the Trump administration's claims that these efforts reduce waste are unverifiable, numerous data sources show they created chaos, destroyed decades of institutional knowledge and expertise, and hampered the federal government's ability to provide vital services.

Another change that symbolizes the Trump administration's disinterest in helping Appalachian coal country was the DOE's quiet dismantling of the Interagency Working Group on Coal and Power Plant Communities (IWG) in early 2025. The Biden administration established The IWG in July 2021 to provide a whole-of-government response to facilitate economic revitalization in communities affected by changes

28 BlueGreen Alliance, "Standing Up to Congress' and the Trump Administration's Attacks on Clean Energy and Jobs," December 2025, www.bluegreenalliance.org/site/standing-up-to-congress-and-the-trump-administrations-attacks-on-clean-energy-and-jobs/by-the-numbers/.

29 Christa Marshall and Hannah Northey, "E&E News: Details Emerge Around Surge of DOE Departures," Politico, April 21, 2025, <https://subscriber.politicopro.com/article/eenews/2025/04/21/details-emerge-around-surge-of-doe-departures-00301326>.

30 Brad Plumer, "A Trump Overhaul of the Energy Dept. Breaks up Clean Energy Offices," The New York Times, November 20, 2025, <https://www.nytimes.com/2025/11/20/climate/clean-energy-department-offices.html>.

31 Stephen Fowler, Shannon Bond and Jenna McLaughlin, "Federal agencies are rehiring workers and spending more after DOGE's push to cut," NPR, October 1, 2025, <https://www.npr.org/2025/10/01/nx-s1-5558298/doge-fiscal-year-savings-budget-rehired-government-shutdown>.

in coal, oil, and gas industries, and by power plant closures, and to support workers. Despite the IWG's success in providing popular resources, such as a clearinghouse for federal funding opportunities and Rapid Response Teams (RRTs) that coordinated with energy communities to deliver targeted resources to meet local needs, as well as Congress explicitly appropriating \$5 million to the IWG through DOE, the Trump administration disbanded this program designed explicitly to support coal communities, including those in Appalachia.³²

Additional barriers to the development of clean energy and manufacturing industries in the region include burdensome administrative requirements and a reduced staff with which to enact administrative tasks. For example, in July 2025, the Department of the Interior issued a memo stating that the Interior Secretary Doug Burgum can personally conduct an “elevated review” of all solar and wind energy projects on federal lands and waters. This added layer of administrative bureaucracy creates barriers for projects looking to meet the shortened tax credit timelines noted above.

Historically, the Department of Energy and other federal agencies have been key drivers of innovation and development. These changes raise concerns not only about our region's economic future, but about the United States' ability to compete in the global clean energy market. The bottom lines: these massive disruptions at the DOE hinder the efficient use of federal funds and harm our communities.

32 Congressional Research Service, Library of Congress. “Interagency Working Group (IWG) on Coal and Power Plant Communities and Economic Revitalization Activities, 2023-2024,” December 3, 2024, <https://www.congress.gov/crs-product/IN12465>.

CASE STUDY 1

CLEVELAND-CLIFFS CORPORATION IN MIDDLETOWN, OH

Initial Project: With the help of the Inflation Reduction Act, [Cleveland-Cliffs](#) planned to replace its old blast furnace with two electric melting furnaces (EMF) as well as a Hydrogen-Ready Direct Reduced Iron (DRI) Plant. The federal funding of \$500 million would have been coupled with a \$1.3 billion investment from Cleveland Cliffs. This project would have helped the mill to further decarbonize rolled steel products for its customers in the U.S. automotive industry, and to secure 2,500 jobs at Middletown Works, many of them unionized. The flex-fuel DRI plant and electric melting furnaces would have created 170 permanent jobs, along with 1,200 building trades jobs during construction. Cleveland-Cliffs planned to engage community and labor stakeholders during the project.

Project Cancellation: In June 2025 Cleveland Cliffs officially canceled the project, citing the lack of low-cost hydrogen fuel due to the absence of a local hydrogen hub. In 2021, the Department of Energy (DOE) established a Regional Clean Hydrogen Hubs program supporting seven hubs throughout the U.S., but the new administration is considering funding cuts for the program. Shawn Coffey, union president of Local 1943, expects steel production at Middletown Works to continue. Still, he praised the initial news of the furnaces' upgrades as "absolutely huge" and is now "slightly disappointed" by the project cancellation³³. With the mill's continued reliance on fossil fuels, the community of Middletown will continue to see higher levels of air pollution from the outdated facility. Butler County, OH, where Middletown is located, has the worst rating of all Ohio counties for soot according to the American Lung Association's 2025 report card. The proposed new furnaces would have reduced carbon emissions by 50%-90%.

IRA funding: \$500 million through the DOE's Industrial Demonstrations Program

District: 8th OH congressional district, House of Representative member: Warren Davidson (R)

Jobs: 170 new permanent jobs, 1,200 union construction jobs

Union: International Association of Machinists and Aerospace Workers (IAM)

More OH cancellations: Another project that was canceled under the same DOE program was a furnace upgrade at Libbey Glass. The Toledo tableware manufacturer initially received a cost share of \$45 million through the Industrial Demonstrations Program³⁴ to replace its old furnace with a larger hybrid electric one, saving about 60% in carbon emissions. The new administration canceled the grant in April along with 16 other projects under the same program.



Photo Credit: Nick Graham, [Journal News website](#), retrieved March 11, 2025

³³ [Cleveland-Cliffs turns back on \\$500M federal grant to upgrade Middletown plant](#), retrieved Sept 11, 2025.

³⁴ Also known as "Advanced Industrial Facilities Deployment Program".

Federal and Private Investments in Clean Energy and Manufacturing Have Flatlined in Appalachia

As noted above, the Trump administration's attacks on federal investments have included the cancellation of dozens of programs. In this section, we primarily explore two data sources—the Climate Program Portal and the Rhodium Group/MIT CEEPR Clean Investment Monitor (CIM). We examine first the Climate Program Portal, which gives us a picture of announced investments to our region and the (confirmed and proposed) canceled projects. Then we examine data from the Clean Investment Monitor, which shows federal and private clean energy investment over time and how things have changed since Trump's electoral victory and the start of the second Trump administration. We also use the CIM to look at the regional impact of clean energy investments and where outstanding funding could be at risk, as well as to examine the jobs impact in North Central Appalachia.

Announced (and Canceled) Federal Funding to Our Four-State Region: Data from the Climate Program Portal

The Climate Program Portal tracks climate investments from the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). It includes several dashboards, one showing funding opportunities and the other showing funding outcomes. We examined the outcome portal to see how much federal climate funding has been announced for our region and how much has been canceled since the second Trump administration took office. The funding tracked on this dashboard includes climate-related awards from both competitive and formula grant programs and from loan programs.

Announced Funds

The IIJA and IRA have awarded our four-state region approximately \$19 billion in federal grant funding and \$6.1 billion in loans, assisting a total of 2,635 projects in our region. Pennsylvania saw the greatest amount of grant funding out of the four states, with \$8.85 billion in grants, followed by Ohio (\$4.8 billion) and Kentucky (\$3.2 billion). Kentucky saw, by far, the largest amount in loans (\$3.8 billion), due almost entirely to a loan of \$9.6 billion to BlueOval SK, which will finance three new battery manufacturing plants. (We apportioned the \$9.6 billion between Kentucky and Tennessee based on population.³⁵)

Pennsylvania has seen the largest number of funded projects out of our four Appalachian states, at 986, followed by Ohio at 838.

³⁵ For this Climate Portal Program data, KRC took multi-state grants or loans and divided the total loan by the population share of states receiving the grant or loan. We estimate Kentucky's share is about \$3.7 billion.

Table 3

Climate Funding Awarded to Our Four Appalachian States from the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA)			
	Grant Funding Awarded*	Loan Amount Awarded*	Projects
Kentucky	\$2,926,123,227	\$3,820,112,037	491
Ohio	\$4,790,046,507	\$1,572,262,824	839
Pennsylvania	\$8,602,021,306	\$598,762,809	986
West Virginia	\$2,061,849,113	\$546,148,349	321

*These total amounts of grants and loans is less than what is shared on the Climate Program Portal dashboard. The Climate Program Portal, for multi-state projects, adds the total amount of funding for multi-state projects to each state. To get a more accurate estimate by state, we allocated the multi-state grants and loans to states by their population share of the states receiving that funding. Without knowing how each multi-state grant and loan is divided by state, we believed this gave us a more accurate estimate of the grants and loans that each of our four Appalachian states will likely see.

Source: Keystone Research Center analysis of Climate Program Portal data, accessed at: <https://climateprogramportal.org/outcomes-dashboard/>

The three largest programs providing climate funding to our region are the Abandoned Mine Reclamation Fund, the Urbanized Area Formula Grants and the Regional Clean Hydrogen Hubs. The Abandoned Mine Reclamation Fund tops the list, at more than \$1.5 billion. The region, especially Pennsylvania, is known for its large number of abandoned mines that need cleaning up. The Urbanized Area Formula Grants go towards public transportation and are the next largest program funding projects in our region, at \$1.36 billion, followed by the Regional Clean Hydrogen Hubs, which brought \$1.04 billion in grants to our region (In October, The Appalachian Hydrogen Hub appeared on a list of funds at risk of cancellation by the DOE, as noted above, but they have not yet been canceled). The IIJA funded these three largest grants.

The largest IRA grants to the region are EPA's Climate Pollution Reduction Implementation Grants (\$525 million)—these grants went to states and local governments to implement climate action plans to reduce greenhouse gas emissions. Also via the IRA, the region received \$420 million from the Advanced Industrial Facilities Deployment Program to develop clean industrial technologies.³⁶

Canceled Funds

The Climate Program Portal also tracks federal funding that has been confirmed canceled or proposed to be canceled.³⁷ Table 4 shows the regional programs that have faced cancellation (proposed and confirmed), including the amount and percentage of funds canceled regionally and nationally.

The Advanced Industrial Facilities Deployment Program, which provides funding for emissions-reducing industrial technology, was rescinded via the OBBBA (all unobligated funding). The amount of canceled funding to the region was substantial—\$613 million, topping the list in Table 4. The Solar for All Program, funded through the EPA, was also canceled (proposed). It would have brought \$481 million to our four-state Appalachian region. Also canceled was the Battery Materials Processing Grants, which would have brought about \$480 million to our region. The last column in Table 4 shows the percentage

³⁶ More funding was given through this program, but a significant amount has been canceled, and is not included in this amount.

³⁷ Confirmed grant cancellations have been agreed to by all parties. Proposed canceled funding refers to funding where termination has been attempted by the Agency, but the decision is being litigated or not yet confirmed.

of canceled funds to our region (out of the national total) for each program. Our region would have benefited significantly from the Carbon Capture Large-Scale Pilot Programs (receiving 60% of national funds), followed by the Battery Materials Processing Grants (56% of the total), and the Clean Energy Demonstrations on Current and Former Mine Land (receiving 49% of total funds).

Table 4

Canceled Funds (Both Confirmed and Proposed) by Program Name, KY, OH, PA, WV*				
Program Name	Department dispersing the funds	Amount canceled in our region**	Amount canceled nationally**	% of canceled funds in our region
Advanced Industrial Facilities Deployment Program	DOE	\$613,418,898	\$3,007,400,000	20.4%
Greenhouse Gas Reduction Fund - Solar for All Program	EPA	\$480,870,000	\$7,000,000,000	6.9%
Battery Materials Processing Grants	DOE	\$480,582,200	\$852,665,523	56.4%
Neighborhood Access and Equity Grant Program	DOT	\$158,911,664	\$1,535,046,520	10.4%
Clean Energy Demonstrations on Current and Former Mine Land	DOE	\$90,000,000	\$185,000,000	48.6%
Carbon Capture Large-Scale Pilot Programs	DOE	\$72,000,000	\$121,000,000	59.5%
Environmental Justice Community Change Grants	EPA	\$56,117,944	\$1,732,861,347	3.2%
Domestic Manufacturing Conversion Grants	DOE	\$35,000,000	\$369,763,050	9.5%
Building Resilient Infrastructure and Communities (Robert T. Stafford Act Section 203(i))	DHS (Homeland Security)	\$27,200,461	\$582,816,370	4.7%
Environmental Justice Thriving Communities Grantmaking	EPA	\$8,000,000	\$710,000,000	1.1%
Environmental Justice Government-to-Government	EPA	\$5,930,411	\$57,618,363	10.3%
Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program	EPA	\$3,994,295	\$50,659,410	7.9%
Clean Heavy-Duty Vehicles	EPA	\$2,800,000	\$30,923,465	9.1%
Low Embodied Carbon Labeling for Construction Materials	EPA	\$2,486,224	\$112,542,651	2.2%
Cost-effective Codes Implementation for Efficiency and Resilience	DOE	\$2,000,000	\$63,800,000	3.1%
Total		\$2,039,312,097	\$48,736,618,555***	

*This is the documented confirmed and proposed canceled funds by the Climate Program Portal. We did not report multi-state grants the same way that the Climate Program Portal reports it. To get a more accurate estimate by state, we allocated the multi-state funding to states by their population share of the states receiving that funding. The Climate Program Portal reports the full amount of multi-state grants to each state. **These are funding sources lost that impact our four-state region directly (14 programs). There are 45 programs total that have been canceled nationally - you can see the full list on the Climate Program Portal. ***This total amount of canceled funds nationally is the sum total of all 45 programs canceled nationally (not all listed here). **Source:** Keystone Research Center analysis of Climate Program Portal data, accessed here: <https://climateprogramportal.org/outcomes-dashboard/>

See Appendix C for a breakdown of Table 4 by project. As Figure 1 below shows, Ohio and Kentucky both have the largest amount of funding that has been (confirmed or proposed) canceled. Altogether, the Climate Program Portal has identified more than \$2 billion in funds to the region that have either been confirmed to be canceled (\$1.01 billion) or proposed to be canceled (\$1.03 billion).³⁸

Ohio

Ohio has lost \$594 million in confirmed canceled funds. Most of this, \$500 million from the Department of Energy's Advanced Industrial Facilities Deployment Program, would have gone to Cleveland-Cliffs Steel Corporation. Libbey Glass lost \$45 million from the same DOE program. Cancellation of a multi-state \$125 million grant to O-I Glass, Inc. cost Ohio around \$25 million (if you allocate the funding to the three participating states of CA, OH, and VA based on population). Kraft Heinz announced cancellation of \$170.9 million in funding across nine states, with Ohio's population-based share about \$24 million. On top of this confirmed canceled funding, another \$222 million in Ohio has been proposed to be canceled.

Kentucky

Confirmed cancellations have cost Kentucky \$256 million. This includes a Battery Materials Processing Grant from the Department of Energy to Ascend Elements for \$164 million; and \$72 million to PPL Corporation from a Carbon Capture Large-Scale Pilot Program from the Department of Energy. Kentucky lost an estimated \$20 million due to the cancellation of a Diageo Americas Supply grant to KY and IL from the Department of Energy's Advanced Industrial Facilities Deployment Program. Diageo planned to use this funding to install heat battery technology to capture and store renewable energy and make its Plainfield, IL, and Shelbyville, KY production sites carbon neutral within a few years.³⁹ Out of the four states, Kentucky has the largest amount of proposed funding cuts at \$388 million.

Pennsylvania

Pennsylvania has \$159 million in confirmed canceled funds, which was from the Department of Transportation's (DOT) Neighborhood Access and Equity Program to the City of Philadelphia. Pennsylvania also has significant proposed funding cuts, at \$302 million. The largest grant proposed to be canceled in Pennsylvania is \$156 million from the Greenhouse Gas Reduction Fund—Solar for All Program (via the Environmental Protection Agency). The program would have deployed residential solar in low-income communities, resulting in household energy savings, quality jobs, and community ownership to neighborhoods that need it in rural, suburban, and urban areas.

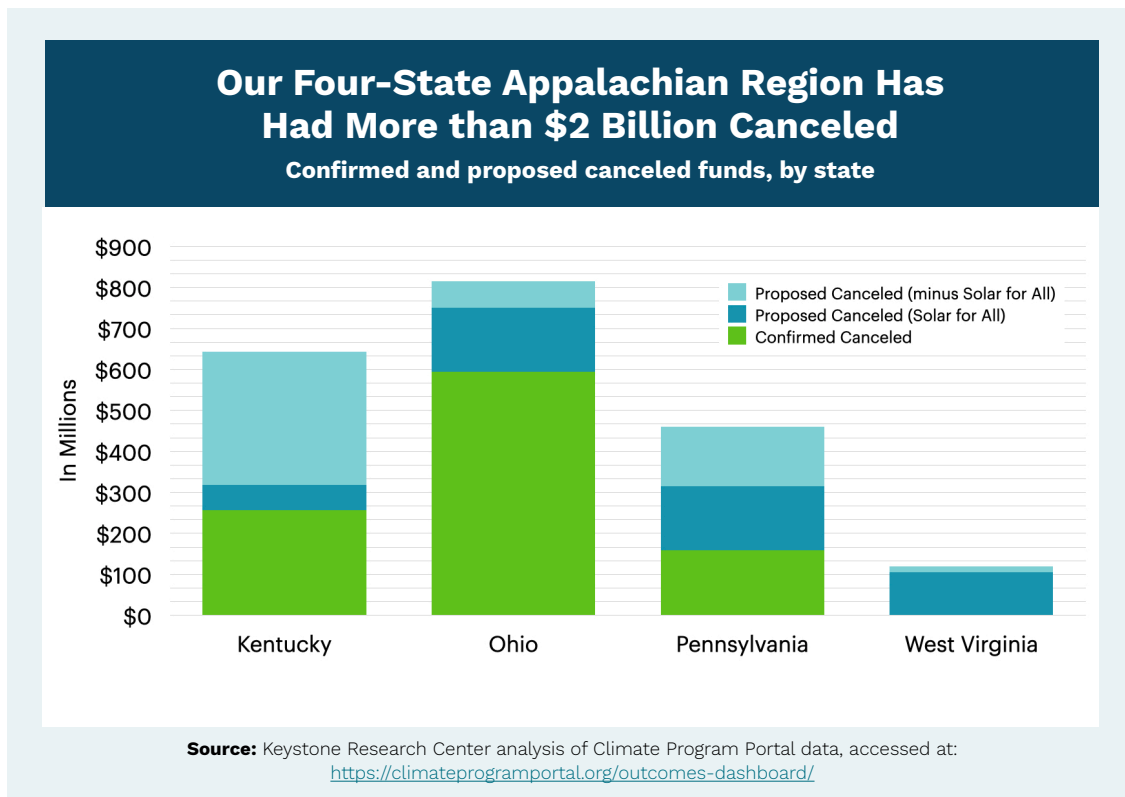
West Virginia

West Virginia does not have any confirmed canceled funding highlighted in the Climate Portal data. The Solar for All Program makes up the bulk of the proposed canceled funding in West Virginia—\$106 million out of \$119 million total proposed canceled funding. The Trump administration illegally canceled all Solar for All funds. The cancellation is being challenged in the courts and could still be reinstated.

³⁸ Confirmed canceled funds include confirmed grant cancellations agreed by all parties. Proposed canceled funds include funding where termination has been attempted by the granting agency, but that decision is being litigated or is not yet confirmed.

³⁹ Jo Marquez, "Department of Energy Pulls \$3.7 Billion From Clean Energy Projects, Affecting Kraft Heinz and Diageo," Hoodline, June 3, 2023, <https://hoodline.com/2025/06/department-of-energy-pulls-3-7-billion-from-clean-energy-projects-affecting-kraft-heinz-and-diageo/>. See also Andy Hanacek, "Funding for Kraft Heinz, Diageo Projects Eliminated in Dept. Of Energy \$3.7 Billion Cuts," Food Processing, June 2, 2025, <https://www.foodprocessing.com/food-safety/environmental/news/55294587/funding-for-kraft-heinz-diageo-projects-eliminated-in-dept-of-energy-37-billion-cuts>.

Figure 1



Federal Funding and Private Clean Energy Investment in Our Region: Data from the Clean Investment Monitor

The Climate Project Portal data, explored above, give us a good picture of the federal funding—grants and loans—awarded to states, cities, businesses, non-profits, and others, as well as funds that have been canceled and proposed to be canceled in our region. However, this source does not account for the actual amount of funding that has been spent on the ground by both the federal government and private companies. To find this information, we look to another source: The Rhodium Group-MIT/Center for Energy and Environmental Policy (CEEPR) [Clean Investment Monitor](#) (CIM) data, which gives us a sense of the scope and magnitude of investments coming into the region over time. These data track, on a quarterly basis, federal clean energy investments, and the combination of private and public clean energy investment. Clean Investment Monitor data include three categories of investments: manufacturing of emission-reducing technologies, like technologies related to solar, wind, batteries, critical minerals, and zero emission vehicles; the deployment of technologies that reduce greenhouse gas emissions via solar, wind, nuclear, other clean electricity, storage, hydrogen, etc.; and the retail purchase of greenhouse-gas reducing technologies by households and businesses—technologies such as zero emissions vehicles, heat pumps and distributed electricity and storage. The CIM also tracks technologies eligible for tax incentives under the Inflation Reduction Act.

Another thing to note is that the CIM has a high bar for including projects in its data. For example, while the Climate Program Portal tracks all announced funding, the CIM only includes announced projects once there is a clear location, timeline, or, for larger projects, when Front-End Engineering Design (FEED) work has begun. Actual investment—actual dollars spent in a quarter—is not reported until a project has broken ground.

Federal Clean Energy Funding

Clean Investment Monitor data show that, nationally, federal investment since the beginning of 2022 to the third quarter of 2025 in the deployment of clean energy and transportation technologies has totaled about \$167 billion. This total includes tax credits, grants, loans, and loan guarantees. Table 5 shows that tax credits account for the vast majority (95%) of federal spending. The Clean Electricity Tax Credits, the Advanced Manufacturing Tax Credits, the Zero Emissions Vehicle Tax Credits, and the Residential Energy and Efficiency Tax Credits make up 90% of the federal investments in clean energy. As noted above and in the Appendix, many of these tax credits are phasing out as a result of President Trump’s OBBBA.

Table 5

Tax Credits Make up 95% of Federal Clean Energy Investments Nationally Federal investment in the U.S. in clean energy and clean energy manufacturing, 2022 through 2025 (Q3), in 2024 millions of USD			
Segment	Federal Investments	Total Federal Investment	Share of Total Federal Investment
Energy and Industry	Clean Electricity Tax Credits	\$59,914	36%
	Emerging Climate Technology Tax Credits	\$4,305	3%
Manufacturing	Advanced Manufacturing Tax Credits	\$37,311	22%
Energy and Industry	Non-residential Distributed Energy Tax Credits	\$2,825	2%
	Residential Energy & Efficiency Tax Credits	\$26,370	16%
	Zero Emission Vehicle Tax Credits	\$27,231	16%
Various	Grants, Loans, and Loan Guarantees	\$8,679	5%
Total	All Tax Credits	\$157,956	95%
Total	Only Grants, Loans, and Loan Guarantees	\$8,679	5%

Source: Keystone Research Center analysis of Rhodium Group-MIT/CEEPR Clean Investment Monitor, via the bulk data download: <https://www.cleaninvestmentmonitor.org/>

Clean Investment Monitor data show a steady rise in federal clean energy and manufacturing investments from quarter three of 2022 through quarter four of 2024 in our four-state Appalachian region (see Figure 2). Notably, federal clean energy investments waned in quarter one of 2025 as President Trump took office for his second term, and continued to decrease in quarter two of 2025. Federal funding to our four-state Appalachian region increased again in quarter 3 of 2025, in large part from an unusual dip in federal funding to Kentucky in quarter 2 of 2025, which rose again in quarter 3.

Ohio is an outlier in the region—the state was quick to leverage its federal investments, and saw them rise steadily from the beginning of 2023 to the peak in quarter four of 2024. Pennsylvania accessed fewer federal funds than Ohio initially, but the state’s draw down of such funds has risen steadily since the beginning of 2024. Kentucky, a less populous state, has not captured as much federal funding as Ohio and Pennsylvania (although Kentucky’s private investment has been significant, as we will show in the next section). West Virginia, by far the least populous state of the four, has captured the least federal funding.

CASE STUDY 2

LANDFORCE IN PITTSBURGH, PA

Initial Project: Landforce, along with PowerCorpsPHL, received \$15.3 million in EPA Community Change grant funding to expand workforce development and wood reuse in disadvantaged neighborhoods in Pittsburgh and Philadelphia. Landforce offers workforce development and transitional employment in the environmental sector for area residents with barriers to employment. They graduated over 200 crew members from the program in the last 10 years. With the EPA Community Change grant, the nonprofit planned to grow their workforce readiness program to provide career pathways in wood products. The project creates critical infrastructure for upcycling and commercializing materials from urban tree waste making everything from lumber to biochar. The funding allowed Landforce and PowerCorpsPHL to increase staff (several of them former trainees), to purchase crucial U.S. made sawmill equipment, and to hopefully increase their yearly cohort of trainees for the program.⁴⁰

Project Cancellation: In the spring of 2025, Landforce received a grant termination notice from the EPA. The initial plan was to train a larger cohort with the goal to create a new business model to learn manufacturing and machine operations skills. While Landforce was able to purchase all necessary equipment, and has officially opened The Mill, because of the termination, Landforce is now unable to grow their cohort and to staff up adequately to use all of the equipment efficiently. This is how Landforce CEO Ilyssa Manspeizer described the situation in August 2025: “We are up and operational, having milled our first wood a couple of weeks ago. We are doggedly getting it done, but as if we have both hands tied behind our backs. Simultaneously we are trying to figure out how to ensure we can carry out the workforce development side of our work and hire adequate operating staff to run efficiently.”

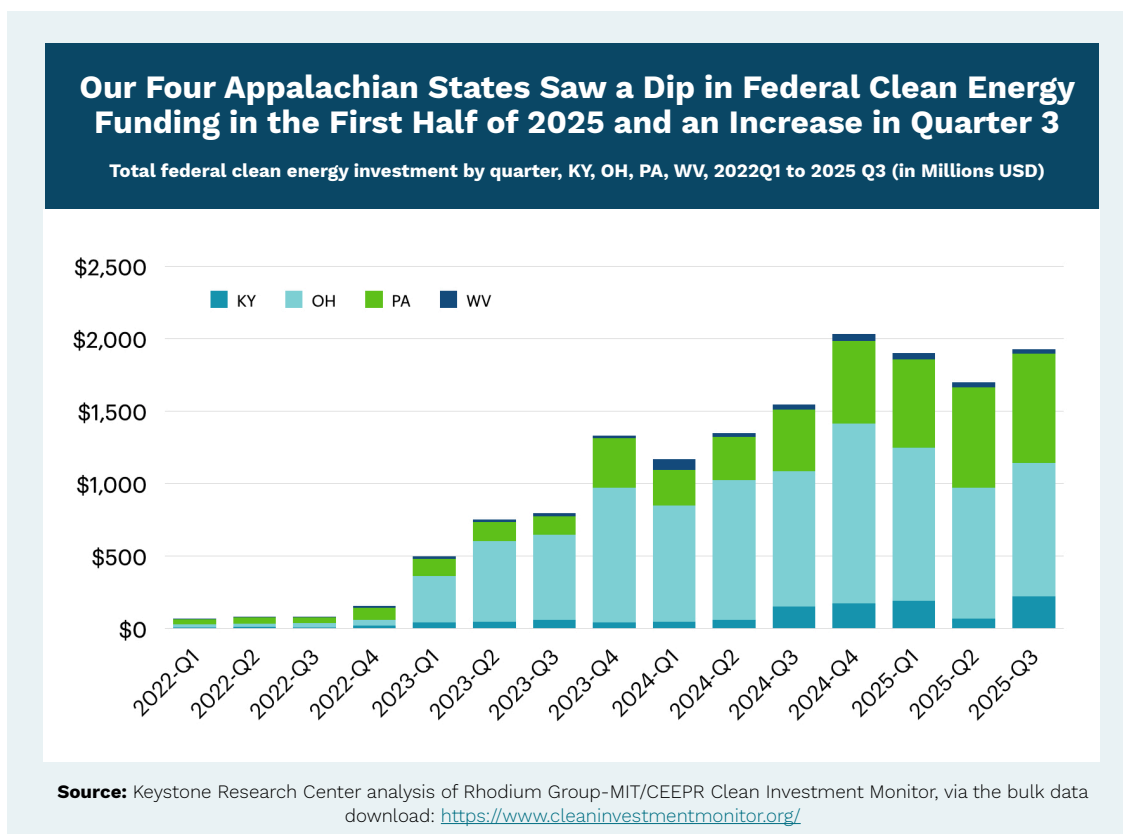
IRA funding: \$15.3 mil EPA Community Change grants

District: 12th PA congressional district: House of Representative member: Summer Lee (D)



⁴⁰ EPA terminates \$15M climate justice grant to Pittsburgh and Philly non-profits, retrieved Nov 24, 2025.

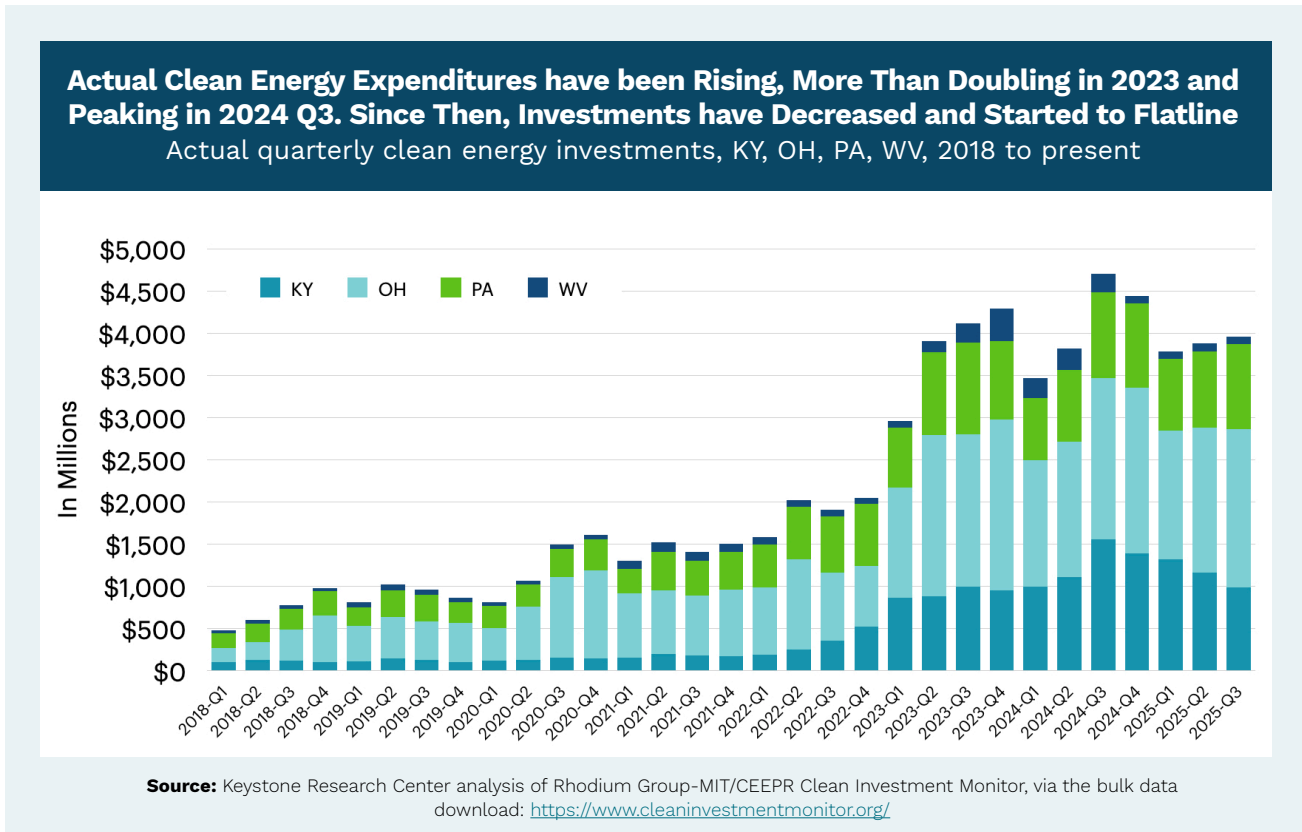
Figure 2



Actual Clean Energy Investments (Both Public and Private Investments)

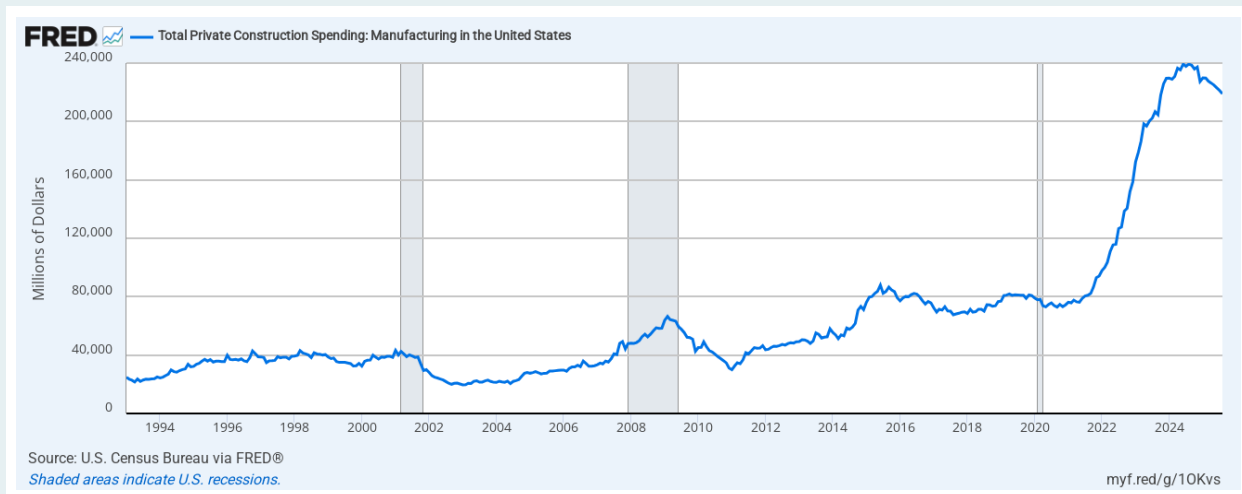
The above data show that federal funding to our four-state region has decreased from its peak in quarter four of 2024. Here we examine how total funding, which includes both public and private investments, has changed. Figure 3 below shows actual clean energy investments by quarter, going back to 2018, for our four states. Actual clean energy investments peaked in our region in quarter three of 2024 at \$4.7 billion—which is an annual rate of \$18.8 billion, more than three times the \$5.7 billion annual rate in 2021. From the 2024 Q3 peak, we see a slight decrease in quarter four of that year and then a significant decrease in quarter one of 2025 (down to \$3.8 billion). In 2025 Q2 and Q3, we see a flatlining of clean energy spending in Appalachia.

Figure 3



The Flatline of Private Construction Spending in Manufacturing Mimics the Downward Trends of Clean Energy Expenditures

Figure 4



Source: <https://fred.stlouisfed.org/series/PRMFGCONS>

National data on private investment in manufacturing echo and corroborate the trends in Figure 3. The Federal Reserve Economic Data (FRED) created Figure 4 using US Census Bureau data. Figure 4 indicates that private construction spending in manufacturing in the United States rose from

\$80 billion on an annual basis in 2021 to a peak of \$240 billion in mid-2024. The series differs in three respects from that shown in Figure 3: Figure 4 is private investment only, it includes all of manufacturing, including semiconductors (not just manufacturing related to clean energy), and it does not include non-manufacturing investment in clean energy. Acknowledging these differences, the two series both track private investment in clean manufacturing (as well as other investment) and show a tripling in spending from 2021 to 2024. The levels of spending and its increase in the two charts are compatible: the U.S. population is about 10 times the population of PA, OH, WV, and KY; and the level of spending shown in this Figure 4 is roughly an order of magnitude (factor of 10) higher than that in our four-state region. The final, and concerning, commonality across the two charts: the decline in total spending since its 2024 peak. Both of these sources indicate that federal policy shifts on climate and clean energy may have derailed a potentially transformative surge in private investment in sustainable manufacturing and a clean economy.

Clean Energy Investments by Category

As mentioned above, Rhodium/MIT-CEEPR categorizes clean energy expenditures into 3 main categories of spending: energy and industry (or the deployment of clean energy technology) (Figure 5), manufacturing of clean energy technologies (Figure 6), and retail (Figure 7), which is the retail purchase of greenhouse gas-reducing technologies by households or businesses.

Energy and Industry

Figure 5 breaks down Rhodium’s “energy and industry” category, which is the deployment of clean energy technology. Since 2022, \$9.85 billion has been invested in our region in this category, driven almost entirely by investments in the deployment of solar, which makes up 96% of the total actual investments in energy and industry.

Manufacturing

Since 2022, \$18.8 billion has been invested in our region in clean energy manufacturing. Figure 6 shows the manufacturing category broken down by investment in types of technologies. As you can see, nearly three-quarters of the clean energy manufacturing investments in our region has been in batteries (72%), followed by zero-emissions vehicles (19%), and solar (8%).

Figure 5

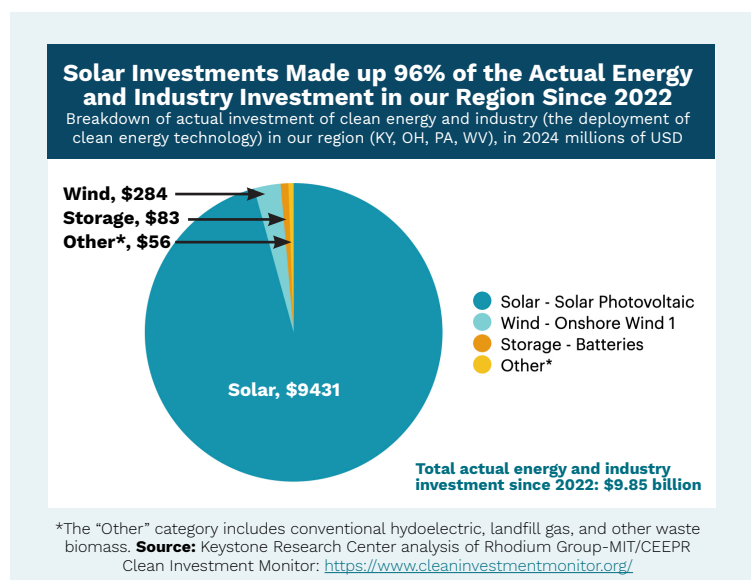
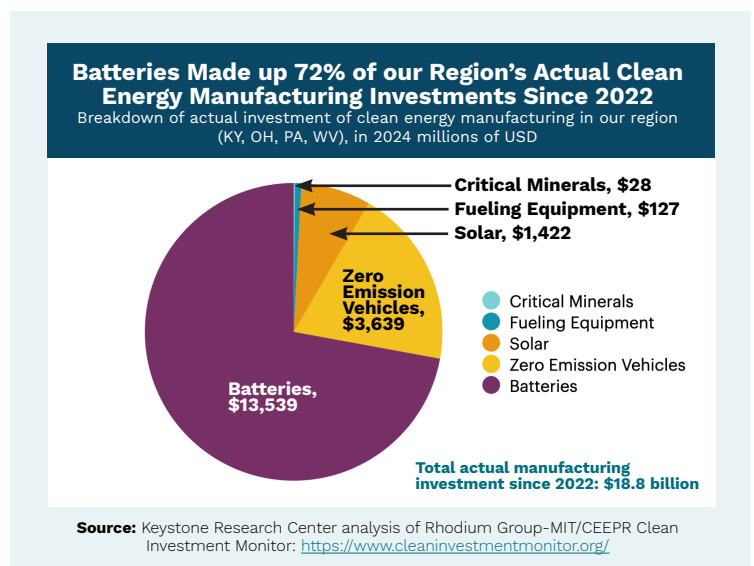


Figure 6



Retail

And, finally, the last category reported on by Rhodium is the “retail” category--the retail purchase of greenhouse gas-reducing technologies by households or businesses. Since 2022, households and businesses have invested \$22.3 billion into our region (Figure 7).

Figure 8 shows the “retail” category in the Appalachian region in more depth. The three purchases by households and businesses captured in this category include distributed electricity and storage, heat pumps, and zero-emissions vehicles. As you can see, the steepest increase in purchases was due to EV vehicle purchases. Between quarter two of 2025 and quarter three of 2025, there was a steep increase as consumers made purchases before tax credits expired.

Figure 7

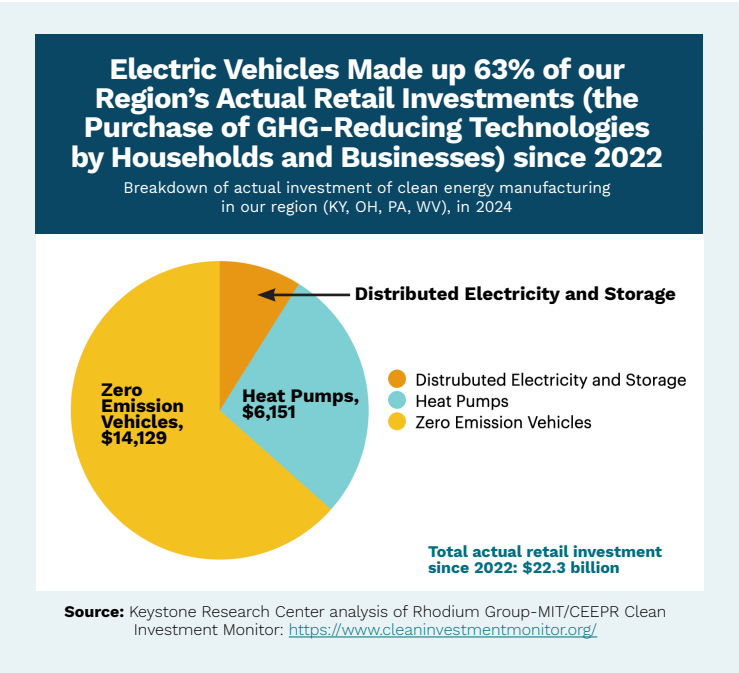
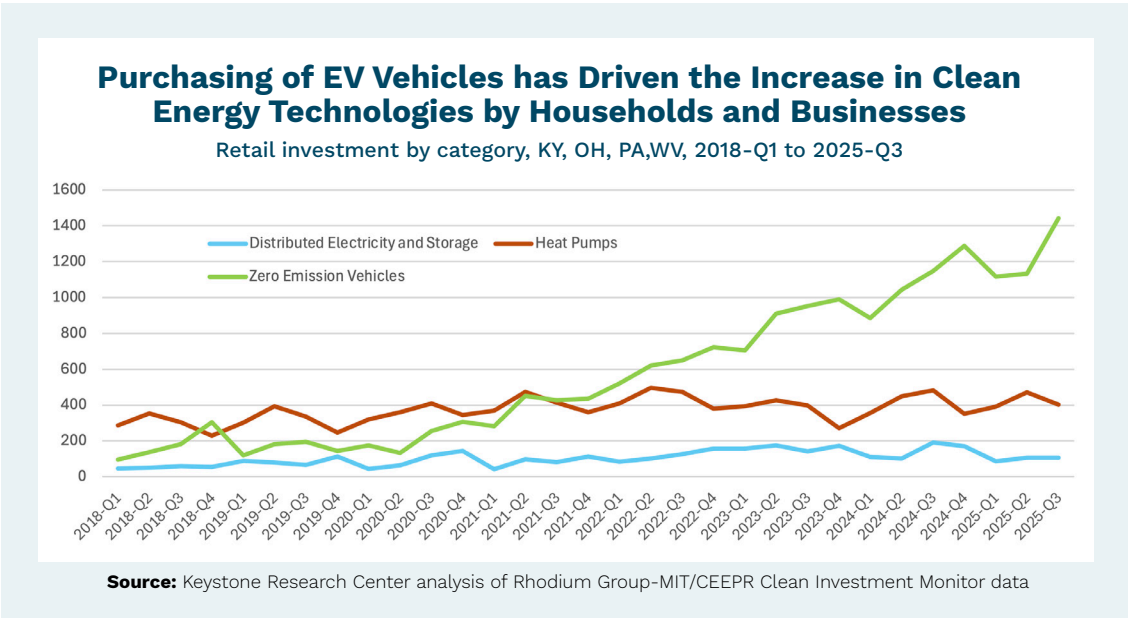


Figure 8

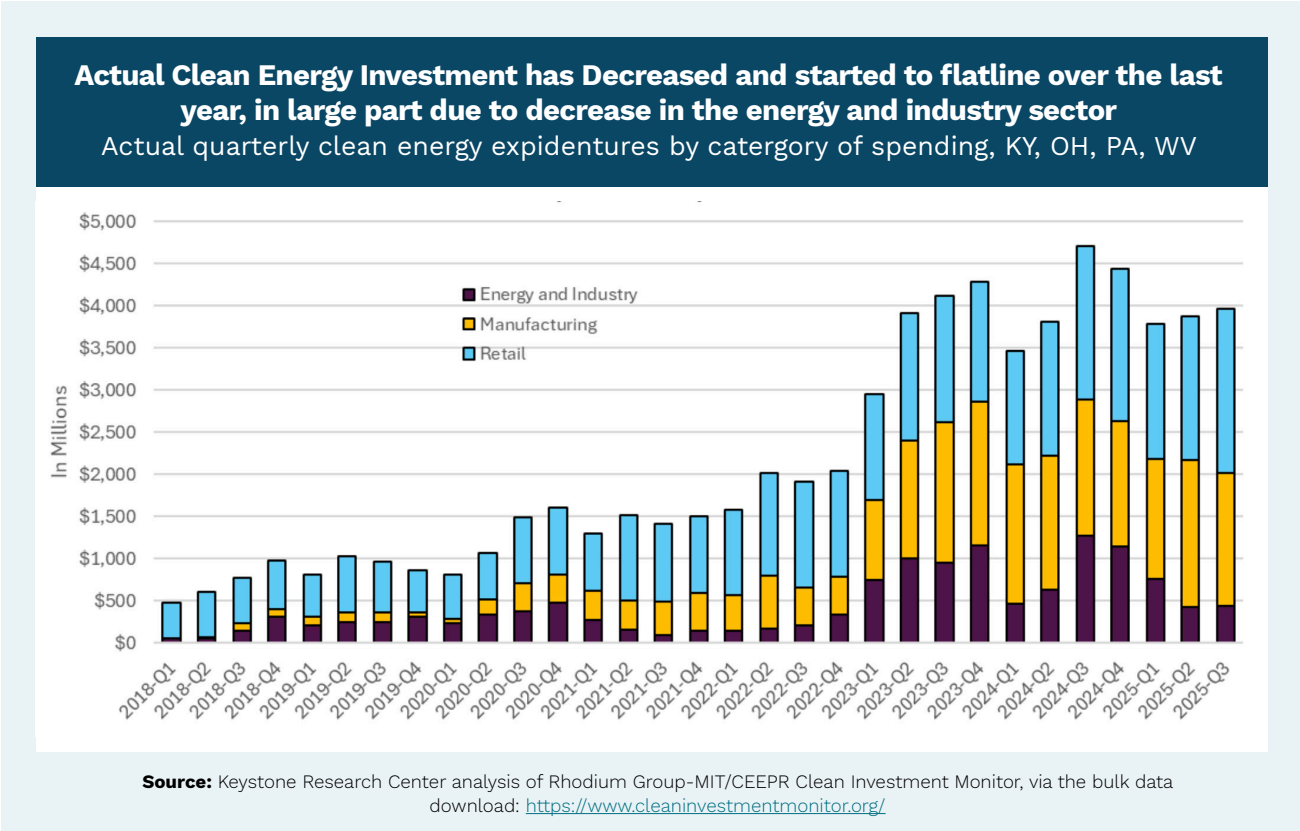


Clean Energy Investments by Category Over Time

In our four-state region, energy and industry expenditures (purple in Figure 9) peaked in quarter three of 2024, going from \$1.27 billion to \$755 million by quarter one of 2025 and down to \$445 million by Q3 of

2025. Manufacturing spending (yellow) has hovered between \$1.4 and \$1.7 billion since quarter 3 of 2023. Looking at manufacturing spending over time in Figure 9 shows how clean energy manufacturing grew from nearly nothing in 2018 to substantial investments today, with a significant jump in 2023. The retail category—households and businesses spending money on greenhouse gas-reducing technologies, like EVs and solar—peaked in quarter three of 2025, due to households and businesses wanting to take advantage of disappearing tax credits, before time ran out.

Figure 9



CASE STUDY 3

NICHOLAS COUNTY SOLAR PROJECT IN NICHOLAS COUNTY, WV

Initial Project: At two former surface coal mines in West Virginia, the solar and energy storage developer Savion plans to install a utility-scale solar project capable of generating 250 megawatts of power which could service about 39,000 West Virginia homes. The project would help to revitalize the local economy, and was expected to provide over \$18.5 million in property taxes over its 40 year life span. Currently, there is virtually no tax revenue from the former coal mines. The project was supported by a \$129 million grant from the Department of Energy's Office of Clean Energy Demonstrations and included a community benefits plan.⁴¹ The plan was to train and employ approximately 400 people for the project, with a programmatic recruitment emphasis toward local people facing barriers to employment, in collaboration with Coalfield Development's workforce model and the New River Community and Technical College's curriculum and facilities. Additionally, a portion of the funds were budgeted for the expansion of a workforce training center at the college for long-term workforce support. The total investment in this public-private partnership was estimated to be over \$250 million.⁴²

Project Cancellation: After the Office of Clean Energy Demonstrations awarded the Nicholas County Solar Project, LLC (a subsidiary of Savion, LLC) more than \$1.9 mil in 2024 to start Phase 1, the funds have been and remain frozen. The freeze happened while job fairs and coalition planning sessions had already gone underway.

IRA and IIJA funding: \$129 mil through the DOE's Clean Energy Demonstration Program on Current and Former Mine Land

District: 1st WV congressional district: House of Representative member: Carol Miller (R)

More Appalachian cancellations: Under the same program the DOE awarded \$90 million to the Mineral Basin Solar project in Clearfield County, Pennsylvania. On reclaimed coal mine sites the solar farm was projected to generate over 400 megawatts becoming the largest of its kind in the state. This project also included funding for local job training. Continued federal funding remains uncertain.⁴³



Source: [Swift Current Energy](#), retrieved December 5th, 2025

41 IN DEPTH: Massive, federal project will merge multiple facets of energy industry in Nicholas County, retrieved Nov 24, 2025.

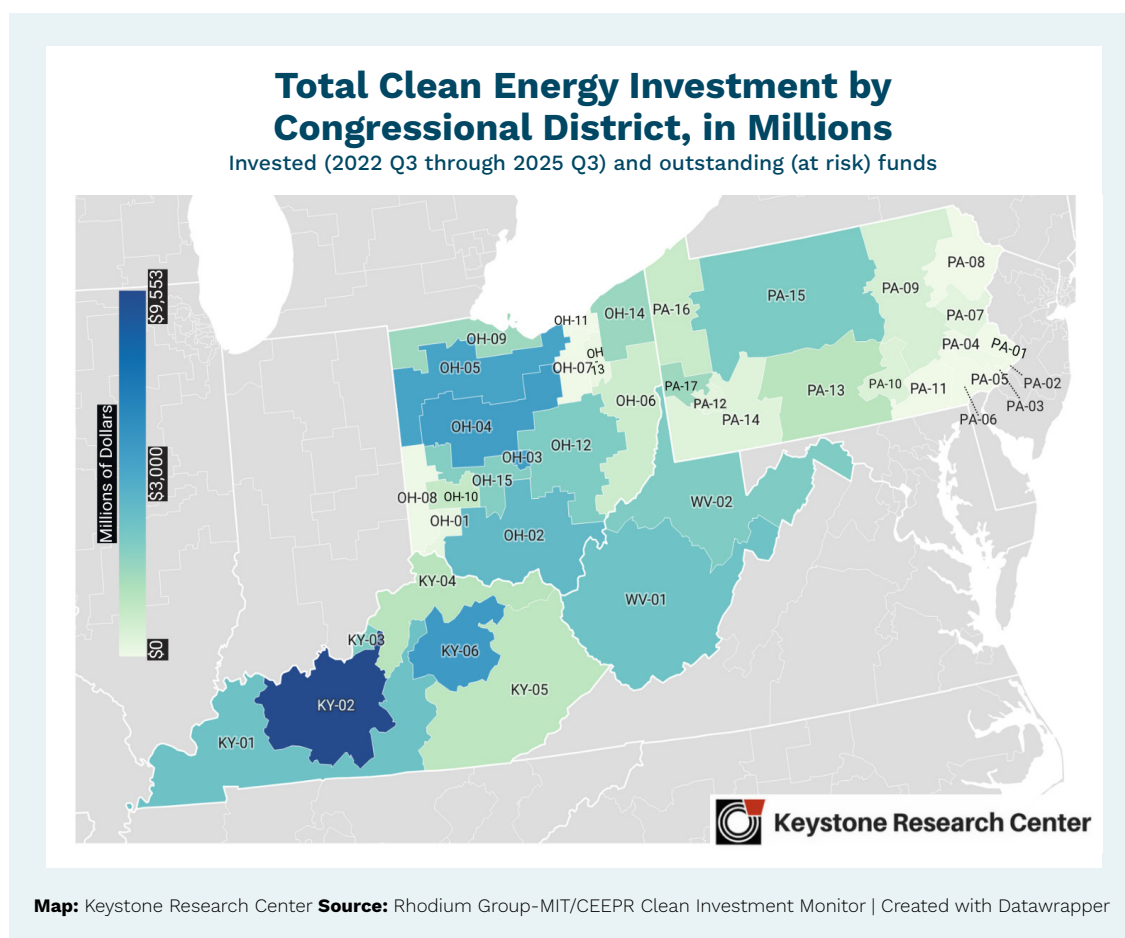
42 IN DEPTH: Massive, federal project will merge multiple facets of energy industry in Nicholas County, retrieved Nov 24, 2025.

43 [Largest solar project in Pa. to be built on former coal mine with \\$90M federal grant](#), retrieved Nov 24, 2025.

Investments—Already Made and Outstanding—by Congressional District

Map 1 below shows the announced investments in our region—both outstanding investments and actual clean energy expenditures invested so far in Congressional districts between the end of quarter 2 of 2022 through quarter 3 of 2025 (data for the last three years and one quarter).⁴⁴ For this map, the darker areas show a greater amount of clean energy investment. Kentucky Congressional District 2, which is Representative Brett Guthrie’s district, has seen and will see, by far, the largest investment in the region, with \$9.55 billion. For more detailed information on each congressional district, see Appendix A.

Map 1

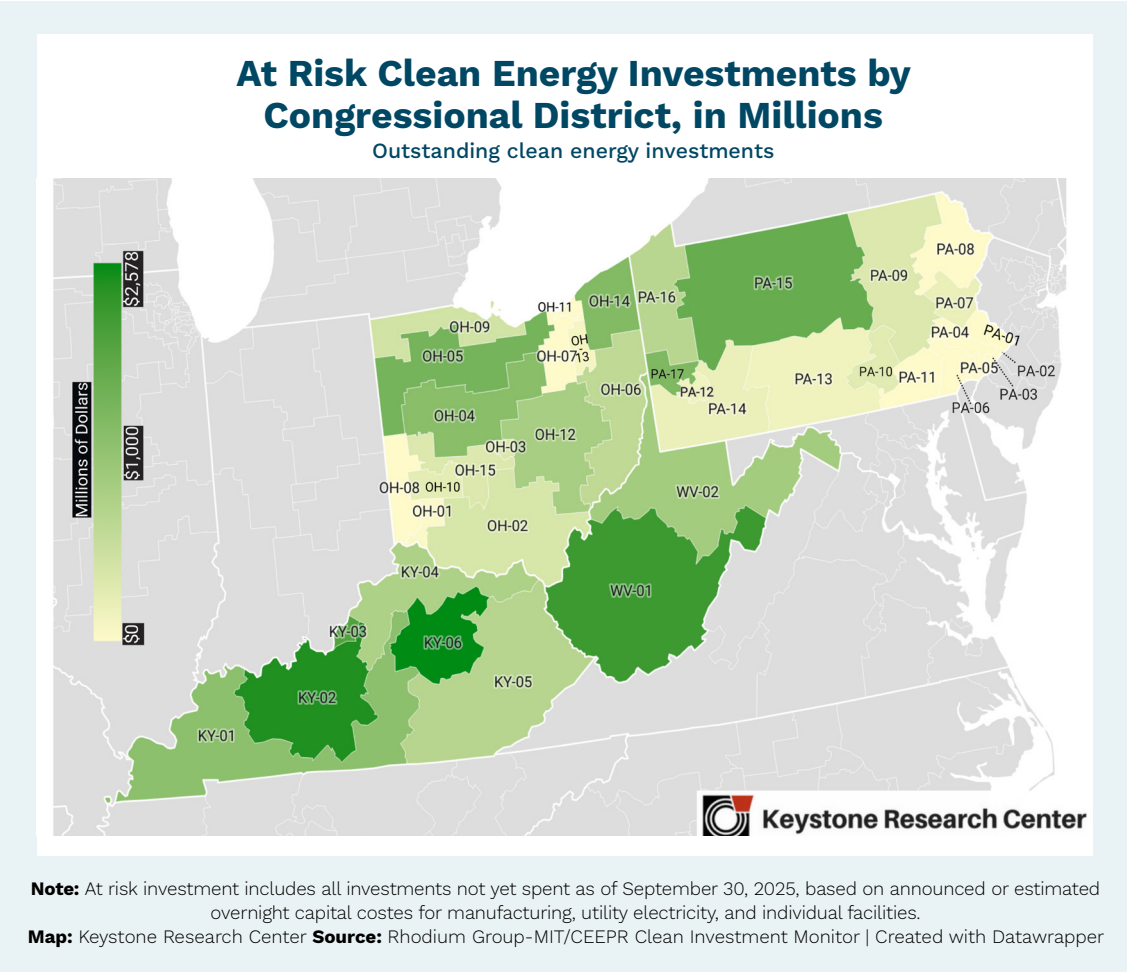


Map 2 pulls out the outstanding clean energy investments by congressional district in our region—that is, investments not yet spent. Much of the region has a lot to lose if clean energy investments are pulled back or canceled. Representative Andy Barr (R) of KY-06 takes the lead with the most outstanding clean energy investment (\$2.58 billion), followed by Representative Brett Guthrie’s (R) district, with \$2.43 billion in funds yet to come. Representative Carol Miller (R) of WV-01 also has significant clean energy

⁴⁴ For projects included in the “invested so far” category, this only includes projects that have gone beyond the “announced” stage and on to breaking ground (construction or operation). These calculations of actual investments are calculated by the CIM researchers, based on the estimated real dollars spent during each quarter on new or expanded facility construction. So, once a project has broken ground, the CIM tracks actual investment in its construction and equipment. The Rhodium Group-MIT/CEEPR estimates actual investment by distributing the total investment proportionally over the construction window. This is based on either reported completion time when it is available, or modeled completion time based on the average of past investments in that particular technology category. Note: This data, at the Congressional district level, includes only data on the manufacturing and deployment of greenhouse gas reducing technologies (and does not include the “retail” segment – that is the retail purchases of greenhouse-gas reducing technologies by households and businesses). For more on their methodology, see: https://cdn.prod.website-files.com/64e31ae6c5fd44b10ff4058f674f5a00ea2094069b46661b/The%20Clean%20Investment%20Monitor_Methodology.pdf.

funds outstanding—\$2.17 billion. Rep. Miller’s district only had \$566,546 spent over the last three years, but looking forward, WV-01 is positioned to benefit substantially. Other congressional districts that are positioned to benefit significantly are Rep. McGarvey (D) of KY-03 (\$1.9 billion), Rep. Glenn Thompson (R) in PA-15 (\$1.63 billion), and Rep. Bob Latta (R) in OH-05 (\$1.42 billion).

Map 2



Job Creation is a Key Benefit of Clean Energy Investments in our Region

The IRA and IIJA climate funding has spurred private clean energy investments in our region, which has created good jobs, with more in line to come. In our last report, we showed how congressional districts across our four states were going to benefit from increased investments and jobs, with Republican congressional districts set to benefit disproportionately from these investments. That means that as funding is cut, projects are canceled, and job estimates pulled back, these same Republican districts will be most impacted.

Figure 10 shows the total number of jobs created so far or expected to come to our region due to clean energy investments. Our region is expected to see 92,282 jobs if outstanding clean energy investments are spent, including both operational jobs at facilities and construction jobs. Ohio leads the region in job creation, with 40,706 new or expected jobs, followed by Kentucky (31,961), Pennsylvania (12,638), and West

Virginia (6,977). For every state in our region, the balance of outstanding jobs exceeds the number of jobs created by clean energy investments so far. In fact, 67% of clean energy jobs in the region are still outstanding, which makes the current funding instability potentially dire for our region.

Jobs at Risk

Now let’s drill down on the jobs at risk from federal funding changes—i.e., jobs expected to be created in the future which may not now be created—in our four-state region (purple on Figure 10 above). Figure 11 shows the number of operational jobs and construction jobs for announced clean energy projects still to be created, broken down by state. Kentucky has the most expected future jobs now at risk, an estimated 24,923 jobs (11,806 operational jobs and 13,117 construction jobs). Ohio follows with 24,466 (9,547 operational jobs and 14,919 construction jobs).

Figure 10

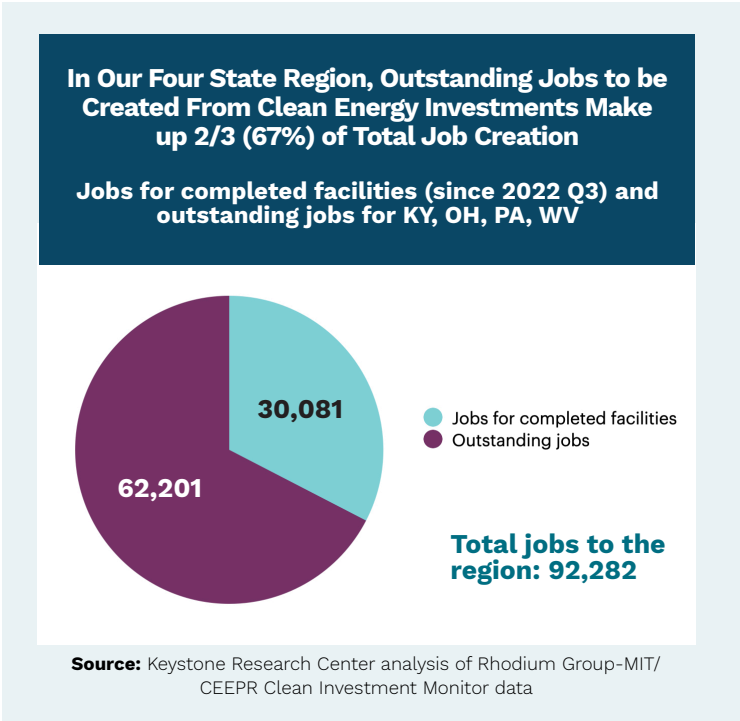
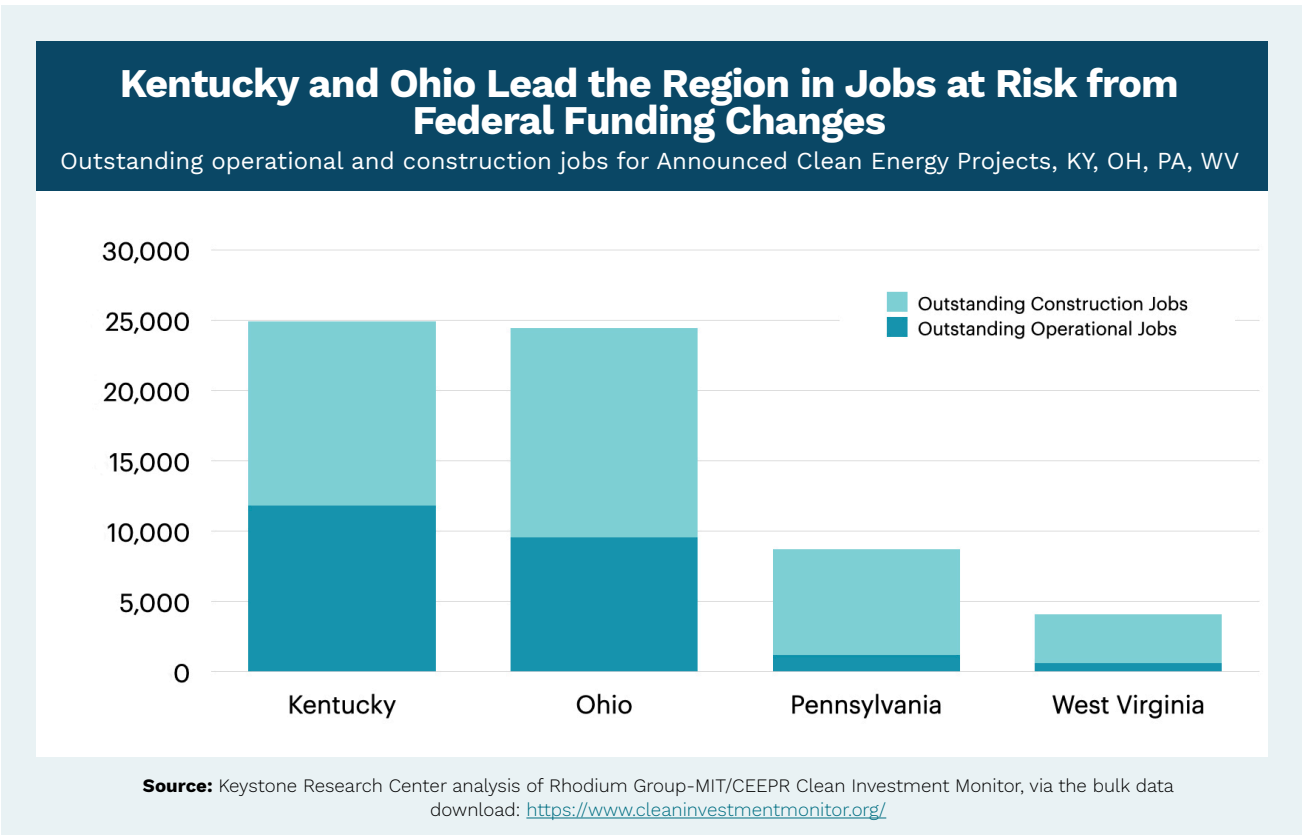
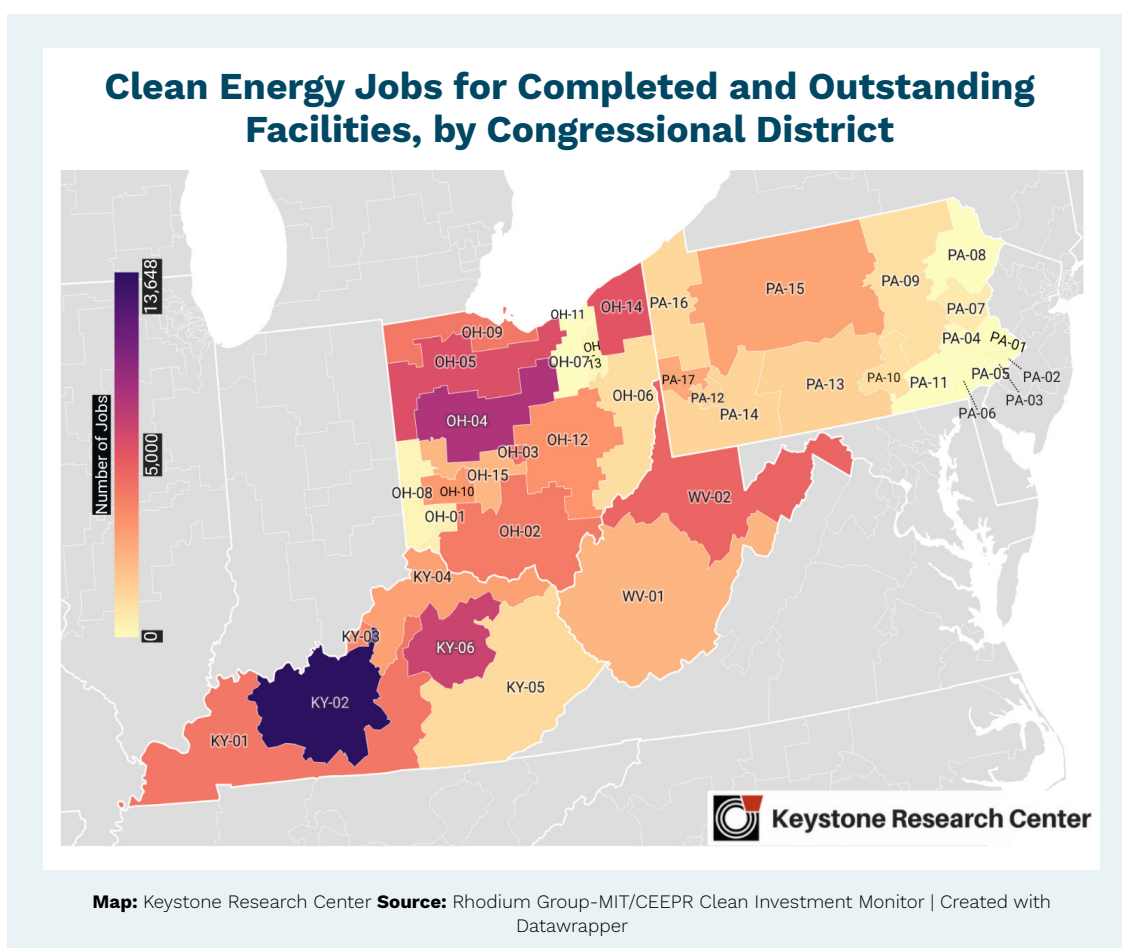


Figure 11



Unsurprisingly, Rep. Brett Gurthrie's district (KY-02) leads the region in clean energy jobs because of the large investments to his district mentioned above. With follow-through on current investment plans, KY-02 will see an estimated 13,648 jobs (5,232 have already come to the Representative's district and 8,416 are still outstanding). Congressional district OH-04, represented by Jim Jordan, was also slated to benefit substantially, with 7,791 operations and construction jobs expected as a result of clean energy investments. Four other congressional districts expected 4,500 to 6,500 jobs, not all of which may not now materialize: Rep. Andy Barr's KY-06 (6,383 jobs), Rep. Bob Latta of OH-05 (5,451 jobs), Rep. David Joyce of OH-14 (5,079 jobs), and Rep. Alexander Moody of WV-02 (4,556 jobs). In Pennsylvania, Rep. Glenn Thompson of PA-15 has the largest number of expected jobs in the state, many of which are now in jeopardy, at 2,689, followed by Rep. Chris Deluzio of PA-17 with 2,541 jobs. Throughout our four states, the number of clean energy jobs created and in the pipeline is significant. Communities across central Appalachia stood to benefit greatly from continued investments. Canceled projects and federal cuts threaten to shut down this clean economy boon, risking the livelihoods of tens of thousands of working families in our region.

Map 3



To our knowledge, no one has yet generated explicit estimates by congressional district of once-projected jobs no longer expected; Energy Innovation has generated estimates by state. Energy Innovation estimates job losses of 57,400 in our four-state region in 2030 and 71,200 in 2035. Energy Innovation projects Ohio to lose the most jobs: 28,000 in 2030 in Ohio and 34,000 jobs in 2035 in Ohio.⁴⁵

⁴⁵ Energy Innovation's spreadsheet with jobs and other impacts by state can be downloaded at <https://zenodo.org/records/15802499/files/All%20data%20points%20-%2000BBBA%20States%20-%20July%202025.xlsx?download=1>.

CASE STUDY 4

SPARKZ INC. IN TAYLOR COUNTY, WV

Initial Project: Battery company Sparkz plans to build a new manufacturing facility on the site of a shuttered glass factory in Taylor County, West Virginia. The private-public investment is supported by a \$9.8 million federal grant with the goal to accelerate clean energy manufacturing in former coal communities. The plant plans to create 75 new jobs and produce batteries for forklifts and other commercial vehicles. As part of the grant, former coal miners will be trained at a United Mine Workers of America (UMWA) Career Center to take jobs at the factory thanks to a labor-management agreement between the union and Sparkz.⁴⁶ [In mid-2023, Sparkz also signed an agreement with the United Auto Workers](#) pledging that the company will not interfere with UAW efforts to organize its battery factories across the country.⁴⁷

Project Cancellation: Since the Office of Manufacturing and Energy Supply Chains (MESC) awarded the Sparkz Inc a \$9.8 mil grant in 2024 the release of the funding has been slow-walked, and a recently leaked Department of Energy document points towards a full cancellation of the grant money.

IIJA funding: \$9.8 mil through the DOE's Office of Manufacturing and Energy Supply Chains

Union: United Mine Workers of America (UMWA) for job training and United Auto Workers

District: 2nd WV congressional district: House of Representative member: Riley Moore (R)

Conclusion

The Inflation Reduction Act and the Infrastructure Investment and Jobs Act brought much-needed investment and job creation in communities and businesses across Pennsylvania, Ohio, Kentucky, and West Virginia. These gains are now at risk.

Because these investments targeted places like Appalachia, the chaotic and multifaceted efforts of the Trump administration to dismantle them will have particularly devastating impacts here. Analysis predicts that the One Big Beautiful Bill Act (OBBBA) will raise residential energy prices, sabotage job creation, and cede America's leadership in clean energy and manufacturing to foreign competitors.

Our region was set to create 92,282 jobs because of clean energy investments; the majority of the jobs created directly by these clean energy and manufacturing investments would have been in construction and manufacturing. These are good blue-collar jobs, most of which don't require a college degree. Now, 67% of those projected jobs are at risk because of the Trump administration's actions. In less than a year, we have seen the historic growth of the clean energy and manufacturing sectors drop to a flat line.

⁴⁶ SPARKZ, UMWA prepare for high-tech manufacturing partnership, retrieved Nov 24, 2025.

⁴⁷ Battery startup Sparkz strikes partnership with auto workers union | Reuters, retrieved Nov 24, 2025.

Appendix A

Actual Clean Energy Expenditures by Congressional District in KY, OH, PA, WV from 2022 Q3 through 2025 Q3 (in 2024 USD)

119th Congressional District	US Representative	Party	Invested so far	Outstanding announced investment	Total announced investment	Share outstanding of total announced value
KY-01	James Comer Jr.	Republican	\$1,092,576,179	\$1,088,471,404	\$2,181,047,583	50%
KY-02	Brett Guthrie	Republican	\$7,121,133,514	\$2,432,322,076	\$9,553,455,590	25%
KY-03	Morgan McGarvey	Democratic	-	\$1,901,746,823	\$1,901,746,823	100%
KY-04	Thomas Massie	Republican	\$195,864,461	\$751,017,913	\$946,882,374	79%
KY-05	Hal Rogers	Republican	\$197,835,584	\$664,262,772	\$862,098,356	77%
KY-06	Andy Barr	Republican	\$1,385,244,067	\$2,577,944,455	\$3,963,188,522	65%
OH-01	Greg Landsman	Democratic	\$130,006,940	\$26,353,426	\$156,360,366	17%
OH-02	David Taylor	Republican	\$2,100,265,285	\$361,377,800	\$2,461,643,085	15%
OH-03	Joyce Beatty	Democratic	\$3,373,002,061	\$328,029,799	\$3,701,031,860	9%
OH-04	Jim Jordan	Republican	\$2,548,519,232	\$1,145,935,004	\$3,694,454,236	31%
OH-05	Bob Latta	Republican	\$1,875,047,004	\$1,419,037,097	\$3,294,084,101	43%
OH-06	Michael Rulli	Republican	\$5,547,431	\$594,240,571	\$599,788,002	99%
OH-07	Max Miller	Republican	\$3,648,454	-	\$3,648,454	0%
OH-08	Warren Davidson	Republican	\$28,071,693	-	\$28,071,693	0%
OH-09	Marcy Kaptur	Democratic	\$985,036,550	\$420,011,214	\$1,405,047,764	30%
OH-10	Michael Turner	Republican	\$486,834,151	\$233,241,957	\$720,076,108	32%
OH-11	Shontel Brown	Democratic	\$3,042,514	-	\$3,042,514	0%
OH-12	Troy Balderson	Republican	\$1,055,746,608	\$806,806,118	\$1,862,552,726	43%
OH-13	Emilia Sykes	Democratic	\$5,734,587	\$75,132,462	\$80,867,049	93%
OH-14	David Joyce	Republican	\$214,736,271	\$1,240,331,517	\$1,455,067,788	85%
OH-15	Mike Carey	Republican	\$1,451,692,029	\$320,144,890	\$1,771,836,919	18%
PA-01	Brian Fitzpatrick	Republican	-	-	-	0%
PA-02	Brendan Boyle	Democratic	-	-	-	0%
PA-03	Dwight Evans	Democratic	-	-	-	0%
PA-04	Madeleine Dean	Democratic	\$30,182,036	-	\$30,182,036	0%
PA-05	Mary Gay Scanlon	Democratic	-	-	-	0%
PA-06	Chrissy Houlahan	Democratic	\$5,765,434	-	\$5,765,434	0%
PA-07	Ryan Mackenzie	Republican	\$37,762,166	\$187,318,029	\$225,080,195	83%
PA-08	Rob Brenahan Jr.	Republican	-	-	-	0%
PA-09	Dan Meuser	Republican	\$119,459,122	\$323,153,655	\$442,612,777	73%
PA-10	Scott Perry	Republican	\$77,532,382	\$268,849,249	\$346,381,631	78%
PA-11	Lloyd Smucker	Republican	-	-	-	0%
PA-12	Summer Lee	Democratic	\$93,689,788	\$120,647,481	\$214,337,269	56%
PA-13	John Joyce	Republican	\$809,704,297	\$130,729,163	\$940,433,460	14%
PA-14	Guy Reschenthaler	Republican	\$117,510,572	\$173,537,325	\$291,047,897	60%
PA-15	Glenn Thompson	Republican	\$265,347,965	\$1,634,408,520	\$1,899,756,485	86%
PA-16	Mike Kelly	Republican	\$27,831,494	\$647,714,056	\$675,545,550	96%
PA-17	Chris Deluzio	Democratic	\$102,568,369	\$1,293,791,927	\$1,396,360,296	93%
WV-01	Carol Miller	Republican	\$566,546	\$2,166,538,159	\$2,167,104,705	100%
WV-02	Riley Moore	Republican	\$1,006,948,044	\$841,795,798	\$1,848,743,842	46%

*Invested so far is total invested (actual capex spending) for manufacturing, utility electricity, and industrial facilities under construction or completed between July 1, 2022, and Sept. 30, 2025. **Outstanding investment includes the amount of investment not yet spent as of Sept. 30, 2025, based on announced or estimated overnight capital cost for manufacturing, utility electricity, and industrial facilities..

Source: Keystone Research Center analysis of Rhodium Group-MIT/CEEPR Clean Investment Monitor data, <https://www.cleaninvestmentmonitor.org/>

Appendix B

Clean Energy Tax Credits under the One Big Beautiful Bill Act (OBBBA)⁴⁸

Consumer and Transportation Credits

Clean Energy Tax Credits	IRA Tax Credits	Changes under OBBBA
Clean Vehicle Credit (26 U.S. Code § 30D)	Up to \$7,000 in tax credits for the purchase of an electric vehicle. For vehicles placed in service between 2023 and 2032.	Tax credit expired at the end of September 2025.
Credit for Previously-Owned Clean Vehicles (26 U.S. Code § 25E)	Up to \$4,000 in tax credits for the purchase of a used electric vehicle. For vehicles placed in service between 2023 and 2032.	Tax credit expired at the end of September 2025.
Credit for Qualified Commercial Clean Vehicles (26 U.S. Code § 45W)	Up to \$7,500 in tax credits for clean vehicles under 14,000 lbs and up to \$40,000 for all other clean vehicles. For vehicles placed in service between 2023 and 2032.	Tax credit expired at the end of September 2025.
Alternative Fuel Vehicle Refueling Property Credit (26 U.S. Code § 30C)	A tax credit for the installation of alternative fuel vehicles refueling infrastructure and EV-charging stations in low-income and rural areas. Alternative fuels include electricity, ethanol, natural gas, hydrogen, biodiesel, and others.	The tax credit expires for any property placed in service after June 30, 2026.
Energy Efficiency Home Improvement Credit (26 U.S. Code § 25C)	A 30% tax credit for energy-efficiency improvements of residential homes. The tax credit can be claimed for energy-efficiency improvements until 2032.	The tax credit expires by the end of 2025.
Residential Clean Energy Credit (26 U.S. Code § 25D)	A 30% tax credit for the purchase of residential clean energy equipment. The tax credit can be claimed for energy-efficiency improvements until 2032. The 2-year phase down starts in 2033.	The tax credit expires by the end of 2025.

Industry and Business Credits

Clean Energy Tax Credits	IRA Tax Credits	Changes under OBBBA
Investment Tax Credit (ITC) (26 US Code §48E)	The ITC provides a technology-neutral tax credit for investments in energy projects with net-zero carbon emissions. The base tax credit (6%) increases when the project: <ul style="list-style-type: none"> meets wage and apprenticeship requirements (5x the base). is located in an energy community (up to 10%). using solar or wind technology is located in a low-income community (10% or 20%) meets the domestic content requirements by using domestic iron, steel and manufactured components (up to 10%) Available for facilities placed in service after 12/31/24. Phase-out starts in 2032 or when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower, whichever comes first.	The ITC (§48E) terminates for solar and wind facilities placed in service after Dec. 31, 2027 , unless construction begins within 12 months of the bill being signed into law (i.e., by July 4, 2026). Facilities that begin construction prior to July 4, 2026, generally have four years to be placed in service. New FEOC (foreign entity of concern) restrictions starting January 1, 2026. Tax credit phase-out for other eligible energy sources begins in 2033 (no phase-out tied to electricity greenhouse gas emission levels). Nuclear communities now also qualify for a tax credit bonus. NOTE: Other add-ons to base tax credit remain.
Investment Tax Credit (ITC) (26 US Code §48)	This tax credit is the predecessor to the ITC §48E (row above). It provides a tax credit for investments in renewable energy projects, such as solar, small wind, energy storage, fuel cells, microgrid controllers, and combined heat and power properties that started construction before 2025.	No changes under the OBBBA.
Production Tax Credit (PTC) (26 US Code §45Y)	The PTC provides a technology neutral tax credit for a 10-year period for the electricity produced from net-zero carbon emission energy sources. The base tax credit increases when the project: <ul style="list-style-type: none"> meets wage and apprenticeship requirements (5x the base). is located in an energy community (up to 10%). using solar or wind technology is located in a low-income community (10% or 20%) meets the domestic content requirements by using domestic iron, steel and manufactured components (up to 10%) 	The PTC (§45Y) terminates for solar and wind facilities placed in service after Dec. 31, 2027 , unless construction begins within 12 months of the bill being signed into law (i.e., by July 4, 2026). Facilities that begin construction prior to July 4, 2026, generally have four years to be placed in service. New FEOC (foreign entity of concern) restrictions starting January 1, 2026. Tax credit phase-out for other eligible energy

⁴⁸ This table has been informed by and cross-checked with the Bluegreen Alliance report: [“What Survived? An Update on Inflation Reduction Act Programs August 2025”](#)

Appendix B, cont.

Changes in IRA Clean Energy Tax Credits under the One Big Beautiful Bill Act (OBBBA)

Industry and Business Credits

Clean Energy Tax Credits	IRA Tax Credits	Changes under OBBBA
Production Tax Credit (PTC) (26 US Code §45Y) <i>cont</i>	Available for facilities placed in service after 12/31/24. Phase-out starts in 2032 or when U.S. greenhouse gas emissions from electricity are 25% of 2022 emissions or lower, whichever comes first.	sources begins in 2033 (no phase-out tied to electricity greenhouse gas emission levels). Nuclear communities now also qualify for a tax credit bonus. NOTE: Other add-ons to base tax credit remain.
Production Tax Credit (PTC) (26 US Code §45)	This tax credit is the predecessor to the PTC §45Y (row above). It provides a tax credit for the generation of energy from renewable energy projects, such as solar, small wind, energy storage, fuel cells, microgrid controllers, and combined heat and power properties that started construction before 2025.	No changes under the OBBBA.
Advanced Manufacturing Production Credit (26 US Code § 48X)	<p>The Advanced Manufacturing Production Credit provides a tax credit for domestic manufacturing of:</p> <ul style="list-style-type: none"> • Solar Energy Components • Wind Energy Components, including Offshore Wind Vessels • Inverters • Electrode Active Materials • Qualifying Battery Components • Applicable Critical Minerals <p>Its goal is to support the clean energy supply chain by incentivizing new domestic manufacturing facilities.</p> <p>The tax credit for critical minerals is permanent. For the other items the tax credit phases down between 2030 and 2032. It ends in 2033.</p>	<p>The Advanced Manufacturing Production Credit terminates for wind energy components sold after Dec. 31, 2027.</p> <p>The credit terminates for the sale of integrated components starting in 2027.</p> <p>New FEOC (foreign entity of concern) restrictions starting January 1, 2026.</p> <p>The tax credit phase out for critical minerals begins in 2031 (formerly permanent).</p> <p>The Advanced Manufacturing Production Credit creates a new tax credit for metallurgical coal. The tax credit ends in 2030</p>
Qualifying Advanced Energy Project Credit (26 US Code §48C)	The Qualifying Advanced Energy Project Credit program aims to advance clean energy manufacturing and recycling projects, and to help reduce greenhouse gas emissions. The Inflation Reduction Act provided \$10 billion in new funding under the 48C tax credit, with at least \$4 billion reserved for projects in designated energy communities. Projects selected under this tax credit span across large, medium, and small businesses and state and local governments.	<p>Forfeited credits are no longer reissued: Projects that fail to meet certification requirements (within 2 years after allocation) and placed into service requirements (within 2 years after certification) will need to return related allocated amounts to the Treasury.</p> <p>The DOE allocated its \$10 billion; no further funds have been budgeted for the program under the OBBBA.</p>
Credit for Carbon Oxide Sequestration (26 US Code § 45Q)	<p>Base tax credit is \$17/metric ton of carbon oxide captured and sequestered, and \$12/metric ton of carbon oxide injected for enhanced oil recovery or to make a commercial product. Those amounts are \$36 and \$26, respectively, for direct air capture facilities.</p> <p>Tax credit increases 5 times the base if the facility meets wage and apprenticeship requirements.</p>	<p>New FEOC (foreign entity of concern) restrictions.</p> <p>Tax credit is kept at up to \$85 per metric ton but creates parity between permanent geological storage and usage in enhanced oil recovery or for secondary products.</p> <p>NOTE: Tax credit increase for wage and apprenticeship requirements remain.</p>
Clean Hydrogen Production Credit (26 US Code § 45V)	<p>The tax credit ranges from \$.60/kg to \$3/kg of hydrogen produced, depending on the lifecycle ("well to gate") greenhouse gas emissions of the hydrogen production. The tax credit can be claimed over a 10-year period once hydrogen production begins.</p> <p>Tax credit increases if the project meets wage and apprenticeship requirements.</p> <p>Tax credit applies for facilities that start construction before 2033.</p>	<p>Shorter timeline: Facilities now need to start construction before 2028 in order to receive the tax credit.</p> <p>NOTE: Tax credit increase for wage and apprenticeship requirements remain.</p>
Industry and Business Credits		
	CHIPS Act Tax Credit	Tax Credit under OBBBA
Advanced Manufacturing Investment Credit (26 US Code § 48D)	A 25% tax credit on qualified investment for domestic manufacturers of semiconductors and semiconductor manufacturing equipment.	The tax credit increases from 25% to 35%.

Appendix C

List of Canceled Projects (Proposed and Confirmed) in our Four-State Appalachian Region (KY, OH, PA, WV)

Program	Agency Name	Recipient	State or CD	Canceled Funding	Status
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA15	\$3,150.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Mercer, PA	PA16	\$8,981.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Sidney, OH	OH15	\$25,125.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: New Bloomfield, PA	PA13	\$25,154.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: James Creek, PA	PA13	\$31,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$36,563.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Port Matilda, PA	PA15	\$37,515.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$38,418.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$47,625.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$48,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Pennsburg, PA	PA01	\$48,400.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Middletown, PA	PA10	\$48,750.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$56,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$56,250.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$56,700.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Carlisle, PA	PA10	\$59,969.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA03	\$60,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA12	\$64,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	WV Division of Emergency Management	WV02	\$74,612.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Dalton, PA	PA08	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Franklin, PA	PA13	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Gettysburg, PA	PA13	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Wilkes Barre, PA	PA08	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA08	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$75,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$80,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$80,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$80,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA10	\$80,400.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA15	\$80,824.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Ohio Department Of Public Safety, Emergency Management Agency	OH06	\$90,418.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA12	\$90,519.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$96,200.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$101,250.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$104,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Williamsport, PA	PA07	\$112,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Fulton, KY	KY01	\$123,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA10	\$123,750.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	WV Division of Emergency Management	WV	\$146,048.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$150,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA09	\$150,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Hebron, OH	OH12	\$157,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$158,333.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA16	\$168,750.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$180,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Pottsville, PA	PA09	\$187,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY03	\$188,689.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Dickson City, PA	PA08	\$208,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$217,500.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Columbus, OH	OH15	\$236,070.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$280,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Lakewood, OH	OH11	\$287,794.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Philadelphia, PA	PA03	\$290,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Jackson, OH	OH07	\$296,994.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$315,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Kentucky Department Of Military Affairs	KY	\$320,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$320,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA14	\$378,027.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Harleysville, PA	PA04	\$431,250.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	WV Division of Emergency Management	WV01	\$450,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Clean Water Fund	PA15	\$497,111.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Green Umbrella	OH04	\$497,184.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Parks Alliance Of Louisville, Inc.	KY03	\$500,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Vincentian Ohio Action Network	OH03	\$500,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Advocates For Basic Legal Equality, Inc.	OH04	\$500,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Nueva Esperanza Inc.	PA02	\$500,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	John Bartram Association	PA03	\$500,000.	Proposed Canceled
Environmental Justice Collaborative Problem-Solving	EPA	Shamokin Creek Restoration Alliance	PA09	\$500,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Ohio Department Of Public Safety, Emergency Management Agency	OH	\$854,815.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	Allegheny County	PA12	\$930,411.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Ohio Department Of Public Safety, Emergency Management Agency	OH	\$953,991.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Location: Columbiana, OH	OH06	\$996,517.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	Louisville-Jefferson County Metro Government	KY03	\$1,000,000.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	Cuyahoga County Board-Health	OH11	\$1,000,000.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	Cuyahoga County	OH11	\$1,000,000.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	Philadelphia, City Of	PA02	\$1,000,000.	Proposed Canceled
Environmental Justice Government-to-Government	EPA	City Of Mc Keesport	PA12	\$1,000,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA12	\$1,026,371.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Ohio Department Of Public Safety, Emergency Management Agency	OH	\$1,046,009.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	WV Division of Emergency Management	WV	\$1,494,290.	Proposed Canceled

Appendix C, cont.

List of Canceled Projects (Proposed and Confirmed) in our Four-State Appalachian Region (KY, OH, PA, WV)

Program	Agency Name	Recipient	State or CD	Canceled Funding	Status
Building Resilient Infrastructure and Communities Cost-effective Codes Implementation for Efficiency and Resilience	DHS	Ohio Department Of Public Safety, Emergency Managment Agency	OH15	\$1,602,001.	Proposed Canceled
Building Resilient Infrastructure and Communities Low Embodied Carbon Labeling for Construction Materials	DOE	Northeast Energy Efficiency Partnerships, Inc.	PA05	\$2,000,000.	Proposed Canceled
Building Resilient Infrastructure and Communities Clean Heavy-Duty Vehicles E	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA05	\$2,012,532.	Proposed Canceled
Environmental Justice Community Change Grants	EPA	WVRC - West Virginia University Research Corporation	WV	\$2,486,224.	Proposed Canceled
Building Resilient Infrastructure and Communities	DHS	Pa Emergency Management Agency Governors Office Comptroller	PA	\$2,717,213.	Proposed Canceled
Environmental Justice Community Change Grants	PA	Penn Hills School District	PA17	\$2,800,000.	Proposed Canceled
Building Resilient Infrastructure and Communities	EPA	The Trust For Public Land	OH11	\$3,000,000.	Proposed Canceled
Environmental Justice Thriving Communities Grantmaking	DHS	Kentucky Department Of Military Affairs	KY04	\$6,378,694.	Proposed Canceled
Environmental Justice Community Change Grants	PA	Green & Healthy Homes Initiative Inc	WV01	\$8,000,000.	Proposed Canceled
Environmental Justice Community Change Grants	EPA	Pittsburgh Conservation Corps	PA15	\$15,309,845.	Proposed Canceled
Advanced Industrial Facilities Deployment Program	EPA	Metrohealth System, The	OH11	\$17,810,277.	Proposed Canceled
Environmental Justice Community Change Grants	DOE	Diageo Americas Supply	KY; IL*	\$19,893,476	Confirmed Canceled
Advanced Industrial Facilities Deployment Program	EPA	Energy Coordinating Agency Of Philadelphia, Inc.	PA03	\$19,997,822.	Proposed Canceled
Advanced Industrial Facilities Deployment Program	DOE	Kraft Heinz	IL; MO; OH; MI; IN; NY; MN; IA; VA*	\$23,720,321	Confirmed Canceled
Advanced Industrial Facilities Deployment Program	DOE	O-I Glass, Inc	CA; OH; VA*	\$24,705,101	Confirmed Canceled
Domestic Manufacturing Conversion Grants	DOE	PACCAR Inc	OH02	\$35,000,000.	Proposed Canceled
Advanced Industrial Facilities Deployment Program	DOE	Libbey Glass	OH09	\$45,100,000.	Confirmed Canceled
Greenhouse Gas Reduction Fund - Solar for All Program	EPA	Kentucky Energy and Environment Cabinet	KY	\$62,450,000.	Proposed Canceled
Carbon Capture Large-Scale Pilot Programs	DOE	PPL Corporation	KY03	\$72,000,000.	Confirmed Canceled
Clean Energy Demonstrations on Current and Former Mine Land	DOE	Mineral Basin Solar Power, LLC	PA15	\$90,000,000.	Proposed Canceled
Greenhouse Gas Reduction Fund - Solar for All Program	EPA	West Virginia Office of Energy	WV	\$106,180,000.	Proposed Canceled
Greenhouse Gas Reduction Fund - Solar for All Program	EPA	State of Ohio Office of Budget and Management State Accounting	OH	\$156,120,000.	Proposed Canceled
Greenhouse Gas Reduction Fund - Solar for All Program	EPA	Pennsylvania Energy Development Authority	PA	\$156,120,000.	Proposed Canceled
Neighborhood Access and Equity Grant Program	DOT	City of Philadelphia	PA03	\$158,911,664.	Confirmed Canceled
Battery Materials Processing Grants	DOE	Ascend Elements	KY01	\$164,395,625.	Confirmed Canceled
Battery Materials Processing Grants	DOE	Ascend Elements	KY01	\$316,186,575.	Proposed Canceled
Advanced Industrial Facilities Deployment Program	DOE	Cleveland-Cliffs Steel Corporation	OH08	\$500,000,000.	Confirmed Canceled

*While the Climate Program Portal reports the full amount of multi-state grants to each state, to estimate a more accurate amount of canceled funds to our region, we allocated the multi-state funding to states by their population share of the states receiving that funding.

Source: Keystone Research Center analysis of Climate Program Portal data, accessed here:
<https://climateprogramportal.org/outcomes-dashboard/>

Appendix D

Total Jobs (Completed and Outstanding) for Congressional districts in KY, OH, PA, WV, from 2022 Q3 through 2025 Q3 (in 2024 USD)

Congressional District	US Representative	Party	Operational jobs - completed facilities	Construction jobs - completed facilities	Total jobs - completed facilities	Outstanding operational jobs	Outstanding construction jobs	Total Outstanding jobs	Total jobs (completed facilities and outstanding)
KY-01	James Comer Jr.	Republican	91	1,135	1,226	603	2,185	2,788	4,014
KY-02	Brett Guthrie	Republican	2,649	2,583	5,232	4,552	3,864	8,416	13,648
KY-03	Morgan McGarvey	Democratic	0	0	0	2,200	1,353	3,553	3,553
KY-04	Thomas Massie	Republican	16	209	225	1,612	947	2,559	2,784
KY-05	Hal Rogers	Republican	17	218	235	59	781	840	1,075
KY-06	Andy Barr	Republican	9	111	120	2,666	3,597	6,263	6,383
OH-01	Greg Landsman	Democratic	0	6	6	60	328	388	394
OH-02	David Taylor	Republican	218	2,739	2,957	110	816	926	3,883
OH-03	Joyce Beatty	Democratic	0	0	0	2,200	1,919	4,119	4,119
OH-04	Jim Jordan	Republican	214	1,858	2,072	2,212	3,507	5,719	7,791
OH-05	Bob Latta	Republican	240	646	886	1,995	2,570	4,565	5,451
OH-06	Michael Rulli	Republican	72	51	23	60	808	868	991
OH-07	Max Miller	Republican	2	8	10	0	0	0	10
OH-08	Warren Davidson	Republican	98	140	238	0	0	0	238
OH-09	Marcy Kaptur	Democratic	887	1,700	2,587	374	1,027	1,401	3,988
OH-10	Michael Turner	Republican	0	0	0	2,025	939	2,964	2,964
OH-11	Shontel Brown	Democratic	26	44	70	0	0	0	70
OH-12	Troy Balderson	Republican	1,000	1,185	2,185	63	919	982	3,167
OH-13	Emilia Sykes	Democratic	1	9	10	35	138	173	183
OH-14	David Joyce	Republican	1,700	1,591	3,291	320	1,468	1,788	5,079
OH-15	Mike Carey	Republican	264	1,499	1,763	26	352	378	2,141
PA-01	Brian Fitzpatrick	Republican	0	0	0	0	0	0	0
PA-02	Brendan Boyle	Democratic	0	0	0	0	0	0	0
PA-03	Dwight Evans	Democratic	0	0	0	0	0	0	0
PA-04	Madeleine Dean	Democratic	4	48	52	0	0	0	52
PA-05	Mary Gay Scanlon	Democratic	0	0	0	0	0	0	0
PA-06	Chrissy Houlahan	Democratic	2	12	14	0	0	0	14
PA-07	Ryan Mackenzie	Republican	2	18	20	107	440	547	567
PA-08	Rob Brenahan Jr.	Republican	0	0	0	0	0	0	0
PA-09	Dan Meuser	Republican	15	188	203	136	564	700	903
PA-10	Scott Perry	Republican	12	144	156	151	567	718	874
PA-11	Lloyd Smucker	Republican	0	0	0	0	0	0	0
PA-12	Summer Lee	Democratic	650	389	1,039	2	188	190	1,229
PA-13	John Joyce	Republican	87	1,090	1,177	12	168	180	1,357
PA-14	Guy Reschenthaler	Republican	12	137	149	52	1,044	1,096	1,245
PA-15	Glenn Thompson	Republican	25	315	340	174	2,175	2,349	2,689
PA-16	Mike Kelly	Republican	4	48	52	150	965	1,115	1,167
PA-17	Chris Deluzio	Democratic	330	392	722	428	1,391	1,819	2,541
WV-01	Carol Miller	Republican	920	27	947	115	1,132	1,247	2,194
WV-02	Riley Moore	Republican	776	1,156	1,932	426	2,198	2,624	4,556

*Invested so far is total invested (actual capex spending) for manufacturing, utility electricity, and industrial facilities under construction or completed between July 1, 2022, and Sept. 30, 2025. **Outstanding investment includes the amount of investment not yet spent as of Sept. 30, 2025, based on announced or estimated overnight capital cost for manufacturing, utility electricity, and industrial facilities..

Source: Keystone Research Center analysis of Rhodium Group-MIT/CEEPR Clean Investment Monitor data, <https://www.cleaninvestmentmonitor.org/>