



COAL IN THE UNITED STATES: POLICY RESPONSES TO AN INDUSTRY IN DECLINE

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ABOUT DELTA INSTITUTE

Established in 1998, Delta Institute is a Chicago-based nonprofit organization that collaborates with communities to solve complex environmental challenges throughout the Midwest. Since our founding, we have engaged in community-driven redevelopment of vacant sites and brownfields, and we are a national leader in supporting coal plant communities in the transition away from coal. We help communities plan for the closure and potential reuse of their coal plants in ways that promote environmentally sustainable and socially equitable economic development. We do this work in broad partnership with community-based organizations, environmental justice organizations, coal plant owners, electric utilities, private foundations, local government agencies, elected officials, federal agencies, and labor organizations. We have worked with coal plant communities across the country from New York to Montana. Visit us online at www.delta-institute.org.

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INTRODUCTION

Across the United States, coal-fired power plants are closing their doors. Driven by shifting energy markets, aging infrastructure, and changing consumer preferences, the coal industry is rapidly shrinking. In the last 11 years alone, electricity generated by coal has gone from representing 50 percent of the country's power mix in 2006, down to 30 percent in 2017. For decades, communities that are home to coal-fired power plants have had to live with both the environmental consequences of our country's reliance on coal for energy, and at the same time acknowledging their economic dependence on the coal industry. While signs point to the continued decline of the industry, Donald Trump and his administration (the administration) have made their intentions clear to "end the war on coal" and restore the industry to its former dominance in the energy sector.

The first section of the white paper provides an overview of six actions that the administration has taken or attempted to take, to deliver on their campaign promise of bringing back coal. Although the administration continues to take steps aimed at making it easier for existing coal plants to continue current operations or make it easier for them to pollute, as of the start of the administration's second year in office, coal plant closures show little sign of slowing. According to the Energy Information Administration, over 170 coal plants have closed since 2002, with another 30 plants slated to close by 2025.¹ As power plants continue to go offline and coal mines close, communities that house these facilities are faced with the challenge of planning for the remediation and reuse of their brownfield site, retraining displaced workers, and filling the hole in their community's tax base.

The second section of the white paper outlines the opportunities, challenges, and lessons learned of past state and federal responses to support communities that have experienced the greatest impact due to an industry closing or moving out of their region. The coal industry has been a source of pride and economic support for many communities throughout the U.S. As coal-fired power plants continue to shut down despite the current administration's efforts, a coordinated response to provide support to those communities hit the hardest by the transition is essential to ensure future economic viability.

SECTION ONE: WHAT HAS HAPPENED

The Trump administration has promised to bring back coal. Campaigning on this promise, the administration won nine of the ten states with the highest coal production in the U.S., including Wyoming, West Virginia, and Kentucky.ⁱⁱ Since taking office, the administration has taken steps or proposed changes at the federal level to “end the war on coal.” This section examines six of those actions and what impact, if any, they have had on the coal industry and the communities that are home to coal infrastructure.

1. January 2017 - Repeal the “Stream Protection Rule”

One of the Trump administration’s first acts to end the war on coal took place less than a month after taking office. Applying the rarely used Congressional Review Act, an act that allows the administration to overturn rules that were passed in the previous 60 working days, Trump signed a bill to repeal the Stream Protection Rule. The rule, which was part of the 1977 Surface Mining Control and Reclamation Act, was formalized by the Obama administration in December 2016. The Obama administration’s goal of clarifying the vague language from 1977, was to protect drinking water by establishing a 100-foot buffer around streams, in addition to other provisions. The rule would have helped preserve native species to ensure the hydrologic balance was not damaged by coal mining activities, such as mountaintop-removal.

Impact

Repealing the Stream Protection Rule was an easy first step for the Trump administration to take to appease his supporters in coal country. By repealing the Stream Protection Rule, coal companies are able to more easily dump coal waste from mining activities into streams.ⁱⁱⁱ Many coal industry leaders claimed that the regulation would have led to a loss in coal jobs, cost coal companies thousands, and was a duplication of the regulations outlined in the Clean Water Act. No reliable figures were available on how much the coal industry saved due to the repeal of this rule, or if any jobs were spared as a result of the repeal. However, it is clear that dumping waste from coal production activities makes it easier for companies to create pollution that has a negative environmental effect on our aquatic habitats and drinking water.

2. March 2017 - Clean Power Plan

In March of 2017, President Trump signed an executive order directing the Environmental Protection Agency (EPA) to review the Clean Power Plan. The plan, which was created under President Obama, assigned each state a goal for limiting emissions from coal-fired power plants. States were given flexibility in how they would reach their emissions goals, but one way to achieve this reduction by shifting away from their existing energy infrastructure in favor of other sources such as wind, solar, and nuclear.^{iv} Although the plan is under review, many states, driven by market trends including the decreasing prices in natural gas and the increasing access to renewable energy sources were already taking steps to shift away from coal generated electricity. For example, New York and Oregon both plan to retire their last coal unit in the next two years.^v

Impact

The EPA is accepting comments on the proposed repeal of the Clean Power Plan until April 26, 2018.^{vi} However, because targets set by the rule would be carried out on a state-by-state basis, there are state-level factors that need to be taken into consideration to determine whether repealing the Clean Power Plan will actually provide support to struggling coal-fired power plants. Many states already have existing efforts in place that will allow them to meet their targets and reduce the number of coal-fired power plants in their geography. While repealing the Clean Power Plan may slow the rate of coal-fired power plant retirement in some states, according to a Rhodium Group report, one significant nationwide impact could be the repeal's ability to undermine what would have been the first-ever national CO2 emission regulatory framework.^{vii}

3. June 2017 - Withdrawal from Paris Agreement on Climate Change

In June of 2017, the Trump administration announced that the United States would withdraw from the Paris Agreement. Many in the coal industry saw this move as a gesture to keep the administration's campaign promises to the sector. The Paris Agreement, signed by President Obama and 195 other nations in April of 2016, was the first time in history that every country in the world came together to take action on climate change and set goals for the reduction of greenhouse gases. With the decision to leave the Paris Agreement, the Trump administration made the United States the only country that is not a part of the agreement.

Impact

While it may have been a symbolic step for the Trump administration to take, withdrawing from the Paris agreement will most likely do little to keep the coal industry afloat and coal jobs in the U.S. In many ways, leaving the Paris Agreement was a way to double down on the Trump administration's efforts to repeal of the Clean Power Plan, removing any emission standards or metrics that would require additional environmental regulations. While the federal government has turned its back on the agreement, many states have signed onto the U.S. Climate Alliance, a coalition of states that continues to work towards cutting their carbon emissions and achieving the goals of the original agreement.^{viii} With 17 states and Puerto Rico already implementing policies that would achieve the climate accord's goals as well as 246 Mayors who have adopted the agreement, many in the U.S. are still committed to

reducing carbon emissions, which for some regions may mean adopting state-level policies that would favor alternative sources of energy over coal.

4. December 2017 - Tax Cuts and Jobs Act

On December 22, 2017, President Trump signed a \$1.5 trillion tax bill that changed the tax rate for utilities and other corporate entities. The two provisions in the Tax Cuts and Jobs Act that affects the coal sector is the elimination of the alternative minimum tax credit (AMT) and the decrease to the corporate tax rate from 35 percent down to 21 percent. The elimination of the AMT was fought for by the coal industries, as it limits the deductions and tax credits that companies can receive. However, the lower corporate tax rate has a mixed impact on the fossil fuel utility companies.

Impact

Utility companies anticipate mixed benefits from the tax overhaul.^{ix} While for most corporations, lower tax rates mean higher earnings, regulatory proceedings are taking place in some states to determine how utilities can return their savings to customers. For example, in Michigan and Louisiana, the Public Service Commissions have given utilities a deadline to develop a plan to calculate what the rate reductions would be for customers.^x In Pennsylvania, the Public Utility Commission is seeking comments from “utilities and interested parties on how reductions in utilities’ federal taxable income may affect ratepayers.”^{xi} In addition, some companies in the Industry will not be able to take advantage of the corporate cuts due to the provision that excludes companies that are operating at a loss. However, some coal companies have indicated that the elimination of the AMT will help reduce bankruptcies in the industry.^{xii}

5. January 2018 - Implications of FERC ruling on subsidizing coal-fired power plants

The Department of Energy’s (DOE) Notice of Proposed Rule Making for the Grid Resiliency Price Rule was released on September 29, 2017. The proposed rule was based on a grid reliability study that DOE Secretary Rick Perry ordered his staff to undertake. The study examined if coal and nuclear plants were being adequately compensated for the power they generate and for the reliability that they provided to the grid through energy stored on-site. The proposed rule cited that the resiliency of the U.S. power supply would be at risk if these types of generators continued to close. If the proposed rule had been adopted, it would have provided subsidies to nuclear and coal-fired power plants that are facing impending retirements.

Impact

On January 8, 2018, the Federal Energy Regulatory Commission (FERC) voted in a 5-0 decision to reject the Grid Resiliency Price Rule. In its decision, FERC, an independent agency that regulates the interstate transmission of electricity, noted that the planned retirements of coal plants does not pose a threat to the resiliency of the grid.^{xiii} The proposed rule may have been the administration’s best chance at creating a federal response to move the needle in keeping coal-fired power plants in operation. However, the rejection from FERC sends a clear market

signal that support in the form of a subsidy would not be provided to these aging facilities.

6. February 2018 - Potential: Fiscal Year 2019 Budget Cut to the Economic Development Administration

On February 12, 2018, the Trump administration released its budget proposal for fiscal year 2019. The budget calls for cuts to key federal economic development programs that provide support to the very communities that the Trump administration has promised to support. Under the proposed plan, the Department of Commerce would eliminate the Economic Development Administration (EDA). The EDA aims to support business development in distressed areas in the U.S. through grants for programs such as research centers to explore innovations in manufacturing or for redevelopment projects that create business incubators. According to the EDA website, in fiscal year 2017, appropriations included \$30 million in funding for Assistance to Coal Communities.^{xiv} In a statement regarding the FY19 budget, the Trump administration claimed that the programs administered by the EDA are redundant with other federal efforts.

Impact

The Trump administration proposed the same cuts to the EDA in fiscal year 2018. While Congress voted to retain the EDA during the last budget cycle, its funding was cut by \$12 million. The impact of these proposed cuts would most negatively affect the communities that are relying on the administration to bring back coal. However, as market trends have shown, coal plants across the country are continuing to close. In a recent example, in February 2018, Consumers Energy, a Michigan utility provider announced that they would stop burning coal by 2040 stating that they “believe climate change is real and we can do our part by reducing our greenhouse gas emissions.”^{xv} Consumers Energy is joining a growing contingent of companies that are closing their coal plants in favor of natural gas and renewable sources of energy.

SECTION TWO: A POLICY RESPONSE FOR COAL COMMUNITIES

As the examples above illustrate, the Trump administration has taken a number of measures to ease regulations aimed at making it easier for the coal industry to continue to operate. However, the decreasing price of natural gas and renewables, as well as shifting consumer preferences away from coal, are having a much larger influence on the behavior of the coal industry than the roll back of government regulations. The challenges that arises from the current narrative that coal is coming back is that resources are not being made available to support the communities that are hardest hit by coal plants closing. And coal plants will continue to close. According to the Institute for Energy Economics and Financial Analysis (IEEFA), 15,000 megawatts of coal-generated capacity is slated to close in 2018 alone.^{xvi} This means that more communities will face the economic and social impacts of a coal-fired power plant closing and will need to plan for what's next for their community.

The transition away from coal is not the first industry shift that has left communities needing to plan for the reuse of large brownfield sites and a source of economic development to support their tax base. For example, the auto industry experienced a downturn in recent decades, setting precedents for local, state, and federal responses to industry shifts. Although not all responses have been successful, and some were controversial, coal communities can learn from these past political responses to other downsizing or collapsed industries. While the scale of the transition away from coal-fired power plants has grown in recent years, this shift has been going on for decades, and will continue into the future as the U.S. energy sector continues to move away from coal. Coal communities in transition have begun moving forward by planning ahead and championing grassroots campaigns to instate policies ensuring a just transition. As more coal plants and coal mines close, communities can learn from other places that have transitioned away from coal and other types of industrial uses.

The next section of this report examines federal and state responses to past industrial shifts in the United States, as well as more recent efforts to address the coal industry, and what can be learned from those efforts to address the future of the transition away from coal. It is divided into three sections:

1. Abandoned brownfields

2. Worker retraining

3. Shrinking tax base

1. Abandoned Brownfields

Issue Statement:

Closed coal plants and mines can become complex environmental burdens on local communities. Coal plants often store the coal combustion residuals (CCR) on site in ash impoundments. In the United States, 357 power plants have an ash impoundment, and 213 of those impoundments lack a protective liner.^{xvii} A protective liner reduces risk of leakage and research indicates that unlined sites may pose an increased risk to human health and the environment.^{xviii} Coal plants are often located along waterways, historically receiving fuel from freighters, and this combination of unlined sites in close proximity to waterways also increases risk of leaking. The EPA has documented 137 cases of water contamination due to coal ash, just at the subset of sites that are monitored. In a more severe case in 2008, Tennessee Valley Authority's coal ash dam in Harriman, TN broke, damaging homes and leaking pollution into nearby rivers.^{xix}

The coal plant facility itself may also have leaking storage tanks or asbestos. There are currently about 50,000^{xx} abandoned coal mines across the United States, some of which are brownfields, and others that are superfund sites, which pose a serious threat to human health and the environment. The federal government is generally involved in the cleanup of superfund sites, and while federal funds are available for brownfields, states play a larger role in clean up.^{xxi} Existing programs primarily cover mines permitted before 1977, but more will close in the future that were permitted after this date. As of 2016, there were 710 active coal mines in the United States, down 18.8% from the previous year.^{xxii} These unique challenges call for a robust strategy for land impacted by the coal economy, one that can be informed by the auto industry shift.

Policies and Programs:

- **The RACER Trust (Federal)**

In 2008, the Auto Industry bailout led to discussions of what would be done with abandoned sites. As a result of the bailout proceedings in bankruptcy court, the Revitalizing Auto Communities Environmental Response (RACER) Trust (the Trust) was formed in 2011, with advisement from the Mayors Automotive Coalition.^{xxiii} The RACER Trust is responsible for the cleanup and redevelopment of 89 former General Motors facilities.^{xxiv} The Trust had access to \$500 million for investigations and clean ups; after investigation two thirds of the sites required clean ups.^{xxv} The Trust helped to ensure these problem sites were not left abandoned or a burden on communities. The purchasing process required consultation with the community, so the Trust had to notify local governments of the sale thirty days prior. The RACER Trust has set a goal to receive a No Further Action letter from the EPA or equivalent state Lead Agency for each site.^{xxvi} As of 2017, 54 of the 89 sites have been sold.^{xxvii}

- **Abandoned Mine and Land Reclamation Program (Federal)**

The Abandoned Mine and Land (AML) Pilot Program was first funded in 2015, and set aside \$90 million a year toward reclaiming abandoned mine sites for economic development.^{xxviii} The program was championed by Congressman Hal Rogers of Kentucky, and the funds are available for mines permitted prior to 1977. This program is the most recent iteration of use of fees from the Surface Mining Control and Reclamation Act (SMCRA) of 1977.^{xxix} The Office of Surface Mining Reclamation and Enforcement (OSMRE) administers the program and has collected over \$10 billion in a reclamation fee placed on each ton of coal produced.^{xxx} OSMRE has spent \$8 billion on mine reclamation, and will need an estimated \$4 billion more to finish reclaiming the most harmful pre-1977 sites.^{xxxi}

- **EPA Brownfields Grant Program (Federal)**

The EPA Brownfields Grant Program provides a number of opportunities to assist communities in the assessment and cleanup of brownfields through competitive grants. The FY2017 Budget included \$5 million in funds for Area Wide Planning Grants to help communities impacted by the coal economy plan for the assessment, clean up and reuse their brownfields sites.^{xxxii} The FY18 Budget for the Brownfields Grant Program was cut by \$14 million or 30 percent.

Takeaways:

Both the RACER Trust and the AML Pilot set a precedent for a specialized federal response to large brownfields issues. According to the EIA, 75% of coal plants in the Midwest have had at least one operating unit close since 2010, leaving behind coal ash ponds. In addition, coal producers are filing for bankruptcy, with 25 publicly listed companies having filed for bankruptcy between 2015 and 2016.^{xxxiii} Bonds posted by coal companies are meant to provide the funds needed to reclaim newer mines not covered by SMCRA, however the practice of self-bonding, a coal company using their own balance sheets for bonds, have left some concerned that the taxpayer will eventually need to cover the cost of reclamation.^{xxxiv} These trends may leave more problem sites in local communities. While the context is different, the RACER Trust does set a precedent for local government setting the agenda for a federal response and requiring community involvement. The Auto Industry Bailout was at the time controversial,^{xxxv} and while the coal companies and energy generators are in a different context today, the Trust can be used as a reference point to advocate for more state or federal funds for cleanup, especially in cases of bankrupt companies. Funds from SMCRA fees will continue to be used, but are not focused on newer mines and do not apply to coal plant sites. In addition, with funding cuts to the EPA Brownfields Grant Program,^{xxxvi} state and local partners must look to fill this gap by building a strategy and finding more funds that will support coal communities burdened by abandoned contaminated sites.

2. Worker Retraining

Issue Statement:

Employment in the coal industry has been declining for decades. According to the Bureau of Labor Statistics, between 1980 and 2016 employment in coal mining dropped from roughly 230,000 jobs to 53,420 jobs across the United States.^{xxxvii} While employment in specifically coal generation has been more difficult to track, across the Midwest, 27,456 people are employed in fossil fuel generation, and the loss of these high-paying jobs after plant closure results in a negative economic impact at the local level.^{xxxviii} Past and current industry shifts have previously drawn a federal dollars for workforce development and retraining.

Policies and Programs:

- **Power + Plan (Federal)**

In 2015, the Obama administration announced that funds would be available for communities affected by the ongoing shift in the coal industry and power sector under the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative were available. One of the primary purposes of this funding was to provide workforce services and skills training to those affected by industry downsizing.^{xxxix} A number of agencies, including the Appalachian Regional Commission and Economic Development Administration, administered \$35.5 million in funds through competitive grants. This initiative was renewed through The POWER + Plan of 2017, which included \$75 million in grant funds for economic and workforce development.

Takeaways

The EDA has previously played a role in administering these funds however, the Trump Administration has proposed to eliminate the EDA in both the FY18 and FY19 budgets. While the EDA was preserved in the FY18 budget, its spending was cut by \$12 million. The FY18 Budget will continue to make funds available through the POWER initiative, grant awardees can use these funds for up to three years.^{xl} This funding will not fill the gap made from the missing \$12 million however. Overall, federal funding for workforce retraining has decreased 22% since 2009 and will likely continue to shrink.^{xli} Retraining efforts have also been cited as ineffective according to numerous studies.^{xlii} Both the lack of funding and unfavorable study results point to a need for state and local actors to step in. Coal communities can look to other communities that have lost a major employer, such as Newton, Iowa, for strategy. Maytag at its peak provided 20% of the jobs in Newton, yet this community was able to recover after Maytag left by creating flexible retraining programs.^{xliii} This is a complex process that will require state and local champions who are willing to set up flexible and demand driven programs for a rapidly changing economy.

3. Shrinking Tax Base

Issue Statement:

Upon the closure of a coal plant, communities frequently struggle with a significant loss in tax base. Coal plant communities range in size and economic diversity and therefore impacts to tax base vary. For example, the Killen and Stuart plants which are slated to close in Adams County, Ohio represent 32% of the county's general fund and 51% of the their local school district's funds.^{xliv} The loss of tax base can be gradual, in cases of partial closure, or more abrupt. Adding to the complexity, closures are sometimes characterized by disputes in asset value as was the case with the closure of B.C. Cobb in Muskegon, MI.^{xlv} In an energy market that may have less centralized generation in the future and more distributed energy resources, coal plant communities need time to plan for the future of their local economies. States across the nation can look to New York's Electric Generation Facility Cessation Mitigation Program as an interim strategy for tax base replacement for coal plant communities, and other communities with retiring centralized generation.

Policies and Programs:

- **New York: Electric Generation facility Cessation Mitigation Program (State)**

The Clean Air Coalition of Western New York started a grassroots campaign with unions, government agencies and community members of Tonawanda, NY to fight for funds to aid with the closure of the Huntley coal fired plant. The result of that fight was a new law that would backfill tax losses and protect jobs during a 7-year period.^{xlvi} The New York State Energy Research and Development Authority (NYSERDA) and the Department of Public Service now administer the Electric Generation Facility Mitigation Program, which offers grant funding to New York local governments experiencing a reduction in tax base due to the closure of an electric generation facility. This fund is available when the closure results in a 20% or more loss of real property tax collections or Payments in Lieu of Taxes. Thirty million in funds were made available during the 2016-17 fiscal year. This campaign success sets a precedent for other states to contribute to tax losses.^{xlvii}

Takeaways:

More states could institute policies that provide time for coal plant communities and other communities experiencing the closure of a centralized generation site to plan for their future. Creating a state administered temporary fund can be a strong interim strategy for tax base replacement. Providing local governments' funds gives communities time to plan for the best use for the site in redevelopment, relieving local actors from making decisions too quickly to refill their tax base. Engaging in a planning process that encourages economic diversification in site use (See [example](#) from a planning process in Somerset, MA) and a broader strategy for economic diversification for the community (See planning [example](#) from Tonawanda) are key long term strategies for sustainable tax base replacement.

CONCLUSION

The transition away from coal-fired power plants is not the first industry shift that the U.S. has experienced. There is precedent for a response at the federal level to provide support to the communities most impacted by the shrinking or collapse of an industry. However, given the administration's current narrative that the coal industry is coming back, it is unlikely that a coordinated response to provide support to communities transitioning away from coal will be implemented at this time.

The economic and social impacts of a coal plant closing have been growing in scale as more communities are experiencing closures. The redevelopment process, from the decommissioning to the productive reuse of a former coal site can take decades to achieve and the impacts of a coal plant or coal mine closings will continue long after the current administration is out of office. As additional closures are announced, more communities will need to plan for what's next for their residents, workers, economy and environment. Given the lack of federal leadership, it will most likely fall to state and local governments to step-up and determine how to best support their communities. Lessons can be learned from places that have already begun planning, advocating for policy change, identifying funding and private investors, and creating a long-term vision for their post-coal community.

To learn more about Delta Institute's approach and experience, or to explore opportunities for partnership, please reach out to Emily Rhodes at erhodes@delta-institute.org.

JOIN THE CONVERSATION

What are you doing to solve environmental challenges in the Midwest? How can we work together to help communities in transition? What are your BIG ideas?

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