

# Coal Communities in Transition

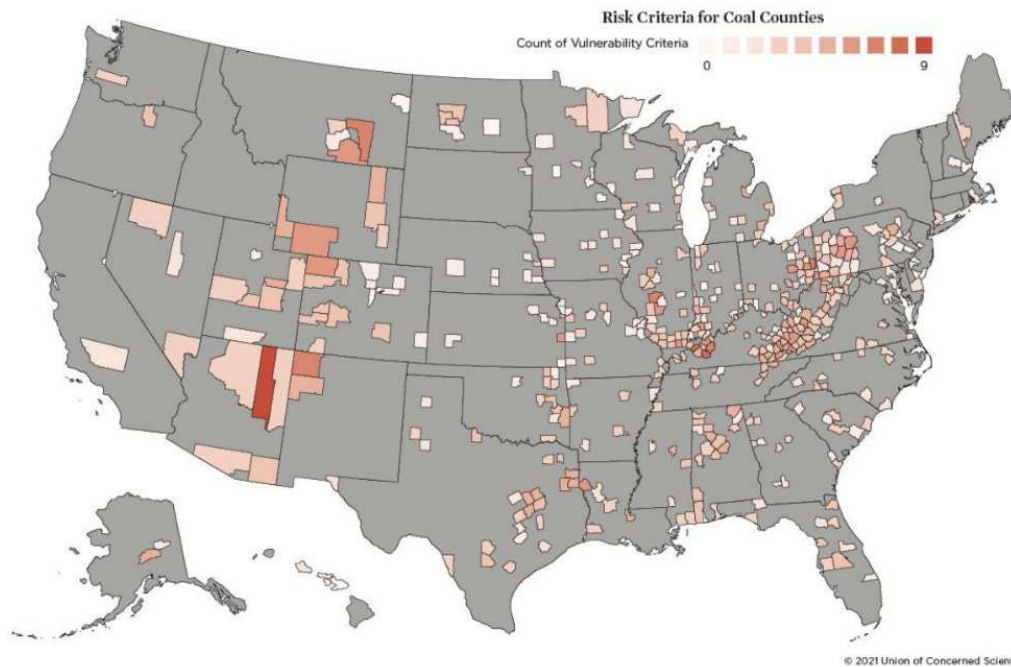


Figure 1. U.S. Coal Counties and Their Vulnerability *Source: Utility Workers of America and the Union of Concerned Scientists (2021)*

## Description

The energy sector is in transition in the U.S. and around the world. Figure 1 shows 462 coal-reliant counties that are especially vulnerable to economic decline from the transition, according to an analysis by the Utility Workers Union of America and the Union of Concerned Scientists.<sup>1</sup>

Coal plants and mines are being closed earlier than planned due to market forces and policy. This brief focuses on coal impacted communities because in 2022 these are the communities at risk. However, in the future these same issues will be seen in oil and gas communities. In the past decade, the U.S. coal plant fleet decreased by 30%, and according to the Department of Energy, an additional 100 coal plants will close in the next five years. Coal fired electricity is being replaced by cleaner, less expensive sources like wind, solar, and natural gas. Coal produces the highest carbon emissions of all electricity sources in the U.S., so the transition away from coal will lead to decreases in harmful emissions that cause air and water pollution, climate change, and negative health impacts like lung disease and asthma.

For decades, many coal-fired power plants were sited in historically disadvantaged communities (often near Black, Indigenous, or other People of Color), leading to disproportionate health problems from pollution<sup>2</sup>. As coal mines and plants close, health issues associated with them will

<sup>1</sup> [www.ucsusa.org/resources/support-coal-workers](http://www.ucsusa.org/resources/support-coal-workers)

<sup>2</sup> EPA Power Plants and Neighboring Communities mapping [tool](https://www.epa.gov/power-plants-and-neighboring-communities) of power plants and environmental justice communities and <https://www.scientificamerican.com/article/coal-plants-smother-communities-of-color/>

decline. The retirement of coal plants and replacement with new energy sources require sincere attention to energy justice – a related and important aspect of the energy transition.<sup>3</sup>

Communities that host coal mines and coal plants rely on jobs and revenue provided by the coal industry. With earlier-than-planned mine and plant closures, communities face uncertain futures, with challenges such as job losses, severe cuts in (mostly rural) county revenue, and even cultural shifts, particularly in areas built around the coal industry.

Ideally, the transition away from coal would benefit coal workers who have powered our electricity system for decades along with their communities that relied on taxes and other revenue from coal plants and mines. However, this will take careful planning and funding. By working collaboratively to invest in and listen to coal-reliant community members, policymakers can help build resilient and equitable economies based on the local needs and values as today's coal towns transition.

There is no one single industry that will take the place of coal jobs – jobs providing very high pay to workers without college degrees. States and counties are beginning to work with the federal government to seek funding and prepare for the transition by providing short term assistance for long term resilience. The coal transition is one of many industrial evolutions in the United States, and there will be more. It behooves us to learn how to transition more effectively and to intentionally include impacted communities in planning.

## Discussion

The energy transition is multi-faceted and impacts sectors across American lives, from the economy to industry to culture. While policy interventions are urgently needed to induce proactive planning, solutions ultimately must come from within impacted communities, with support from outside experts and resources. States that have coal plant retirement and reduction timelines in place are already well positioned to enact supportive transition legislation. State legislators can work with coal community representatives, labor unions, tribes, other policymakers, and environmental organizations to require and fund coal community and worker transition assistance.

The New Mexico [Energy Transition Act](#) (2019) is an example of a State Energy Office working with legislators, stakeholders, and others to bring relief to coal-reliant communities in the time of transition. The Act directs a portion of proceeds from *Securitization*<sup>4</sup> bonds to energy transition initiatives such as community economic development, displaced workers, and tribal communities, with \$20 million for job training alone. When creating transition funding opportunities, it is imperative to consider the long-term strategy, the governance process, who benefits from resources, and how much states will assist in securing and distributing funds.<sup>5</sup> See the *Example Legislation* section below to learn how states already provide aid to coal workers, families, and communities.

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<sup>3</sup> Energy justice is [defined](#) by the Biden-Harris Administration as “the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on those disproportionately harmed by the energy system.” (Initiative for Energy Justice, 2019)

<sup>4</sup> Securitization is a financing tool. Utilities in some states can apply to their public utility regulatory bodies to refinance existing coal plant obligations as they move to less expensive cleaner sources of electricity. Ratepayer-backed “securitization” bonds are issued to recover the costs of stranded power plant assets for a win-win situation for the utility and its customers.

<sup>5</sup> Kelli F. Roemer and Julia H. Haggerty, “[Coal Communities and the U.S. Energy Transition: A Policy Corridors Assessment](#),” *Energy Policy* 151 (2021), <https://doi.org/10.1016/j.enpol.2020.112112>.

In October 2021, the U.S. began a coordinated federal assistance effort for the country’s coal communities. The federal [Interagency Working Group](#) (IWG) on Coal and Power Plant Communities and Economic Revitalization was established and has begun to provide technical assistance to coal communities including a website, [webinars](#), consultants, and federal funding for coal impacted communities. The IWG also holds listening sessions in coal communities to gain an understanding of what challenges face specific states and regions. The group drafted the [Initial Report to the President on Empowering Workers through Revitalizing Energy Communities](#) as a start to this process and continues to build on this work.

While there is action at the federal level to support communities moving away from coal and other fossil fuels, there are also innovative and effective actions states can take to start assisting coal communities.

### **State-level Action on the Energy Transition: Examples and Recommendations**

#### **Create an Office Focused on the Transition**

Established in 2019 by [HB 1314](#), Colorado was the first state to open an [Office of Just Transition](#). Beyond establishing an energy transition office, the bill also established criteria for electric utility companies with coal facilities to submit a workforce transition plan at least 90 days prior to closure. Additionally, it established a 19-member advisory committee requiring a range of diverse stakeholders to provide guidance on transition issues. States may consider expanding diversity efforts to include gender and race parity, labor union members, tribal members, and other impacted and underrepresented groups. Ensuring representation is one step toward actualizing a transition that works for everyone.

The Colorado office is housed within the Department of Labor and Employment, though a similar office could be housed in other state government departments such as energy or commerce. There have been attempts to establish offices or state-administered programs in other states like West Virginia, but legislation establishing such programs has not passed.

Transition-related offices and organizations can also be established at state universities, such as Arizona State University’s [Just Energy Transition Center](#) where energy experts help convene fossil-reliant communities to discuss economic redevelopment solutions and connect them with funding opportunities.

#### **Support Health Care and Pensions for Coal Workers**

Losing a job in the U.S. is not just a loss of salary but can also mean the loss of employer-based health insurance and retirement plans. States can explore ways to ensure continued healthcare and retirement benefits for fossil fuel energy workers and their families. See [The Role of Public Benefits in Supporting Workers and Communities Affected by Energy Transition](#) to learn more about the importance of public benefits. The permanent [losses in coal](#) have “destabilized the existing system of how healthcare is paid for and delivered.” Transition planning and state support can help keep health care available for workers and families.

#### **Allow Investment in Broadband Connectivity**

Attention to investing in broadband has become even more crucial due to the energy transition. Many energy communities are [rural](#), and the impacts of COVID-19 pushed education, training, work, and even healthcare services online. Educational opportunities and the ability of a diversified economy to thrive now depend partly on reliable broadband. In the past few years, [some states have expanded the authority](#) of electric cooperatives to provide broadband through legislation.

[Go Utah](#) is part of Utah's [plan](#) to expand broadband across the state. Virginia [gave four electric cooperatives \\$162 million](#) for universal broadband to connect 20 counties. [Iowa awarded](#) electric cooperatives more than \$210 million through their Empower Rural Iowa program. State legislators can work with regulators to allow utilities who are already installing cables and lines to simultaneously deploy broadband, often with federal funding.

### **Encourage Utilities and the Mining Industry to Offer Transition Support**

Utilities that own coal assets understand the negative economic impact closing mines and plants will have on their employees and host communities. Some are working with state agencies and other organizations or forming their own transition support networks. For example, Salt River Project in Arizona developed a [Coal Communities Transition Team](#) that works on community engagement in coordination with the community surrounding their coal plant. They plan to work in stages: conducting preliminary assessments of the community; developing economic and workforce plans; executing on the plans; and determining post-plant support. Utilities and mining companies could be encouraged to offer financial support or in-kind assistance to workers who will lose jobs in the energy transition.

### **Support Existing Businesses First**

As we transition away from traditional mining and energy production, workers in coal and supporting industries will lose their livelihoods, and counties will lose revenue, while also seeking revenue replacement opportunities. In addition to developing mechanisms to attract new employers to energy communities, planners and economic development experts warn that communities need funding to support existing local businesses that may also suffer because of the energy transition or population loss. Incentivizing locally owned businesses to stay and grow will provide some economic stability and boost confidence in economic resilience before and during the transition.

### **Invest Transition Savings in Tribes**

In regions where coal plants and mines play a significant role in providing revenue and jobs for Tribes and tribal members, the federal government, states, and utilities and their rate payers can invest transition savings. Movement in this direction has started in the West. In Arizona, the Navajo Nation was successful in getting the Arizona Corporation Commission to open a docket to consider having utilities provide replacement revenues to the tribes from savings produced by the transition. In New Mexico, the Energy Transition Act requires that some of revenue from the transition fund go specifically to tribes and native people in affected communities.

Tribes are also working to secure some of the upside benefits of the clean energy transition. The Hopi Tribe is the successful recipient of a federal grant to support the development of a utility-scale solar project on its lands. It is also working toward having its own utility to supply power to its communities. They see it as "enormous opportunity to rewrite our energy history and our economic development history."

In the Midwest, 16 tribal governments have come together to establish the Midwest Tribal Energy Resources Association (MTERA) to empower Tribes to manage Tribal energy resources through collective action. These tribes are working together with the National Renewable Energy Lab to accelerate the adoption of solar technologies in Indian Country.

## Site Remediation

After a coal mine or plant is closed, the site typically requires decommissioning and remediation before it can be transformed for a new purpose. The below chart [from the U.S. EPA](#) shows the necessary stages for remediation, with an emphasis that stakeholder involvement is critical during the entire process. The Bipartisan Infrastructure Law included new funding to address [legacy pollution](#) (from long shuttered coal sites), and [this webinar](#) explains the \$21 billion allocated in funding to remediate environmental damage and polluted sites across the country. The IWG held a workshop on repurposing fossil energy sites that can be accessed [here](#).



Figure 2. Coal Site Remediation Process (Source: [U.S. EPA](#))

Decommissioning and remediation can provide years of work for local displaced employees, using skills they often already have, at a site they know well. Eventual redevelopment of the coal site can revitalize a community, offering opportunities to locally owned businesses while also bringing investors and new businesses. Some communities choose to dedicate the sites to conservation, enhancing the environment for residents.

## Allow Securitization of Utility Stranded Assets

In many states, electricity customers are locked into buying power from utilities or other energy suppliers due to pre-existing long-term contracts – in place for 93% of coal capacity ([RMI 2021](#)). The transition from coal-fired electricity to cleaner sources can create a short-term price increase for customers if they are required to pay for the new cleaner generation assets and also fulfill their existing coal contracts. Several states allow utilities to use a financing tool that eases the costs of the transition – a customer-backed bond process called “securitization.” Securitization helps build cleaner resources while paying off stranded coal assets. When the coal plant retires, customers can pay lower electricity rates because new electricity sources are cheaper. Utilities invest in and benefit from replacement with cleaner energy sources, and communities (including the coal workforce) can receive funding from the utility for local economic resilience (*e.g.*, improvements to existing infrastructure and businesses, incentives for new businesses). For information about securitization legislation, [this](#) is a good summary of bills from Montana, Colorado, and New Mexico.

## Enable Equitable Workforce Development & Education

Coal workers and their communities may be able to take advantage of the clean energy economy by being part of the new workforce. However, the energy transition does not mean coal workers necessarily transition into new energy employment. Their skills and interests take priority when job training and educational programs are offered. Coal plant workers are often transferred to a new location or retrained by the utility they work for, but coal miners typically have fewer opportunities from their employers. Federal, state, and local programs can support coal workers as

they are retrained. New Mexico’s Department of Workforce Solutions has a [Rapid Response](#) team that assists workers who have lost their jobs with retraining.

The energy transition has already catalyzed a dramatic increase in renewable energy and will require energy storage deployment along with grid modernization. While some locations might not be suited for a wind or solar installations, there are many industries such as manufacturing, electric vehicles, transmission, storage, and other innovative technologies (e.g., hydrogen) that offer new employment opportunities. As states continue to enact policies related to clean energy, a trained clean energy workforce is necessary across the country, with jobs ranging from wind plant construction worker to hydropower engineer to electric vehicle mechanic to solar scientist.

Workforce development programs can be implemented through state and local resources. States are allocated federal dollars through the [Workforce Innovation and Opportunity Act](#) and have new opportunities through the Bipartisan Infrastructure Bill. Massachusetts’ [Clean Energy Center](#) is focused on becoming the nation’s supply chain leader in offshore wind and has provided more than \$4 million to Massachusetts institutions, labor unions, and other organizations to support offshore wind workforce training and development.

Another example of a transition-focused workforce program is New York’s [Clean Energy Workforce Development](#). The initiative includes [six](#) program components, including internship opportunities for young people, which is crucial as (1) many coal communities deal with concerns around young people leaving due to lack of opportunity and (2) young people can play an important role in building new economies within communities they know well.

## Example Legislation

Below are brief summaries of enacted legislation. This [link](#) shows related state legislation whether or not it has been enacted.

- **Colorado** [HB 1314](#) (2019) – *Just Transition from Coal-based Electrical Energy Economy* – Just transition support for coal-related jobs. Legislation creates CO Office of Just Transition and Advisory Committee with impacted community quotas, requires a Just Transition Plan and Workforce Transition Plan.
- **Colorado** [SB 236](#) (2019) – *Sunset Public Utilities Commission* – Authorizes PUC continuation. PUC must consider, when evaluating electric resources, what is best for “Colorado labor.” Utilities must provide to PUC “best value” employment metrics including training programs, wages, health care, and benefits as well as positive impacts on the long-term economic viability of Colorado communities.
- **Colorado** [HB 1290](#) (2021) – *Additional Funding for Just Transition* – Bipartisan act finances the Office of Just Transition by allocating \$8 million from the general fund to pay for economic development and another \$7 million to aid coal workers.
- **Connecticut** [SB 999](#) (2021) – *An Act Concerning a Just Transition to Climate-Protective Energy Production and Community Investment* – This act requires developers of new renewable energy projects that have a total nameplate capacity rating of at least 2 MW to meet prevailing wage standards. If projects have a nameplate capacity of 5 MW or more, they must also enter into a community benefits agreement with the community where the project is located.
- **Illinois** [SB 2408](#) (2021) – *Creates The Energy Transition Act* – Requires the closure of all private coal-fired and oil-fired electric generation units by Jan. 1<sup>st</sup>, 2030. Creates “Climate Works Hubs” across the state for clean energy job training and apprenticeships with attention to equity.

- **Indiana** [SB 0386](#) (2021) – *Cost Securitization for Electric Utility Assets* – Allows for securitization of qualified costs associated with an electric generation facility that will be retired from service within 24 months.
- **Louisiana** [SB 110](#) (2022) – *Creates the Louisiana Electric Utility Energy Transition Securitization Act* – Enables Louisiana electric utilities, if authorized by a financing order issued by the commission, to use securitization financing for certain energy transition costs.
- **Minnesota** [HF 1842](#) (2019) – *Solar Energy Production Incentive Program* – Establishes a program for community energy transition grants for host communities of coal, nuclear or gas plants that have or will retire (from special revenue fund in the state treasury).
- **Montana** [HB 467](#) (2019) – *Authorize Securitization for Energy Infrastructure* – It is in the interest of Montanans to encourage and facilitate use of securitized ratepayer-backed bonds as a method for enabling electric utilities to lower the cost of financing and the retirement or replacement of electric infrastructure and to empower the PSC to review securitization mechanisms.
- **New Mexico** [SB 489](#) (2019) – *Energy Transition Act* – creates the energy transition Indian Affairs fund; the energy Transition Economic Development Assistance Fund; and the Energy Transition Displaced Worker Assistance Fund. Manages the pace of the coal transition and generates revenue to address impacts of closure.
- **New York** [S 6599](#) (2019) – *Enacts the New York State Climate Leadership and Community Protection Act* – relates to climate change, renewable energy program, labor and job standards, and job standards and worker protection.
- **Virginia** [SB 1247](#) and [HB 1834](#) (2021) – *Electric Generating Facility Closures* – addresses closure of carbon-emitting generating units through integrated resource plans; requires owners of large carbon-emitting power plants to provide public notice about the decision to close the plant within 30 days of the decision and requires host localities and planning district commissions to conduct public hearings within six months of the notice.
- **Virginia** [HB 1925](#) (2021) – *Virginia Brownfield and Coal Mine Renewable Energy Grant Fund and Program* – establishes, but does not fund, this program

Some states are considering streamlining responsible clean energy siting and providing incentives for communities that host new renewable energy projects such as this New York State Act: [New York State's Accelerated Renewable Energy Growth and Community Benefit Act](#) which creates the Office of Renewable Energy Siting.

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## More Information

- U.S. Department of Energy's Energy Transition Initiative: [www.energy.gov/eere/energy-transitions-initiative](http://www.energy.gov/eere/energy-transitions-initiative)
- Draft Report: [Initial Report to the President on Empowering Workers through Revitalizing Energy Communities](#) by the Interagency Working Group led by the DOE's National Energy Technology Lab
- [EPA Mapping Tool](#): the [Power Plants and Neighboring Communities mapping tool](#) combines power plant data with demographic data from [EJSCREEN](#). Power plant data are from two data sets available from [EPA's Clean Air Markets Division](#).
- The Just Transition Fund: [www.justtransitionfund.org](http://www.justtransitionfund.org)
- CBS News on the Intersection of Just Transition and Environmental Justice: [www.cbsnews.com/news/climate-change-environmental-justice-cbsn/](http://www.cbsnews.com/news/climate-change-environmental-justice-cbsn/)

- Richardson, Jeremy, Lee Anderson. 2021. *Supporting the Nation's Coal Workers and Communities in a Changing Energy Landscape*. Washington, DC.: Union of Concerned Scientists. [www.ucsusa.org/resources/support-coal-workers](http://www.ucsusa.org/resources/support-coal-workers)
- Colorado's Office of Just Transition [cdle.colorado.gov/the-office-of-just-transition](http://cdle.colorado.gov/the-office-of-just-transition)
- Institute for Energy Economics and Financial Analysis on the U.S. Coal Transition <https://ieefa.org/ieefa-u-s-the-coal-to-renewables-transition-takes-off>
- Rocky Mountain Institute's blog: [Making the Coal Transition Feasible and Just](#)
- Rocky Mountain Institute on the Coal Transition and [Securitization](#)
- Resources for the Future and the Environmental Defense Fund, [The Role of Public Benefits in Supporting Workers and Communities Affected by Transition](#), October 2020
- Israel, Brett. 2012. Scientific American [article](#) about the National Association for the Advancement of Colored People's report: *The poor and minority communities bear most of the health burden from coal-fired power plants.*
- Bipartisan Infrastructure Law "[Infrastructure School](#)" Webinars
- Center for the New Energy Economy [Energy Communities in Transition](#)