

# **NEW AND EMERGING SOURCES OF STATE FUNDS TO SUPPORT COAL-DEPENDENT COMMUNITIES**

**JUST  
TRANSITION  
FUND**

Just Transition Fund commissioned the NorthBridge Group, an economic and strategic consulting firm serving the electricity and natural gas industries, to develop this white paper.

## INTRODUCTION

### **IN THE FACE OF GROWING ENVIRONMENTAL AND ECONOMIC CHALLENGES, STATES ACROSS THE COUNTRY ARE LOOKING FOR INNOVATIVE AND EFFECTIVE WAYS TO SUPPORT THEIR TRANSITION AWAY FROM COAL AND OTHER FOSSIL FUELS.**

At the same time, as coal mines and power plants close, state and local leaders must ensure coal-dependent communities continue to thrive. To address this need, a handful of states have created designated funds to support local communities as they transition away from coal and many other states are exploring this option. Tailored to the needs of the affected communities in the state, state transition funds can supplement local property tax revenues, cover the cost of worker retraining programs, pay for the cleanup and reclamation of coal and power plant sites and contribute to related economic development programs.

While creating a state transition fund can be a simple decision in theory, generating resources to support a fund is more complicated. State leaders must work with local communities—including investors, businesses, policymakers, and residents—to identify solutions that are economically viable for energy producers, fair for consumers, easily accessible for coal-dependent communities, and sustainable over the long term.

Many state leaders and local communities have turned to the Just Transition Fund as a resource for creating state funds. Just Transition Fund commissioned the NorthBridge Group, an economic and strategic consulting firm serving the electricity and natural gas industries, to develop this white paper, which provides an introduction to various state-level funding options. While by no means an exhaustive look at revenue sources for state transition funds, this paper offers a starting point for exploration and discussion.

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## OVERVIEW

### **OVER THE PAST DECADE, IN RESPONSE TO LOW NATURAL GAS PRICES, CHANGING FEDERAL AND STATE POLICIES, AND THE DEVELOPMENT OF NEW RENEWABLE ENERGY POWER PLANTS, THE FLEET OF U.S. COAL-FIRED ELECTRIC POWER PLANTS HAS CONTRACTED BY 95 GIGAWATTS (GW) OR 30 PERCENT.**

According to the Department of Energy, this trend is expected to continue for the foreseeable future, with another 80 GWs of coal capacity (close to 100 power plants) forecasted to retire within the next five years. This trend and the associated changes in coal mining could accelerate with new state and/or federal carbon regulations and clean energy programs.

The retirement of coal plants and mining facilities across the country adversely affects the states and communities in which they are located.

Affected communities often must reinvent local economic development efforts, including the replacement of local property tax revenues, worker retraining programs, the cleanup and reclamation of coal and power plant sites, and related economic development programs.

This paper reviews several potential sources of state funding that could be tapped to support coal-dependent communities in transition, with a focus on four main types of new and emerging funding sources:

- Securitization financing of retired coal-fired power plants
- Revenues from carbon pricing programs
- Public benefit funds funded by utility ratepayers
- Fees and subsidies to fossil extraction activities

Several themes emerged from this review that states should consider when selecting an effective funding mechanism for community transition:

- **ALL FOUR OF THESE ARE PROVEN, PRACTICAL SOURCES OF FUNDING THAT ARE FLEXIBLE IN THEIR DESIGN.** All are either rapidly growing or could be expanded to further support community transition efforts.
- **EACH TYPE IS DISTINCT, AND THEREFORE STATES SHOULD CHOOSE CAREFULLY AND TAILOR APPROACHES TO THEIR SPECIFIC CIRCUMSTANCES.** Decisions will differ in each state based on whether one or more of these potential sources of funding has already been established and the magnitude of the state's need for community transition funding relative to the size of its economy.
- Of the four funding sources, **SECURITIZATION AND CARBON PRICING ARE COMPARATIVELY COMPLEX MECHANISMS THAT MOST LIKELY REQUIRE STATE LEGISLATION TO IMPLEMENT**, rather than administrative action alone. These two sources also achieve policy goals that extend well beyond community transition.
- **ONLY SECURITIZATION RELIES ON NEITHER INCREASING CHARGES TO ELECTRIC CUSTOMERS AND TAXPAYERS NOR REDIRECTING REVENUES CURRENTLY DEDICATED TO OTHER PUBLIC PURPOSES.**

**Following is a more in-depth review of each of the four new and emerging sources of financial support.**

## Securitization Financing of Retired Coal-Fired Power Plants

**THE FOUNDATION OF THIS APPROACH IS A FINANCING MECHANISM THAT THE U.S. ELECTRIC SECTOR HAS USED FOR SEVERAL DECADES.** Securitization was first used during the 1990s to help pay for electric utility “stranded costs” (the cost of investments owed on outdated assets), while also providing cost savings to ratepayers. Since then, more than 20 states have used securitization for a growing number of public purposes, including the recovery of storm damages, nuclear plant retirements, and pollution control equipment costs. Only in more recent years has securitization been adapted to facilitate the retirement of coal-fired power plants and fund community transition programs.

In its most basic form, securitization is a type of refinancing. Like refinancing home mortgages, car loans, or student loans, securitization produces cost savings by replacing higher-cost financing with lower-cost financing. In the electric sector, this is achieved by replacing conventional utility financing, which relies on a mix of debt and taxable equity, with lower-cost government- and ratepayer-backed bonds.

To support the financing of a retired coal plant and funding of community transition programs, securitization would require state legislation that, in essence, guarantees the full and timely payment of the interest and principal on new debt, secured by the assurance that utility ratepayers will continue to pay for these costs in their bills over the long term. The financial instruments used to achieve this purpose are sometimes referred to as “ratepayer obligation charges” or ROC bonds. While the cost of the securitization bonds must be fully recovered from customers, these charges are more than offset by the lower utility rates that come from reducing the use of conventional utility financing. The result is cost savings for utility customers and funding for community transition efforts.

Securitization legislation typically establishes a regulatory authority to carry out the terms of the securitization plan, ensure cost recovery, and oversee the use of debt issuance proceeds and cost savings. The government commitment to full and timely recovery and payment of costs ensures a very high bond rating for the new government-backed debt, making it attractive to investors at a relatively low interest rate. Once the

### CASE STUDY: COLORADO

In 2019, the state of Colorado passed a comprehensive package of energy legislation that, among other initiatives, requires the state’s investor-owned electric utility to achieve an 80-percent reduction in greenhouse gas emissions below 2005 levels by 2030, and 100-percent zero emission energy resources by 2050. The legislation also requires that a utility proposing to retire a power plant develop a Workforce Transition and Community Assistance Plan to help impacted workers and communities. Companion legislation created a state Just Transition office, to be financed through the state’s general fund, to develop a transition plan for the state, including education and training benefits for coal workers and grants for related community transition initiatives.

Further, the Colorado **Energy Impact Assistance Act** authorized the use of securitization bonds, called Colorado Energy Impact Bonds, in part to support community transition programs. Under this legislation, an electric utility may apply to the public utility commission for a financing order authorizing it to issue securitization bonds as part of a



plan to retire one or more generating plants. The costs of the securitization bonds are to be recovered from ratepayers through a commission-approved energy impact assistance charge, and utility rates adjusted downward to reflect the lower amount of conventional utility financing required, thereby avoiding a bill increase for energy customers. Transition assistance to Colorado workers and communities affected by the retirement of the power plants will be funded by a portion of the proceeds received by the

sale of the securitization bonds and a share of the ongoing financing savings. A newly established Colorado Energy Impact Assistance Authority will oversee management of the bond proceeds and distribution of funds to affected communities. Under the legislation, transition assistance will include financial assistance and job retraining for displaced fuel production and power plant workers and compensation to local communities for lost property tax revenues.

new debt is issued, the proceeds from the issuance are used to pay off the utility's remaining investment in one or more coal plants and in most instances fund worker and community assistance programs. The power plants are then retired according to a government-approved schedule.

The gap between the relatively low cost of government-backed debt and higher conventional cost of utility debt and equity financing, along with lower income tax expenses, create significant cost savings. State policymakers, regulators, and/or utilities can use these savings for a variety of public purposes, including funding reductions in utility rates and community transition programs, provided this is done in a manner that is consistent with the terms of the enabling legislation. While the core elements of this approach are common to most all securitization plans, the specific provisions and terms of state securitization legislation are typically tailored to the circumstances of individual states.

Securitization legislation to facilitate coal plant retirement and community transition has already passed in Colorado, New Mexico, and Montana, and has reportedly been considered in several other states, including Wisconsin, Utah, Minnesota, Kansas, and Missouri. While it may be most straightforward to implement securitization financing in states with rate-regulated electric industries, it should also be possible to adapt it for use in states with competitive electric generation.

## CASE STUDY: MONTANA

In Montana, **legislation enacted in 2019** enables electric utilities in the state to use securitization to lower the cost of financing when retiring or replacing electric power plants and related energy infrastructure. The mechanics of Montana's securitization process are generally like that adopted in other states, with commission oversight of the bond issuance through financing orders and recovery of refinancing costs through an "energy impact assistance charge." While the Montana securitization legislation does not include community transition assistance provisions, companion legislation allows county governments receiving funds from coal-related activities to establish coal trust funds and, when a coal mining operation or coal-fired electric power plant has closed or there is a substantial reduction in workforce, to use funds from the trust to offset the loss of property tax revenue and promote

## CASE STUDY: NEW MEXICO

New Mexico's **Energy Transition Act** requires the state's electric utilities to move to 100-percent zero carbon energy resources by 2045 and enables them to use securitization (called "energy transition bonds") to refinance investments in retired coal-fired power plants. The securitization provisions of the legislation specifically address the San Juan Generating Station, the state's largest coal-fired power plant at 925 MWs, which is owned by Public Service New Mexico (PNM) and currently scheduled to retire in 2022. Under this legislation, PNM may apply to the New Mexico Public Regulation Commission for a financing order to issue securitization bonds and recover the associated costs. The legislation also directs a percentage of proceeds from the bond issuance toward supporting transition initiatives, specifically related to Indian affairs, community economic development, and displaced workers.



## Revenues from Carbon Pricing Programs

### CARBON PRICING PROGRAMS TAKE TWO FORMS:

- *Carbon cap and trade* is a regulatory system that limits or “caps” either the carbon content of fossil fuels at the point of production (such as a coal mine or natural gas well) or the carbon emitted when fossil fuels are used to generate electricity. Two examples are the **Regional Greenhouse Gas Initiative** (“RGGI”)—a cooperative effort among 11 northeast and mid-Atlantic states to cap emissions from the electric sector—and California’s cap and trade program, which covers the state’s electric, industrial, and fuel distribution sectors.
- *The carbon tax* is a fee on the carbon content of fossil fuel production or the carbon emissions from fossil fuel-fired electric generation.

Most states that use these programs have established them through acts of the state legislature.

While the mechanics of these two programs are quite different, at their core, they each establish a price on carbon emissions. If cap and trade programs are designed to auction emission allowances (rather than allocate them for free), both programs will also be a source of revenue to state governments. In 2016, under the RGGI program, proceeds to participating states totaled approximately \$436 million.<sup>1</sup> The much larger California cap and trade program has yielded more than \$2 billion in state revenues annually.<sup>2</sup> States use this revenue to support a wide variety of programs, including ones that promote energy efficiency, clean and renewable energy, direct bill assistance, and greenhouse gas abatement investments.

In a similar way, states could elect to use a portion of this revenue to support community transition efforts, including temporary replacement of lost local property taxes, worker training programs, site reclamation and remediation, and related local economic development programs.

### CASE STUDY: MASSACHUSETTS

In 2017, Massachusetts responded to the closure of the Brayton Point coal plant by providing the town of Somerset with about **\$12 million of RGGI funds** over a three-year period. The town used the funding to temporarily replace the loss of local property taxes. Proceeds from the RGGI program have also gone to at least two other towns in Massachusetts.<sup>3</sup>

Looking forward, as more states consider joining RGGI or instituting carbon taxes, this type of funding may become available in other regions of the country.<sup>4</sup> Similarly, approval of a federal tax on carbon emissions could fund these investments more broadly. Dedicating a small percentage of revenues from a federal carbon tax to the economic development of coal-dependent communities could fund billions of dollars in annual investments.

## Public Benefit Funds Paid for by Utility Customers

Public benefits funds, or system benefit funds, are state programs that are typically funded by a modest charge on the bills of electric or other utility customers (sometimes referred to as “wire charges”). The money is then dedicated to specific public purposes. Public benefit funds were originally developed during the 1990s as a means for state governments to support energy efficiency, renewable energy, low-income energy assistance, and, more recently, state green banks. Some states established these programs through enabling legislation. Other states pursued this approach through state energy regulatory bodies.

More than 30 states across the country currently have public benefit funds.<sup>5</sup> These include several states in coal-producing or coal-consuming regions, such as Ohio, Virginia, Georgia, Pennsylvania, Texas, and Montana.

While public benefit funds differ widely in their funding levels, they can be quite large. The California fund, for instance, has provided more than \$1 billion in funding annually.

Most existing public benefits funds focus primarily on providing support and incentives to develop renewable energy projects and energy efficiency programs. A number of them, however, also support a broad range of zero-carbon technology projects—and several specifically address plant site remediation, resource recovery, and coalfield economic development.

<sup>1</sup> The Investment of RGGI Proceeds in 2016, September 2018, [https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI\\_Proceeds\\_Report\\_2016.pdf](https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI_Proceeds_Report_2016.pdf)

<sup>2</sup> <https://lao.ca.gov/reports/2017/3553/cap-and-trade-021317.pdf>

<sup>3</sup> <https://www.heraldnews.com/news/20171020/somerset-reaps-millions-in-funds-as-power-plants-shut-down>

<sup>4</sup> <https://www.southcoasttoday.com/special/20170807/haddad-says-she-can-no-longer-request-rggi-funds>

<sup>5</sup> U.S. Environmental Protection Agency, Clean Energy Financing Programs: A Decision Guide for States and Communities (Washington, D.C., 2011), <https://www.epa.gov/sites/production/files/2015-08/documents/financingprogramsresourceguide.pdf>; and [https://openei.org/wiki/Public\\_Benefits\\_Fund](https://openei.org/wiki/Public_Benefits_Fund)

## CASE STUDY: MASSACHUSETTS

The Massachusetts the Clean Energy Center (“MassCEC”) is a state economic development agency focused on accelerating the growth of the clean energy sector and promoting long-term economic growth for the state. It is funded by a small (0.5 mill/kWh) system benefit charge paid by customers of investor-owned electric utilities.<sup>6</sup> MassCEC has conducted several site reuse studies to help communities transition closing coal-fired power plants to alternative uses. For example, in Somerset, Massachusetts, the site of the former Brayton Point power plant is now a transport and assembly center for offshore wind development and hosts large-scale battery storage and transmission converter facilities.

Broadening the range of public purposes to which system benefit funds are applied could allow this source of funding to provide transition support for local coal-dependent communities.



## Fees and Subsidies to Fossil Fuel Extraction Industries

**MOST STATES THAT PRODUCE COAL, NATURAL GAS, OR OIL RECEIVE REVENUES (EITHER DIRECTLY OR INDIRECTLY) FROM FOSSIL FUEL PRODUCTION.** Some states also provide subsidies to fossil fuel producers. Many states levy severance taxes, which are charges imposed on the extraction of natural resources from private or public lands. These are typically expressed as a percentage of the value of the fossil commodity produced. Approximately 35 states also receive allocations of Federal Mineral Royalties, which the federal government receives from fossil fuel producers in exchange for the right to extract resources on federal lands.<sup>7</sup> State revenues from these sources may vary considerably from year to year depending on changes in production levels and the value of fossil fuel commodities. Several states also provide financial subsidies to fossil fuel production, often in the form of exemptions from state severance and other taxes.

## CASE STUDY: KENTUCKY

In Kentucky, the Local Government Economic Assistance Fund (“LGEAF”) Coal Severance Program returns a portion of the revenue the state collects through coal and other mineral severance taxes to qualifying local governments. Under the program, local governments can use the funds to address a range of community needs, including social services, industrial and economic development, workforce training, and environmental protection.

<sup>6</sup> <https://www.windpowerengineering.com/report-guiding-offshore-wind-investments/>

<sup>7</sup> <https://revenue.data.doi.gov/downloads/disbursements/>

By reallocating state revenues received from severance and mineral royalties, or reducing the subsidies provided to fossil fuel producers, states may free up funds to increase their support for coal-dependent communities.

West Virginia, Wyoming, and North Dakota are three coal-producing states that receive a large portion of state revenues from fossil fuel fees of various sorts, most importantly severance taxes.<sup>8</sup>

## CASE STUDY: VIRGINIA

The **Virginia Coalfield Economic Development Authority (VCEDA)** is a regional economic development organization that works to enhance and diversify the economic base of the coal-producing region of southwestern Virginia. It has supported the development of electronic information technology, energy, education, and emerging technologies in the region. VCEDA manages a revolving loan fund to provide low-interest loans for land purchases and building construction and equipment, and provides other financing to develop industrial, business and technology parks and assist with related infrastructure development. It is primarily funded by local mineral severance taxes paid by coal and natural gas industries.

## CONCLUSION

**THIS REVIEW FOUND THAT EACH OF THESE FOUR APPROACHES CAN BE A PROVEN, PRACTICAL SOURCE OF FUNDING THAT IS FLEXIBLE BY DESIGN AND IS EITHER ALREADY WIDESPREAD OR COULD BE EXPANDED TO FURTHER SUPPORT THE TRANSITION EFFORTS OF COAL-DEPENDENT COMMUNITIES.** However, each of these funding mechanisms is distinct. States need to evaluate each of these options against their current political realities and opportunities to determine which structure(s) will most effectively meet local needs.

**SOME THEMES THAT EMERGED THROUGH THIS RESEARCH THAT MAY HELP STATE LEADERS MAKE THIS ASSESSMENT INCLUDE THE FOLLOWING:**

- **SOME STATES HAVE ALREADY ESTABLISHED ONE OR MORE OF THESE SOURCES OF FUNDING.** While many states currently receive revenue from fossil fuel severance taxes and other production fees, other states do not produce fossil fuel energy, which obviously limits the use of this source of funding to some extent. States with one or more of the other sources of funding already in place may find it more practical to reallocate existing revenue streams or expand them for this purpose, rather than establish entirely new funding sources.
- **STATES WILL DIFFER IN THE MAGNITUDE OF THEIR NEED FOR FUNDING RELATIVE TO THE SIZE OF THEIR ECONOMIES.** Some states anticipate a relatively large number of coal mine and coal power plant retirements, while other states anticipate fewer retirements. This will influence how much funding a state may seek as well as which type of funding mechanism is likely to be the most effective.

- **TWO OF THE FOUR FUNDING STRATEGIES DISCUSSED—SECURITIZATION AND CARBON PRICING—ARE COMPARATIVELY COMPLEX MECHANISMS THAT MOST LIKELY REQUIRE STATE LEGISLATION TO IMPLEMENT.** This implies the need for a larger and perhaps longer-term policy development effort and broader political agreement than might be required to implement a funding source that can be established through administrative action alone.
- **SECURITIZATION AND CARBON PRICING ALSO ACHIEVE POLICY GOALS THAT EXTEND BEYOND COMMUNITY TRANSITION, AND THIS MIGHT SHAPE THEIR APPEAL TO SOME STATES.** Most significantly, securitization is a tool to facilitate coal plant retirements as well as community transition, and carbon pricing is, of course, a policy tool intended to encourage cost-effective carbon emission reductions. These may be attractive attributes to some states and deterrents to others.
- Finally, of the four potential funding mechanisms, **SECURITIZATION IS THE ONLY ONE THAT IS NOT RELIANT ON INCREASING OVERALL CHARGES TO ELECTRIC CUSTOMERS AND TAXPAYERS OR REDIRECTING REVENUE CURRENTLY DEDICATED TO OTHER PUBLIC PURPOSES.** Securitization, as a form of refinancing, produces cost savings for customers on a net basis by replacing higher-cost utility financing with lower-cost government-backed financing. In contrast, carbon pricing programs and public benefit funds tend to raise electric rates and redirecting state funds currently associated with fees and subsidies to fossil fuel extraction activities may be difficult to achieve. As a result, securitization may have special appeal to states with strong concerns about budgetary constraints and household incomes.

<sup>8</sup> The Risk Of Fiscal Collapse In Coal-Reliant Communities, Adele C. Morris, Noah Kaufman And Siddhi Doshi, July 2019. Columbia Center on Global Energy Policy and the Brookings Institute