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Advanced Energy Manufacturing Tax Credits in the West Virginia Coalfields

Introduction

Policy makers are taking steps to invest in coal communities as the country enacts new policies to address global climate change. In coal- and electricity-producing states like West Virginia, these policies are likely to lead to decreased coal production and the loss of jobs at coal mines and power plants.

To counteract these impacts, several policies would funnel resources to coal and power plant communities to build infrastructure, diversify local economies, support entrepreneurs, and create jobs. These programs will take many forms, including tax credits. Some of these programs are included in the bipartisan infrastructure bill that, as of the time of this writing, has passed the Senate but is awaiting action in the House. Other programs are being negotiated as part of the Build Back

Better Act. Still others have already been implemented via executive action by President Biden.

This analysis focuses on one such policy, the Advanced Energy Manufacturing Tax Credit, which is commonly referred to as the "48C tax credit" based on its section of federal code. As already written in code, tax credits are provided for 30% of certain investments in advanced energy projects, which could include, for example, manufacturing facilities that build solar, wind, and geothermal equipment.

In the past, the 48C tax credit has successfully driven investments in clean energy manufacturing facilities across the United States; however, none of these investments have been made in West Virginia.

Setting aside 48C tax credits for coal and power plant communities would create economic opportunities in West Virginia

The current draft of the Build Back Better Act would provide for an additional \$25 billion in 48C tax credits, and it would also expand the definition of qualifying facilities. Further, \$4 billion of this investment would be set aside for communities where coal mines have closed or coal-fired power plants have retired. Many of these communities are in West Virginia.

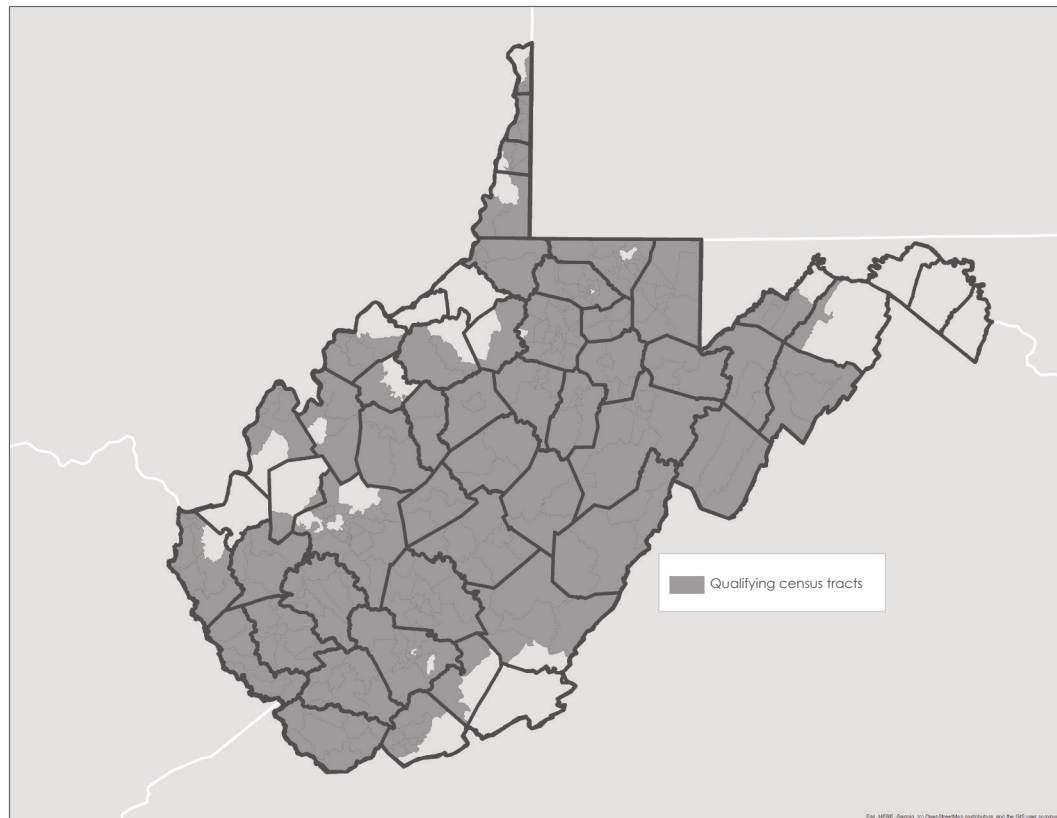
If these \$4 billion in 48C tax credits were spread proportionally across qualifying areas, \$520 million in tax credits would be secured in West Virginia. Because the tax credit covers 30% of the investment, this translates into a \$1.7 billion

investment in advanced energy manufacturing facilities in West Virginia.

As illustrated in Figure 1, the qualifying areas in West Virginia include census tracts in most of the state's 55 counties. These include census tracts where coal mines or power plants have shut down, plus neighboring census tracts.



Figure 1: West Virginia census tracts that would qualify for the \$4 billion set-aside of 48C tax credits



Landing 48C tax credits in West Virginia would have significant economic benefits

This \$1.7 billion investment in advanced energy manufacturing facilities in West Virginia would result in significant local economic benefits:

- 9,300–12,400 new jobs across all sectors, including 3,250–4,350 jobs in the state's manufacturing sector. Many of these jobs will be good union jobs that pay prevailing wages. Apprenticeships at these facilities will also help train tomorrow's workforce.
- \$610–\$810 million in additional annual labor income across all sectors, including \$290–\$390 million in the state's manufacturing sector.
- \$3.3–\$4.4 billion in new annual output (sales and inventory changes) across all sectors, including \$2.3–\$3.1 billion in the state's manufacturing sector.
- \$985 million–\$1.31 billion of additional annual value added (a measure of new wealth in West Virginia that includes labor income) as the impacts ripple through all sectors of the state's economy.



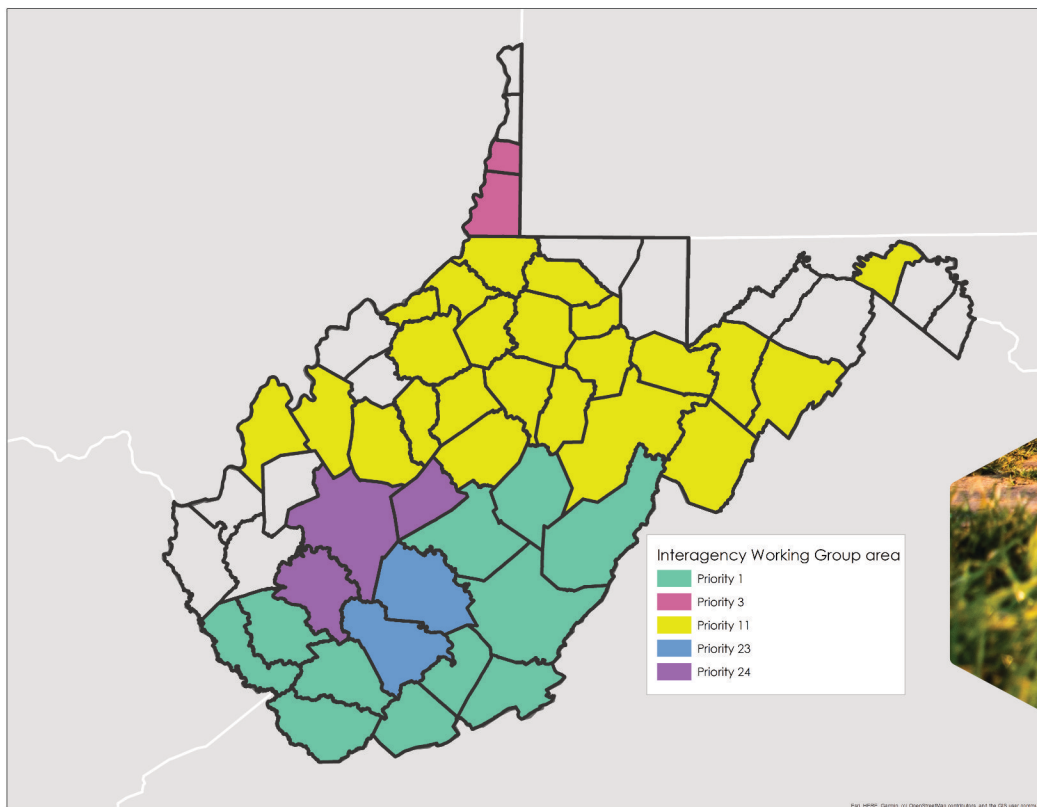
Needs are greater in some counties than others

Counties across West Virginia have been hit hard by a decline in coal-related jobs; however, some are more impacted than others. The federal Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization has prioritized regions across the country based on their concentration of direct coal sector jobs.

As illustrated in Figure 2, West Virginia contains five of the top 25 priority areas; these five areas include 41 of the state's 55 counties:

- **Priority 1: Southern West Virginia non-metropolitan area.** Includes Greenbrier, Logan, McDowell, Mercer, Mingo, Monroe, Nicholas, Pocahontas, Summers, Webster, and Wyoming counties.
- **Priority 3, Wheeling, West Virginia-Ohio.** Includes Marshall and Ohio counties.
- **Priority 11, Northern West Virginia non-metropolitan area.** Includes 23 counties.
- **Priority 23, Beckley, West Virginia.** Includes Fayette and Raleigh counties.
- **Priority 24, Charleston, West Virginia.** Includes Boone, Clay, and Kanawha counties.

Figure 2: Interagency Working Group priority areas in West Virginia



Working West Virginians will benefit greatly

Projects will only qualify for the full 30% tax credit if they satisfy prevailing wage and apprenticeship requirements. In this way, the Build Back Better Act supports unions and working West Virginians.

Tax credits should be steered to communities that need them most

The Build Back Better Act includes selection criteria for 48C tax credits that, for example, consider whether the facility will provide the greatest job creation for dislocated workers previously employed in coal mines or power plants. While much of West Virginia would qualify, the 48C tax credits are unlikely to be evenly distributed across the qualifying census tracts. In fact, they are likely to be used in areas most suitable for building and staffing new advanced manufacturing facilities, which might be areas with existing manufacturing facilities and relatively stable local economies. These areas would likely already have suitable infrastructure—including highway access, water and sewer systems, electricity, and high-speed internet—as well as access to a well-educated workforce.

Counties within the Interagency Working Group's priority areas—and particularly those in the Southern West Virginia non-metropolitan area—face numerous challenges in attracting these investments. In fact, many counties in this area have a small proportion of their populations already working in manufacturing, low labor participation rates, and a lack of access to high-speed internet.

Should the 48C tax credits be reauthorized with funding directed to communities hardest hit by the loss of coal mining and power plant jobs, policy makers would be advised to take proactive steps to maximize the benefits for West Virginia:

- Develop a state plan to promote 48C tax credits in the Interagency Working Group's priority areas.
- Continue investing in infrastructure and workforce development in the counties hardest hit by the decline in mining and power plant jobs, to make these counties attractive sites for major new manufacturing investments.
- Aggressively market West Virginia as a welcoming state for new energy jobs. This would include not just reaching out to manufacturers, but also changing state policy to facilitate the development of non-fossil-fuel industries and the growth of businesses with sustainability mandates and renewable energy targets.

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