

STATE ECONOMIC IMPACTS OF NETL PENNSYLVANIA



NETL NATIONAL ENERGY TECHNOLOGY LABORATORY

From mine safety to acid rain mitigation, the U.S. Department of Energy's National Energy Technology Laboratory (NETL) in Pittsburgh has a rich history of developing technologies through transformative science that improve the efficiency and utilization of our nation's fossil energy resources. Since 1910, NETL's Pennsylvania Laboratory has pioneered work on coal, oil, and natural gas technologies with a focus on resolving environmental issues. The Lab's successes have included developing pollution control technologies for advanced power generation and a suite of technologies to maximize resource recovery and reduce operational impacts in unconventional oil and gas plays. Today, the Laboratory's research enables carbon capture, utilization and storage technologies and critical material sustainability. Through its research activities, science education programs, employment, and operational activities, NETL serves as an important economic catalyst for Pennsylvania.

ECONOMIC IMPACTS OF NETL PENNSYLVANIA

NETL conducted an economic analysis using a state-level input-output (IO) model to quantify the laboratory's economic impacts on Pennsylvania. The two tables below summarize NETL's impacts on Pennsylvania's economy in 2021.

The first table includes employment and salaries of individuals employed in Pennsylvania at NETL as either federal employees or site support contractors (full-time equivalents), as well as NETL's spending on grants, R&D awards, contracts, cooperative agreements, and purchase orders, within Pennsylvania. The analysis revealed that NETL injected \$123 million (\$123M) directly into the state economy in 2021.

Summary of NETL expenditures and number of on-site employees (PA)

Impact Category	
Federal Employment and Site Support Contractor (full-time equivalent jobs)	623
Total Expenditures	\$123M

NETL's impact on the U.S. economy is greater than the lab's total direct spending because the money is spent again by the recipient employees and businesses. This economic "ripple effect" is captured in the IO model through a series of multipliers that provide estimates of the impact of each dollar of direct spending cycling through the state economy in the form of additional (indirect and induced) spending, personal income, and employment. The analysis concluded that NETL had a total estimated impact of \$226 million (\$226M) on Pennsylvania's economy in 2021 (see table below).

NETL's Total Economic Impact on the State of Pennsylvania, 2021

Impact Category	
Jobs (direct, indirect, and induced full-time equivalent jobs)	1,387
Total Economic Impact (direct, indirect, and induced)	\$226M

NETL is a U.S. Department of Energy national laboratory that drives innovation and delivers technological solutions for an environmentally sustainable and prosperous energy future. Through its world-class scientists, engineers and research facilities, NETL is ensuring affordable, abundant and reliable energy that drives a robust economy and national security, while developing technologies to manage carbon across the full life cycle, enabling environmental sustainability for all Americans, advancing environmental justice and revitalizing the economies of disadvantaged communities. Leveraging the power of workforce inclusivity and diversity, highly skilled innovators at NETL's research laboratories in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania conduct a broad range of research activities that support DOE's mission to ensure America's security and prosperity by addressing its energy and environmental challenges through transformative science and technology solutions.