Inflation Reduction Act Invests $150 Million for Infrastructure Improvements at DOE's National Energy Technology Laboratory

FECM announced $150 million provided through the Inflation Reduction Act to support site-wide infrastructure and laboratory modernization upgrades at its three NETL research sites.

Office of Fossil Energy and Carbon Management

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3 min

Funding will Modernize Three Laboratory Complexes to Advance NETL's Mission to Reduce Carbon Pollution and Support a Clean Energy Economy

WASHINGTON, D.C. – The U.S. Department of Energy's Office of Fossil Energy and Carbon Management (FECM) today announced $150 million in funding provided through the Inflation Reduction Act (IRA) to support site-wide infrastructure and laboratory modernization upgrades at all three of its National Energy Technology Laboratory (NETL) research sites. As DOE's only government-owned and government-operated lab, NETL leads research and development, working to drive innovation and deliver solutions in support of programs that help to decarbonize power generation and industrial production, remove carbon dioxide from the atmosphere, and mitigate the environmental impacts of fossil fuel production and use. This lab modernization effort will help enhance NETL's capabilities and competitiveness in developing technologies to address climate change and advance a clean energy and industrial economy.

"DOE is committed to maintaining and enhancing NETL's world-class scientific and technological capabilities needed to drive innovation essential to achieving President Biden's ambitious energy and climate goals," said **Brad Crabtree, Assistant Secretary of Fossil Energy and Carbon Management**. "This funding authorized by the Inflation Reduction Act represents one of the largest-ever investments in DOE's national laboratory infrastructure, making it possible for our scientists and engineers at NETL to continue to advance the research, deployment, and demonstration of critical solutions to reduce carbon emissions and strengthen our nation's energy security."

The IRA investment will be used to enhance core strengths at NETL's three complexes in Pittsburgh, Pennsylvania; Morgantown, West Virginia; and Albany, Oregon, including:

- **Alloy Development** — Investments in Albany's Advanced Alloy Development Center will be used to formulate even more cost-effective, durable metal alloys to develop cutting-edge energy-producing processes and facilities that can generate affordable clean energy and support growth in emerging U.S. industries, such as hydrogen transport and use.

- **Computation, Data, and Visualization** — Investments will be used across all three NETL sites for improvements to ESNet, DOE's high-performance, unclassified network built to support scientific research. The funds will provide resources for the Geological, Environmental and Materials Computational and Visualization Laboratory to apply artificial intelligence and machine learning to visualize and monitor the movement of carbon dioxide stored underground to address potential challenges for carbon

capture and storage. Investments also will supplement existing funding for the Computational Science and Engineering Center to build a new facility in Morgantown. The new facility will include innovative collaboration space for the next level of high-performance computing to accelerate breakthroughs in more abundant, affordable, and reliable clean energy solutions such as clean hydrogen and carbon dioxide removal technologies.

- **Process Development** — Investments in NETL's Carbon Conversion R&D and Critical Materials R&D programs will support modernization of laboratory facilities in Morgantown and Pittsburgh to build in flexibility for these emerging and mission-critical areas of research and development.

Additional projects include space consolidation, construction of hybrid collaboration spaces at all sites, conference facility modernization in Pittsburgh, and other deferred maintenance.

FECM conducts research, development, demonstration, and deployment that focuses on technologies to reduce carbon emissions and other environmental impacts from fossil fuel production and use and from key industrial processes, particularly the hardest-to-decarbonize applications in the electricity and industrial sectors. Priority areas of technology work include carbon capture, carbon conversion, carbon dioxide removal, carbon dioxide transport and storage, hydrogen production with carbon management, methane emissions reduction, and critical minerals production. To learn more, visit the FECM website, sign up for FECM news announcements, and visit the NETL website .

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