

ENACTED PROGRAMS CHAMPIONED BY CHAIRMAN MANCHIN TO SUPPORT NUCLEAR ENERGY PROJECTS IN WEST VIRGINIA

The Inflation Reduction Act of 2022

» *Incentivizes construction of new nuclear power plants and related civil nuclear facilities.*

- Nuclear power is eligible for either:
 - A production tax credit (PTC) for clean electricity at \$25 per megawatt-hour for the first ten years of new plant operation, or
 - An investment tax credit (ITC) for clean electricity equals 30 percent of the investment in the new nuclear electricity facility.
 - Both the clean electricity PTC and ITC include a 10-percentage point bonus for facilities sited in certain energy communities, including those that have been home to coal plants.
- Expanded the Department of Energy Title 17 Loan Guarantee Program to unlock up to \$40 billion for large-scale energy projects that use innovative technology to reduce, avoid, or sequester greenhouse gas emissions, available through September 2026, including for nuclear energy projects.
- Provided \$5 billion for an energy infrastructure reinvestment financing program, which can provide up to \$250 billion in loan guarantees, which can be used to repower previously closed energy facilities, such as nuclear power in a shuttered coal plant.

» *Incentivizes other uses for nuclear power and associated supply chains.*

- Hydrogen derived from nuclear power is eligible for the clean hydrogen production tax credit worth up to \$3 per kilogram of hydrogen produced and sold. This credit has a direct payment option for the first 5 years.
- Provided a \$700 million investment in the nuclear fuel supply chain for increased production of advanced nuclear reactor fuel.
- Expanded and extended the 48C advanced energy manufacturing credit for domestic investments in energy manufacturing, including components for nuclear energy. There is a \$4 billion carve-out for credits required to be used in communities where coal plants or coal mines have closed.
- Provided \$5.8 billion for an advanced industrial facilities deployment program to support advanced industrial technology, retrofits, upgrades, or operational improvements for the installation of industrial technologies.

CHIPS and Science Act of 2022

» *Increases opportunities for university programs focused on nuclear research and physics programs.*

- Authorized \$390 million to establish up to four new research reactors and new nuclear science and engineering facilities.
- Increased authorizations by \$75 million for nuclear science education scholarships, fellowships, and research and development projects.

» *Incentivizes the demonstration of nuclear power at retired coal-fired facilities.*

- Established a new Department of Energy program to provide Federal financial assistance to eligible entities to support the research, development, and demonstration of advanced nuclear reactors at retiring or retired coal generation sites. The program authorizes \$800 million and will prioritize projects that reduce emissions and provide the greatest benefit to the surrounding population.

Infrastructure, Investment, and Jobs Act of 2021

» *Encourages Department of Energy planning and demonstration of advanced reactors*

- Directed the Secretary of Energy to develop a report on the feasibility of using nuclear energy to meet resilience and carbon reduction goals for the Department and isolated communities.
- Provided \$2.4 billion for the demonstration of advanced nuclear reactors.