

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

The Inflation Reduction Act of 2022

» *Incentivizes new energy storage projects.*

- Hydrogen production is eligible for the first-ever hydrogen production tax credit (PTC) The PTC provides up to \$3 per kilogram of hydrogen produced and includes direct pay for the first 5 years of production. Businesses that produce clean hydrogen will be able to claim the credit on their returns for calendar year 2023 and onward.
- Projects producing electricity using hydrogen are 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 equal to 30% of the investment in the new hydrogen electricity facility.

» *Manufacturers of hydrogen technologies like electrolyzers are eligible to apply to DOE for the 48C advanced energy manufacturing credit.* This credit included a \$4 billion carve-out for use exclusively in communities where coal plants or coal mines have closed.

» *Expands DOE Loan Guarantees.*

- **Title 17:** Unlocked up to \$40 billion in Department of Energy Title 17 Loan Guarantee Program guarantees for large-scale energy projects that use innovative technology to reduce, avoid, or sequester greenhouse gas emissions, including for hydrogen projects.
- **Hydrogen vehicles:** Provided up to \$20 billion in direct loans to build new facilities or reequip, modernize, or expand existing facilities for manufacturing eligible vehicles or components, including for hydrogen vehicles.
- **Energy Infrastructure Reinvestment Financing:** Included \$5 billion, which can provide up to \$250 billion in loan guarantees, that can be used to 1) repower previously closed energy facilities, such as to repurpose a shuttered coal plant for hydrogen production and 2) reduce emissions from operating facilities, such as to add carbon capture to a facility already producing hydrogen from natural gas.

» *Zero-emissions vehicle credits of up to \$7,500 for personal use hydrogen vehicles, up to \$40,000 for commercial hydrogen powered vehicles and a 30% tax credit for installing hydrogen refueling stations in rural or low income areas.*

Infrastructure, Investment, and Jobs Act of 2021

» *Hydrogen Hubs.* Provided \$8 billion for DOE to support a minimum of 4 hydrogen hubs, including two in natural gas producing regions (which includes Appalachia).

- With Chairman Manchin's support, the State of West Virginia has partnered with the Appalachian Regional Clean Hydrogen Hub (ARCH2) coalition to seek hydrogen hub funding from DOE.
- Hydrogen businesses interested in investing in West Virginia can apply for DOE hub funding through ARCH2.

» *Hydrogen Supply Chain & Electrolysis.*

- Provided \$1.5 billion for DOE grants to support clean hydrogen manufacturing, supply chains and for research, development, and demonstration to bring down the cost of hydrogen electrolyzers.
- Provided \$2.5 billion in competitive grants for a Charging and Fueling Infrastructure Program through the Department of Transportation (DOT) to strategically deploy publicly accessible electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure along designated corridors and accessible locations.

» *Manufacturing opportunities in coal communities.* Provided \$750 million in DOE grants available for small- and medium-sized businesses to manufacture clean energy technologies, including hydrogen technologies like electrolyzers, in coal communities. Interested businesses can inquire with DOE at <https://www.nrel.gov/manufacturing/recycling-grant-program.html>.