JOE MANCHIN

UNITED STATES SENATOR *for* WEST VIRGINIA

WEST VIRGINIA WINS THE $1 BILLION HYDROGEN HUB

What is a Hydrogen Hub?

A Hydrogen Hub is a network of energy producers, energy consumers, and manufacturers that will keep West Virginia the energy powerhouse of our nation for generations.

Hydrogen hubs will create regional networks of hydrogen producers, consumers, and local infrastructure to accelerate the use of hydrogen as an energy source. Hubs locate hydrogen producers and consumers close together. It's expected that these hubs will result in billions of dollars of new investment, thousands of new, high-paying jobs, and public-private partnerships that will create a network for hydrogen manufacturing, production, and use across America, including in West Virginia.

What is Hydrogen?

Hydrogen is a flexible and powerful fuel that can be used to power vehicles, generate electricity, fuel industrial manufacturing and heat homes and businesses safely and emissions-free. Clean hydrogen can be produced from natural gas with CO2 capture and storage (called "blue hydrogen") or using low-emissions electricity to separate hydrogen from water (called "green hydrogen").

How Was This Funded?

As Chairman of the Senate Energy & Natural Resources Committee, Senator Manchin provided $8 billion in the *Infrastructure Investment and Jobs Act* (Bipartisan Infrastructure Law) for the Department of Energy (DOE) to support a minimum of four hydrogen hubs, including two in natural gas producing regions like West Virginia. Furthermore, Senator Manchin created the first-ever hydrogen production tax credit in the *Inflation Reduction Act*, which hydrogen hub producers in West Virginia will be eligible for. With Senator Manchin's support, West Virginia has partnered with the Appalachian Regional Clean Hydrogen Hub (ARCH2) coalition to successfully secure **up to $925 million in hydrogen hub** funding from DOE, ensuring that West Virginia maintains its heritage as the energy powerhouse of the nation.

About the Appalachian Regional Clean Hydrogen Hub

The Appalachian Regional Clean Hydrogen Hub (ARCH2) will play a major role in accelerating the adoption of hydrogen technologies in West Virginia and across the United States. Based in West Virginia, it also includes Ohio, Pennsylvania, and Kentucky. ARCH2 takes advantage of the region's abundant natural gas resources to produce economic, blue hydrogen at scale. In parallel, ARCH2 will also deploy green hydrogen to accelerate hydrogen end-use market growth.

The Hub is projected to create over 20,000 jobs, with the majority of those in West Virginia. The $925 million in federal funding is expected to unlock roughly $6 billion in additional private sector matching funding.

Examples of ARCH2 projects on back of this page

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Examples of ARCH2 projects under consideration in West Virginia that are eligible for $925 million in federal funding:

- Manufacturing/assembly of electrolysis equipment to produce hydrogen from electricity and water.
- Production of hydrogen and ammonia using captured coal-mine methane from abandoned mines.
- Hydrogen distribution to supply fuel cell-powered trucks, buses, and other vehicles.
- Hydrogen use as a fuel for industrial manufacturing, data centers, power generation, and more.
- Pipeline infrastructure to transport hydrogen and natural gas-hydrogen blends.
- Underground facilities to store carbon dioxide captured during blue hydrogen production.

Key ARCH2 Partners:

- Hydrogen producers, suppliers and equipment manufacturers, including: Plug Power, Fidelis New Energy, Air Liquide, Clearway Energy Group, First Mode, Independence Hydrogen, and Key State Energy.
- Industrial and manufacturing companies who will use hydrogen, including Adams Fork Energy, Dominion Energy, Chemours, Hog Lick Aggregates, and Watt Fuel Cell.
- Natural gas suppliers and transporters to provide feedstock for hydrogen production and transport hydrogen, including CNX, EQT, Hope Gas, Empire Diversified Energy, Marathon Petroleum, and TC Energy.
- Labor, business, and community organizations, including AFL-CIO West Virginia, Eastern Atlantic Regional Council of Carpenters, West Virginia State Building and Construction Trades, Harrison County Development Authority, and West Virginia Manufacturers Association.
- Leading technology firms and universities, including Marshall University, West Virginia University, Blue Ridge Community and Technical College, Bridge Valley Community and Technical College, Mountwest Community College, Pierpont Community and Technical College, West Virginia Community and Technical College, West Virginia State University, National Energy Technology Laboratory, Allegheny Science & Technology, Battelle, GTI Energy, and TRC Companies.

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If you have additional questions, please contact Senator Manchin's office:

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