

# West Virginia Hydrogen Hub Coalition

## PROPOSAL TO PARTICIPATE

in Response to Request for Information # DE-FOA-0002664.0001, Regional Clean Hydrogen Hubs Implementation Strategy

This Proposal to Participate made on this 21<sup>st</sup> day of March 2022, by and between the State of West Virginia and U.S. Senators Joe Manchin (D-WV) and Shelley Moore Capito (R-WV), Representative David McKinley (R-WV) and Governor Jim Justice (R-WV), establishes the West Virginia Hydrogen Hub Coalition and framework for coordinating development of a regional clean hydrogen hub (Hydrogen Hub) as authorized by the 2021 Infrastructure Investment and Jobs Act, (P.L. 117-58 (IIJA)).

The West Virginia Hydrogen Hub Coalition considers clean hydrogen an integral part of West Virginia's and the Appalachian region's efforts to create high quality jobs, incorporate emerging technologies and energy resources into its rural and urban economies, and strengthen its environmental stewardship including by reducing greenhouse gas emissions.

As the national leader in energy production throughout the Twentieth Century, West Virginia is ideally situated to leverage its history, rich natural resources, proximate location to U.S. markets, multiple modes of transportation, world class academic research institutions, competitive industries, highly skilled workforce, and industrial spirit to power a clean hydrogen economy through the framework of a Hydrogen Hub.

### **West Virginia's Contribution to the Growth of Our Nation**

West Virginia has long been known as a major energy producing state, mining over seven billion tons of coal in the past century, not to mention the vast oil and natural gas produced by the Mountain State. In addition, West Virginia is emerging as a leader in developing renewable resources and is home to a growing interest in nuclear energy. The energy reserves produced by West Virginians have forged the steel to build the infrastructure of this nation and kept the lights on for millions of Americans, reaching far beyond the jagged boundaries of our state. However, the contribution West Virginians have made to the growth of our nation has not been without sacrifice, including the more than 3,600 brave coal miners who have tragically lost their lives in fatal mining accidents.

West Virginia, its environment and its residents, have dedicated their lives and existence to powering the growth of our nation. West Virginia is proud of its historical contribution towards energizing the United States and looks forward to a bright future through an all-of-the-above approach to clean-energy production.

### **West Virginia's Energy Economy, Workforce and Industry**

West Virginia is an energy powerhouse that has for generations provided the energy on which the rest of the country relies. That remains true today. The state is a net exporter of energy for the rest of the country. West Virginia ranked fifth among the states in total energy production in 2019, accounting for 5% of the nation's total. In 2020, West Virginia was fifth in the nation in natural gas production. It has substantial existing and untapped renewable resources, including hydropower, wind, solar, and even the potential for geothermal.

West Virginia also possesses a distinct geographic advantage. Centrally located on the U.S. East Coast, West Virginia's location puts business and industry within an eight-hour driving distance of major metropolitan areas representing half of the U.S. population. There are also over 4,000 miles of pipelines in West Virginia that can connect West Virginia's resources with the rest of the country. In addition to its central location and natural resources, West Virginia also has the geology to store carbon dioxide in deep rock formations that would be captured during the production of hydrogen.

The production, transportation, and use of hydrogen will require a skilled workforce. West Virginia's energy workforce has been the backbone of the U.S. economy for generations. West Virginia has a high concentration of energy employment, with 49,088 Energy workers statewide (representing 1.6% of all U.S. Energy jobs). In recent years, workers have taken a hit from the off-shoring of jobs and other economic trends. However, West Virginia's workers are still well positioned to take part in the hydrogen economy. There is significant overlap between necessary skills to support a hydrogen industry and the skills West Virginia's workers already possess thanks to decades of working in the fossil fuel economy.

West Virginia hosts many of the industries that could serve as end-users of hydrogen. The chemical industry has a long history in West Virginia, and the state continue to host a robust chemical manufacturing hub including several multinational chemical companies. In addition to chemicals, the steel and auto industry also have a presence in West Virginia. The proximity of these industries and this workforce to the vast energy resources found in West Virginia make the state the ideal location for a Hydrogen Hub.

### **Proposal to Participate and Agreement**

NOW, THEREFORE, the undersigned West Virginia Hydrogen Hub Coalition agree as follows:

#### **I. Commitment**

The undersigned West Virginia Hydrogen Hub Coalition agrees to work together to develop a West Virginia Hydrogen Hub Proposal.

The undersigned West Virginia Hydrogen Hub Coalition agrees to prepare an application(s) that advances a compelling vision for a hydrogen economy, including production and use of hydrogen in West Virginia. The West Virginia Hydrogen Hub Coalition agrees to work with academic, research, industry, environmental, and community partners and stakeholders to ensure the proposal(s):

- Drives economic growth and development for the Appalachian region.
- Incorporates the latest science, research, and technology for cost-effective generation, transportation, and use of clean hydrogen.
- Ensures the participation of disadvantaged communities, including safeguards around public health, safety, and labor.
- Develops a pathway for workforce development and training.
- Provides for information exchange and collaborative research, including engagement with research and educational institutions, to monitor emissions and Hydrogen Hub performance, and thoughtfully plan expansion of the Hydrogen Hub and the use of hydrogen technology over time.

- Addresses pipeline safety, leak minimization, and pathways for new pipeline construction.
- Engages key stakeholders including end-users in the industrial, buildings, aviation, power generation, transportation, and other sectors.
- Addresses the air quality impacts of hydrogen use and combustion, including emissions of nitrogen oxides.
- Identifies current and possible State resources, incentives, policies, and plans that can be leveraged in support of a flourishing and competitive hydrogen economy among the Working Group Partners.
- Respects the unique needs and policy approaches of each participating member.

## **II. Coalition Framework**

The West Virginia Hydrogen Hub Coalition will encourage engagement from all interested parties within and beyond the state's boundaries. The four principal parties of the West Virginia Hydrogen Hub Coalition, United States Senator Joe Manchin, United States Senator Shelley Moore Capito, United States Congressman David McKinley and West Virginia Governor Jim Justice, or their designees, will together form the coalition framework. The West Virginia Hydrogen Hub Coalition, at the direction of the principal parties or their designees, will convene a working committee of government, industry and labor representatives to develop and commit resources to the extent permitted by law to support the analysis, coordination, and development of a Clean Hydrogen Hub proposal in response to requirements of the U.S. Department of Energy Funding Opportunity Announcement. Any formal external written communication about the Hydrogen Hub collaboration, including press releases, op-eds, or information placed on government websites specific to the West Virginia Hydrogen Hub Coalition will be shared with coalition members in advance.

By the deadline required by the U.S. Department of Energy, the workgroup will develop a proposal(s) to successfully accelerate commercialization of, and demonstrate the production, processing, delivery, storage, and end-use of clean hydrogen in West Virginia and the region. In developing the proposal, the workgroup shall consult with and solicit input from key partners and stakeholders.

## **III. Timeline**

The West Virginia Hydrogen Hub Coalition's collective work will meet deadlines for Federal funding opportunities for regional hydrogen hubs.

## **IV. Additional Coalition Members**

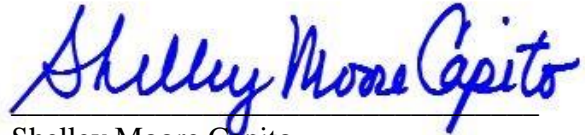
With the encouragement of all West Virginia Hydrogen Hub Coalition members, additional members will be added to the coalition. Additional members will be asked to adhere to the provisions of this proposal and if at any time, a member of the coalition wishes to rescind membership, they are free to do so. Prospective additional members representing key partners include:

- WV Manufacturers Association
- WV Oil & Gas Association
- West Virginia Coal Association
- WV Chamber of Commerce

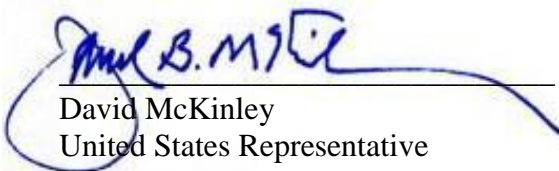
- WV AFL-CIO
- WV Chemical Alliance Zone
- West Virginia University
- Marshall University



Joe Manchin III  
United States Senator



Shelley Moore Capito  
United States Senator



David McKinley  
United States Representative



Jim Justice  
Governor of West Virginia