# MID-ATLANTIC HYDROGEN HUB



**OVERVIEW BRIEFING** FEBRUARY 2023



CONNECTED DMV

## OUR PRIMARY OBJECTIVES



Accelerate a hydrogen economy across Maryland, DC, and Virginia to contribute significantly to the clean energy transition.



Provide high quality job opportunities and economic growth for the region including our underserved communities.



✓ The Mid-Atlantic Hydrogen Hub coalition comprises the diverse and industrial strength set of leading partners required to drive a clean energy transition that also serves our region's broader community and economic interests.



Secure Hydrogen Hub funding from the US DOE \$8B Clean Hydrogen Hub Program





### WHY HYDROGEN?

- While existing proven technologies such as renewables and battery electrification — are important contributors to clean energy goals, additional solutions are required.
- Hydrogen solutions will help tackle the toughest remaining barriers in hard to abate energy use sectors.
- Hydrogen can be produced from renewable and low-carbon energy resources and is an efficient energy carrier essential to combating climate change by curtailing greenhouse gas emissions.
- Hydrogen delivers carbon-free operations for many applications, including transportation, manufacturing, power generation, and storage.

#### WHAT IS THE MID-ATLANTIC HYDROGEN HUB?

The Mid-Atlantic Hydrogen Hub is a coalition of leading organizations accelerating the adoption of clean Hydrogen energy solutions across the District of Columbia, Maryland, and Virginia.



- Cross-section of community organizations, utilities, energy producers, hydrogen technology providers, national labs, and colleges and universities.
- Committed to delivering clean cost-effective hydrogen energy solutions, developing the workforce, growing the economy, and incorporating environmental justice across the region.
- Delivering commercially viable hydrogen projects in hard-todecarbonize sectors, including aviation and airports, maritime shipping and ports, long-haul trucking and heavy- and medium-duty fleets and equipment, industrial uses as well as distributed and grid power applications.
- Planning for an integrated network of production, storage, transportation, and end-use technologies and solutions to provide full hydrogen ecosystem that provides security of supply and demand.



## BENEFITS TO THE REGION

By 2030, a hydrogen economy in the region would result in significant positive impact.

The data comes from the DMV Hydrogen Greenprint and describes the results of investment in a hydrogen ecosystem in the District, Maryland, and Virginia by 2030.

### Thousands of new jobs created



\$1.7B increase in economic activity to the local economy

\$150 million decrease of social costs of carbon, such as reduced burden on healthcare systems

\$490 million increase in state and federal tax revenue

2.7 MMTs CO2 abated



#### WHY OUR REGION IS HYDROGEN HUB READY

Strategic location at the heart of the mid-Atlantic and at the crossroads of the Atlantic seaboard makes the region the essential connecting point to integrate existing and future hydrogen systems in the Northeast, Southeast, and Midwest.

Access to multiple, diverse potential suppliers of hydrogen to provide required volume and supply security.

Our hub has the largest collection of federal facilities and the largest data center cluster in the world.

**Diversity of marquee** demand: off-takers include national and international airports, massive regional transportation network, multiple significant maritime ports, technology firms and data center clusters, manufacturing and heavy industry, and the federal government (civilian, defense, intelligence).

Home to an Independent, non-profit lead coordinating entity for the hub and H2 efforts in region



#### WHERE WE STAND TODAY

79 potential hubs across the US submitted Concept Papers to the DOE.

The Mid-Atlantic Hydrogen Hub was one of only 33 that was encouraged by the DOE to submit a full application.

Application due by April 7, 2023.

DOE has indicated 6-10 funding awards will be made.

We need your support in winning up to \$1B in Federal funds for our region:

- Letter of Support
- Other Clean Hydrogen Projects
- Other Stakeholders



The time to invest in our clean hydrogen future is now.

### MID-ATLANTIC HYDROGEN HUB

connecteddmv.org/hydrogen



