



Hydrogen

The Next Frontier of Clean Energy

Harnessing the world's most abundant element for clean, renewable energy.

Our Path to Net Zero by 2050

Rapidly deploy the clean energy ***technologies of today...***

- Wind
- Solar
- Energy Storage
- Renewable Natural Gas
- Methane Emissions Reduction

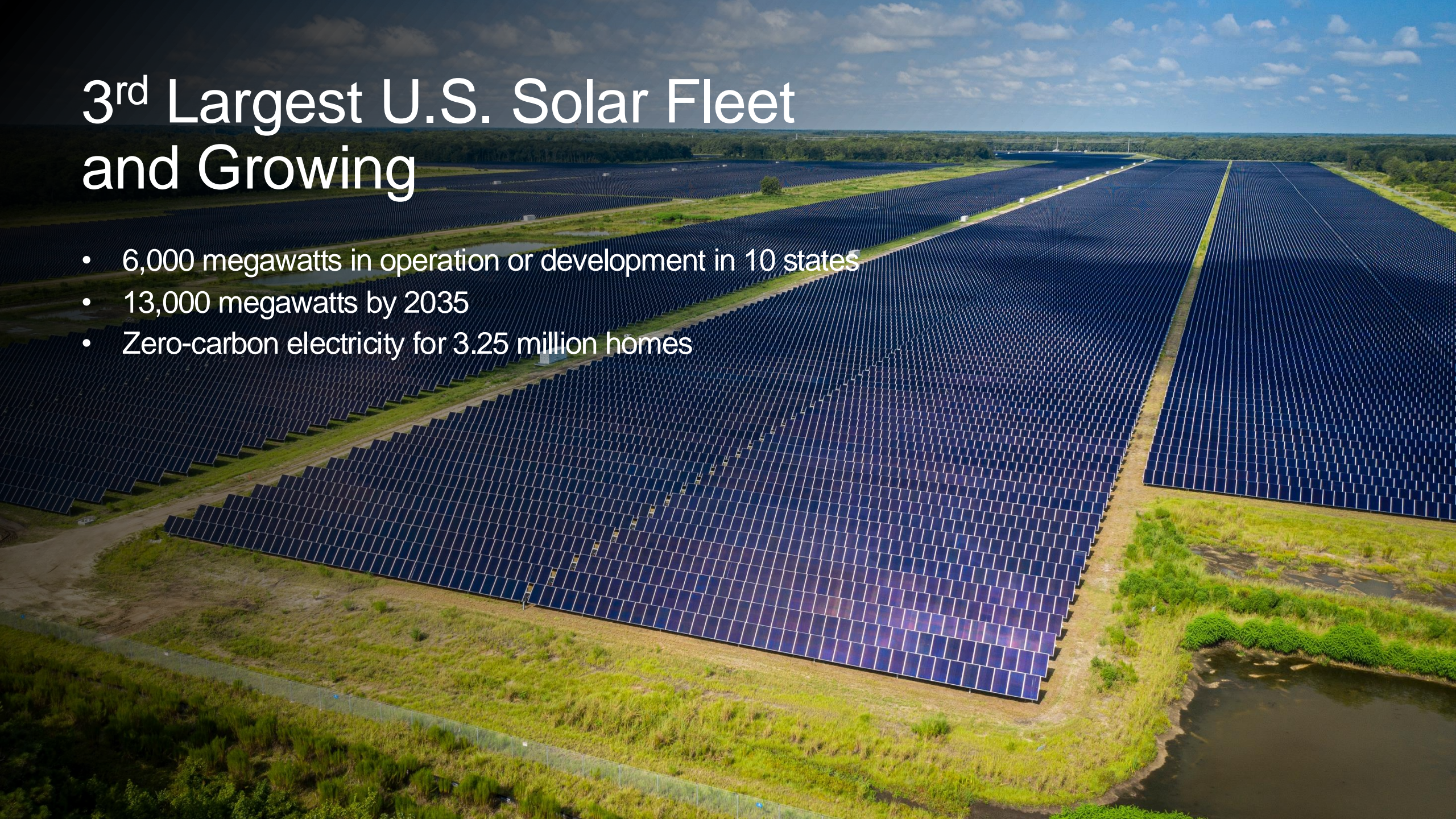


While investing in the emerging ***technologies of tomorrow...***

- Hydrogen
- Advanced Nuclear
- Carbon Capture

3rd Largest U.S. Solar Fleet and Growing

- 6,000 megawatts in operation or development in 10 states
- 13,000 megawatts by 2035
- Zero-carbon electricity for 3.25 million homes



Largest Renewable Natural Gas Investment in U.S.

- Smithfield Foods and Vanguard Renewables partnerships
- \$2 billion potential investment by 2035
- More than 5.5 million metric tons of CO₂e captured annually by 2028
- Equivalent to taking 1.2 million cars off the road each year
- Same as planting more than 90 million new trees



Largest Offshore Wind Project in North America

- Virginia Coastal Offshore Wind (CVOW)
- 12-megawatt pilot completed in 2020
- 2,600 megawatts by 2026
- Zero-carbon electricity for 650,000 homes





Dominion Energy is exploring how hydrogen can help us achieve our goal of **net zero emissions** and also help **decarbonize other industries** like transportation and manufacturing.

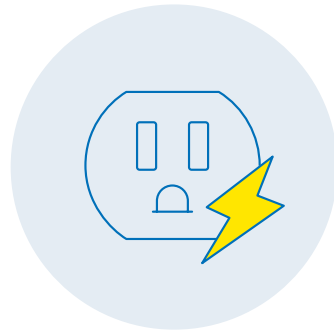
The “Swiss Army Knife” of Clean Energy

Here are a few ways hydrogen can help Dominion Energy and other industries on our path to a clean energy future.



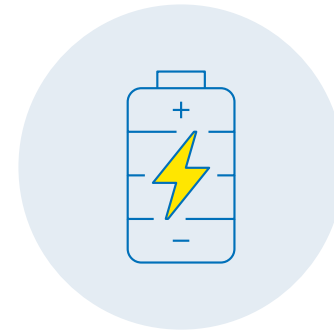
Natural Gas Blending

Hydrogen can be blended into the natural gas distribution system to heat homes and businesses.



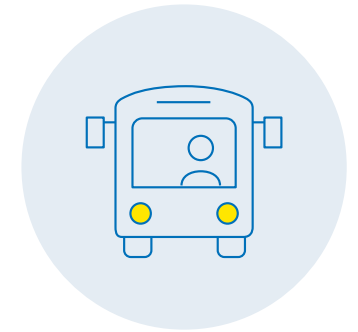
Clean Electricity

Blending hydrogen into our natural gas power plants helps reduce emissions while producing electricity with the same reliability as natural gas.



Renewable Storage

Renewables are not always available when our customers need electricity. Hydrogen helps by storing energy from wind and solar when it isn't needed so we can use it later when it is.



Clean Transportation

Hydrogen can be a zero-carbon fuel source for most forms of transportation, including passenger cars, buses and fleet vehicles.

Getting Started: Gas Distribution Blending Projects

Utah Blending Pilot

- We're testing a 5% hydrogen blend in a low pressure system in Delta, Utah.
- Testing at the ThermH2 pilot project develops the knowledge and best practices we need to blend hydrogen into the broader system that serves our customers. The pilot is being conducted in four phases:
 - **Phase 1:** Pilot test blend at Training Academy - Completed
 - **Phase 2:** Test blend in isolated community – Ongoing
 - **Phase 3:** Test blend into local transmission system
 - **Phase 4:** Power to Gas

North Carolina & Ohio Blending Pilots

- A similar Phase 1 pilot was recently proposed in North Carolina and Ohio is already conducting Phase 1.



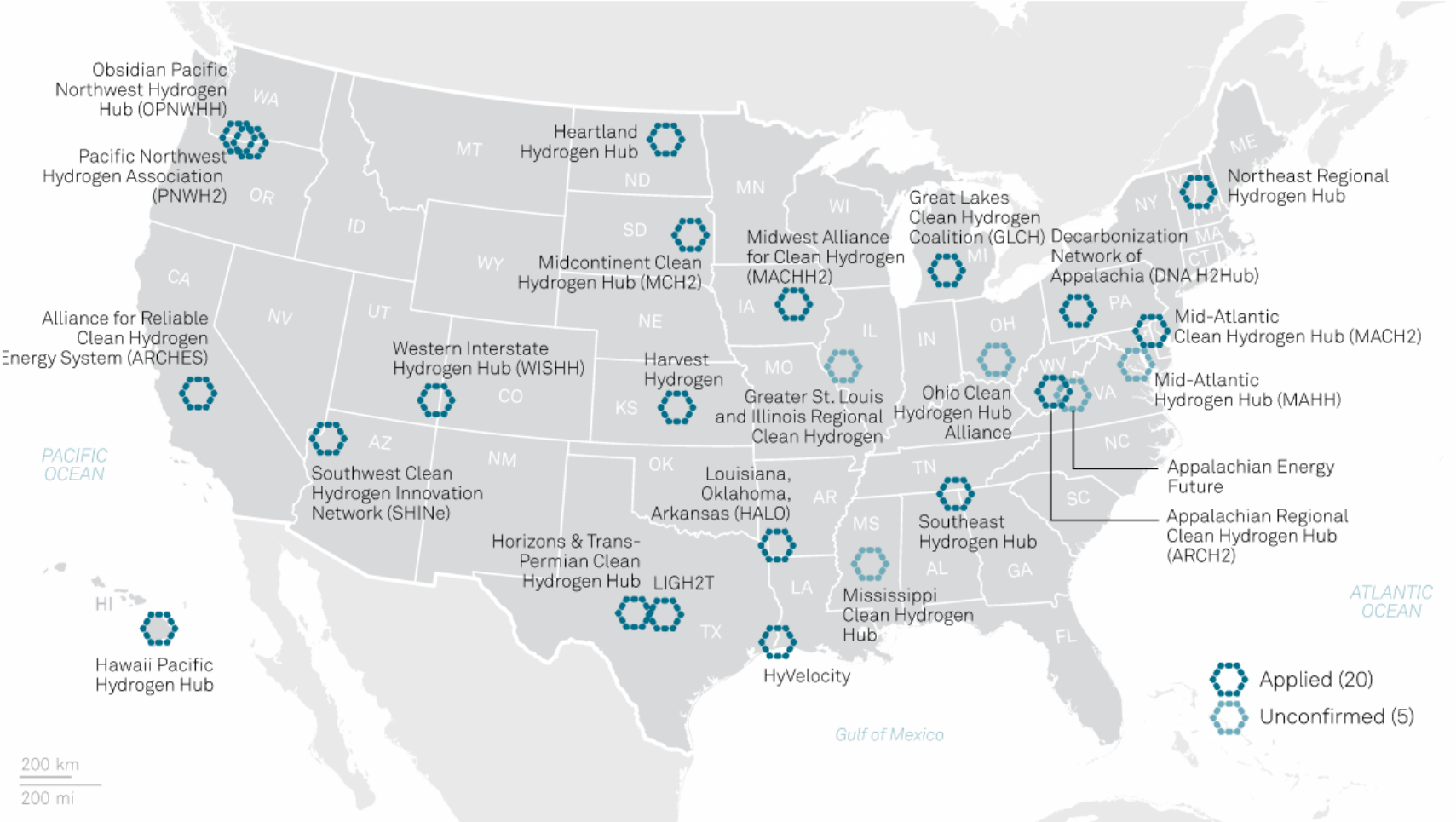


Hydrogen Hubs

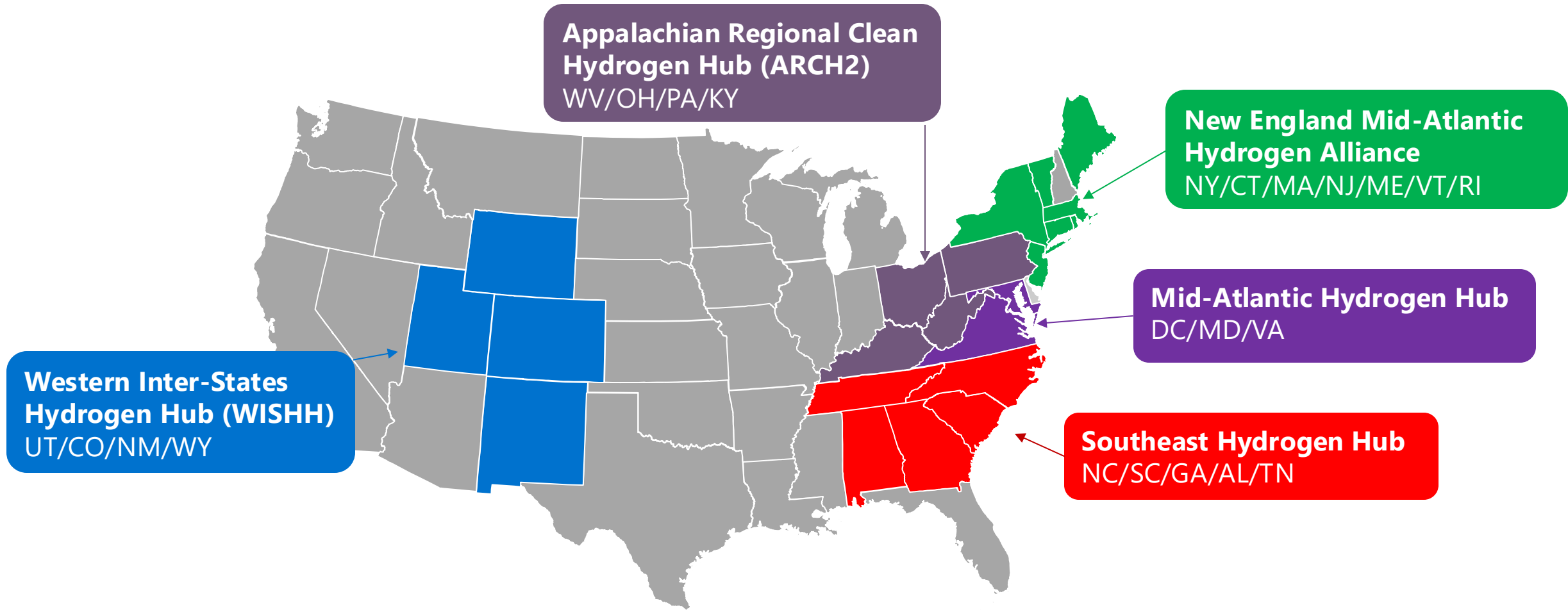
Announced Hydrogen Hub Coalitions Seeking DOE Funding

Hydrogen hub applicants

The US Department of Energy's deadline for hydrogen hub applications was April 7. Of the 33 regions that were encouraged to apply, 20 confirmed submission of a final application.



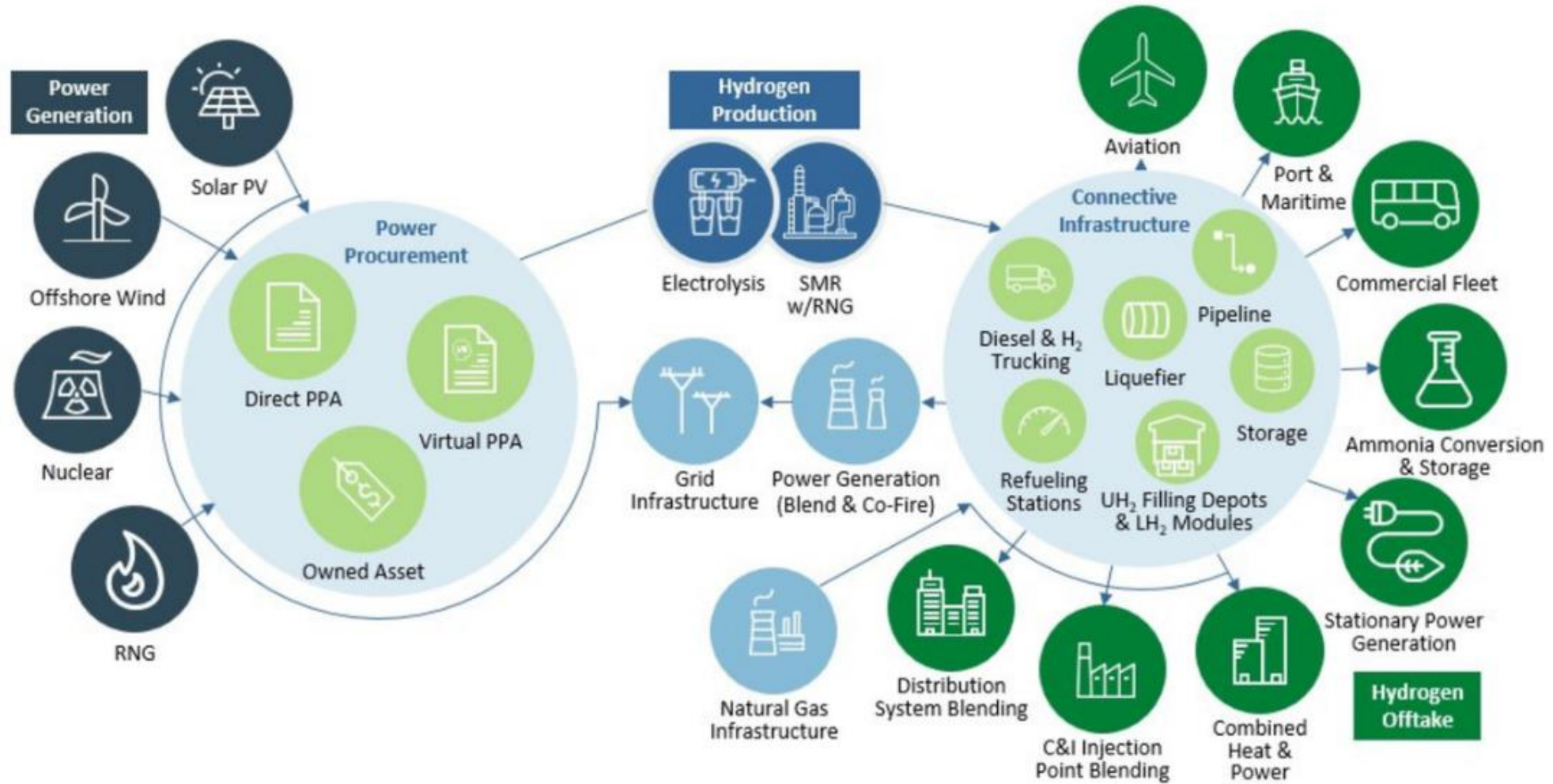
Hydrogen Hub Coalitions with Dominion Involvement and Leads



Mid-Atlantic Hydrogen Hub



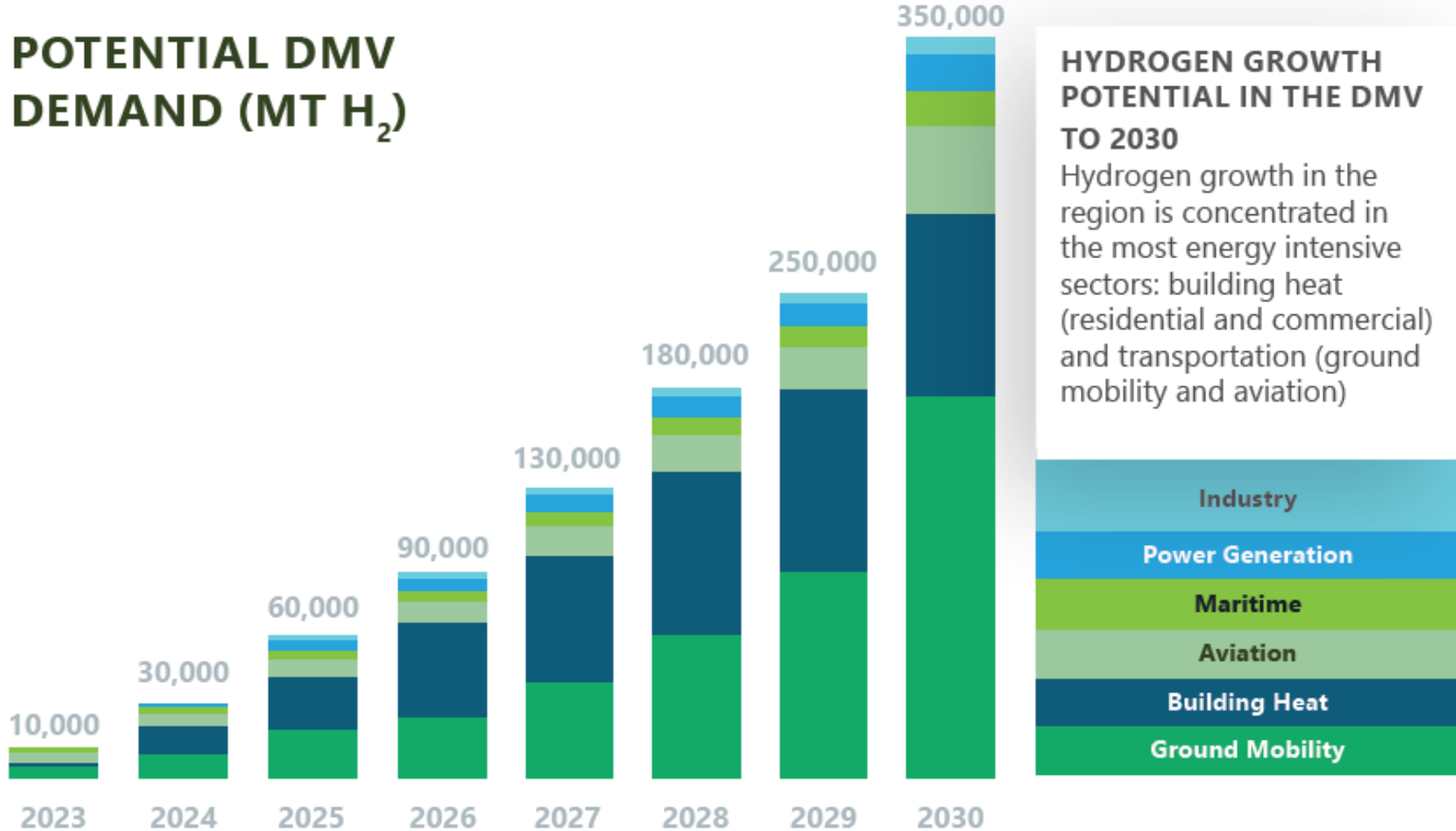
Mid-Atlantic Hydrogen Hub



Adapted for the Mid-Atlantic Hydrogen Hub based on H2@Scale, DOE, energy.gov

Mid-Atlantic Hydrogen Hub

POTENTIAL DMV DEMAND (MT H₂)





Actions Speak Louder

<https://www.dominionenergy.com/projects-and-facilities/hydrogen>

Contact us

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