

# ARCH2: THE APPALACHIAN REGIONAL HYDROGEN HUB



## 🔍 WHAT TO KNOW

The Appalachian Regional Clean Hydrogen Hub, located in Ohio, Pennsylvania, and West Virginia, is a proposed network of hydrogen producers and consumers, with the hydrogen mostly being produced from natural gas and likely transported via pipelines. [1]

ARCH2 will require vast amounts of infrastructure to capture, transport, and store the CO<sub>2</sub> necessary to designate this hydrogen as “clean”. However, the industry and regulators have **little operational experience** with these technologies and have yet to demonstrate the effectiveness of capture and storage technology. [2] Once ARCH2 has been approved by federal officials, developers associated with the hub will advance 15 projects over 8-12 years. [3] ARCH2 has **failed to adequately engage Appalachian communities** and the companies involved have shared few details regarding their plans, including project locations and potential risks. [4]

## ⚠️ HEALTH & SAFETY CONCERNS

Potential health impacts from geologic carbon storage include **water contamination, accidental releases of large volumes of CO<sub>2</sub>, and induced earthquakes.** [5]

Most of ARCH2’s hydrogen will be produced from **fracked natural gas**, which is linked to **cancer, respiratory diseases, and heart problems**, among other issues. [6] Companies that plan to develop ARCH2 projects include CNX, which has been fined nearly \$2 million for hundreds of violations over the past five years, and EQT, whose operations in Greene County experienced a “frac out”, placing local drinking water and communities at risk. [7] Through ARCH2, EQT is planning to construct a gas-to-liquids facility in Southwestern Pennsylvania.

## 📉 ANOTHER FALSE ECONOMIC PROMISE?

Even by their own projections, ARCH2, which states it would create 3,000 permanent jobs, would **increase total employment by less than 1%** across the three states. Ultimately, the hub represents another broken economic promise for our region, like the gas and petrochemical “booms”, and it is unlikely to reverse the pattern of job & population loss in the region.

Worse, Appalachian families would help pay the cost of hydrogen and carbon capture buildout through their utility bills, taxes, or both. In addition to the nearly \$1 billion in federal funding available to ARCH2, companies have access to a massive tax credit for carbon storage, meaning **your tax dollars are helping to foot the bill.** [8] If power plants in the region invest in carbon capture technology, ratepayers could see **significant increases in their utility bills.** [9]

## REFERENCES

1. The White House. [Biden-Harris Administration Announces Regional Clean Hydrogen Hubs to Drive Clean Manufacturing and Jobs.](#)
2. Institute for Energy Economics and Financial Analysis. [Carbon capture and storage; Environmental Protection Agency. Table of EPA's Draft and Final Class VI Well Permits.](#)
3. Department of Energy. [Appalachian Regional H2Hub Community Briefing.](#)
4. Inside Climate News. [Federal Hydrogen Program Is Cutting Out Local Groups, Threatening Climate Goals, Advocates Say.](#)
5. Congressional Research Service. [Injection and Geologic Sequestration of Carbon Dioxide: Federal Role and Issues for Congress.](#)
6. Concerned Health Professionals of NY. [Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking and Associated Gas and Oil Infrastructure, Ninth Edition.](#)
7. Center for Coalfield Justice. [Gov Shapiro's Announcement Of CNX Partnership Is A Slap In The Face To Communities Suffering From Years Of Drilling; PA Environmental Digest. Center For Coalfield Justice: Nearly 11 Months Since An EQT Shale Gas Well Frac-Out Left Residents Near New Freeport, Greene County Without Clean Water; DEP's Investigation Not Complete; Department of Energy. Appalachian Regional H2Hub Community Briefing.](#)
8. Congressional Research Service. [The Section 45Q Tax Credit for Carbon Sequestration.](#)
9. Ohio River Valley Institute. [Carbon Capture, Use & Sequestration Would Decarbonize the Electric System...in the Worst Possible Way.](#)