Hydrogen: The Good, The Bad, and The Ugly!

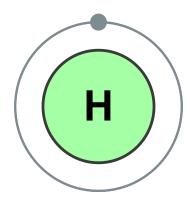


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And why policymakers' current plans for a Hydrogen Hub in the Mid-Ohio Valley are a BAD IDEA!

Jobs from Hydrogen Hub?

The hydrogen hub's most noticeable effect is that it would perpetuate coal and gas industries in the region and perhaps expand the latter. But that only amounts to locking in an economy that is already causing the region to shed jobs and population. Except for a temporary bump in construction jobs to construct the pipeline network, the hub would do nothing to create new jobs.

In contrast, clean energy transition with an emphasis on distributed generation and improvements to homes and buildings to achieve increased efficiency would likely stimulate job growth in the tens of thousands while also reducing utility bills, increasing disposable incomes, and improving the quality of life in both public and private spaces by making them safer and more comfortable.

The clean energy transition would also free up vast sums of money that could be used to compensate workers, families, and communities directly affected by reductions in fossil fuels industries.

Unabated emissions and worsened pollution...

The hydrogen hub and the production of blue hydrogen would do nothing to mitigate upstream emissions associated with the extraction and transportation of natural gas and methane.

Even after CCS (Carbon Capture & Storage) technologies have been installed and put into operation, they are expected to capture only about 90% of plant and factory emissions; however, existing pilot projects often capture far less than that.



Depending on the type of CCS technology that is deployed, pollution from nitrogen oxide, volatile organic compounds, and other hazardous pollutants continue and may worsen.

All Hydrogen is NOT created equal!

Most Common Types of hydrogen:

Blue Hydrogen is hydrogen derived from methane with partial emission reduction by CCS. Brown or Black hydrogen is hydrogen derived from burning coal or lignite. It involves a gasification process.

Grey hydrogen is also hydrogen derived from natural gas, or methane, only it does not involve CCS. Green hydrogen, <u>the only kind of hydrogen that should be considered viable at all</u>, is hydrogen derived from the splitting of water molecules using electrolysis, powered by renewable energy. The hydrogen hub that state and federal policymakers want to see in the Ohio River Valley would be fed by blue hydrogen with all the dangers, great expenses, and unnecessary resource use that comes with it!

Does hydrogen hold any promise at all?

Hydrogen does show promise for the decarbonization of hard-to-decarbonize sectors like international shipping and aviation and for the decarbonization of steel and cement-making, not to mention as a source of fuel for transportation that may help save on the resource-intensive process involved in producing battery powered



electric vehicles.

What we can't afford in the Ohio River Valley is the buildout of more dangerous, polluting, expensive infrastructure ostensibly for hydrogen production, *but really to extend the life of fossil fuels!*

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The information in this pamphlet was provided by the Ohio River Valley Institute (ORVI). Learn more at <u>ohiorivervalleyinstitute.org</u>

The Ohio River Valley Institute is a think tank focused on the greater Ohio Valley and Western Pennsylvania.



Their team of experts produces substantive research on the region's most pressing issues and delivers them with effective communication strategies. They strive to help the Ohio Valley Region mark out a path toward shared prosperity, clean energy, and more equitable civic structures.

Help MOVCA and ORVI tell policymakers in Washington and in our states that the only hydrogen we're interested in is GREEN hydrogen! No other colors of hydrogen for us!

Mid-Ohio Valley Climate Action is a 501(c)(3) nonprofit organization dedicated to educating, mobilizing, and coalition-building to address the global climate crisis in the Mid-Ohio River Valley and beyond. See us on Facebook: Mid-Ohio Valley Climate Action Visit our website: <u>movclimateaction.org</u>

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