KY Regional Hydrogen Hub Workgroup

HOSTED BY THE KENTUCKY OFFICE OF ENERGY POLICY

Stakeholder Survey Results

71 Respondents out of 144 invited stakeholders

4. How do you envision participating in the workgroup moving forward?

More Details

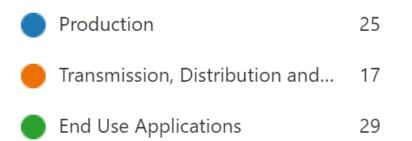
Observer 29 Active Participant 42





5. Which area of the hydrogen supply chain is of **most** interest to you and your organization to work on in the next 6-9 months?

More Details



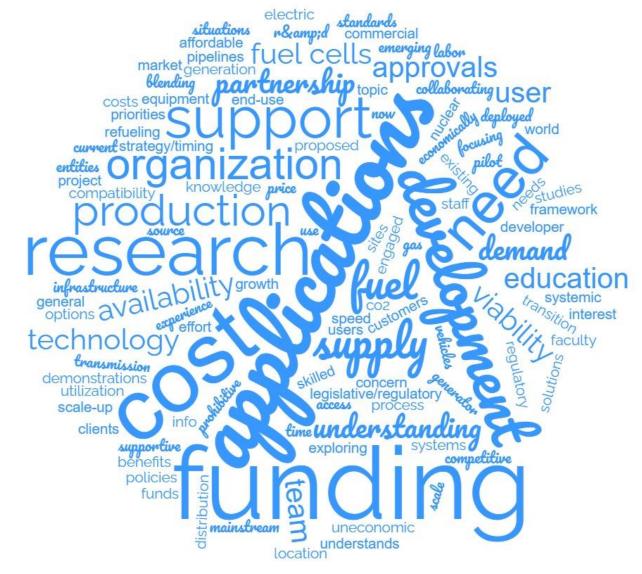


 On a scale of 1 to 5, how important is hydrogen to you or your organization meeting your (their) sustainability goals (5 being most important and 1 being not important at all)?
<u>More Details</u>



3.73 Average Number

Please identify what is the largest need you or your organization has that prevents you from developing hydrogen supply chain projects?





What hydrogen topics do you need further information on moving forward?

RESPONSES FOLLOW



Opportunities with industries looking for partners to fulfill their need for hydrogen.

Hydrogen end-use applications in transportation electrifications and utility power grid

We would like to hear more about manufacturing and initiatives companies are pursuing to get hardware in the ground. Use cases, adoption trends.

Most sustainable/environmentally friendly production of hydrogen

Cost and feasibility of a replacement fuel

Hydrogen fuel cells and hydrogen storage

Production in Kentucky, companies interested in green hydrogen production and development

I'm a novice. Information such as how Kentucky can produce and transmit hydrogen throughout the state would be helpful. Production

I am personally interested in the overall frontier landscape in KY

Understanding stakeholders and where Kentucky is moving helps us to learn where we can help clients in their efforts.

Just basic understanding of what is needed to make a project work and the economic benefits that can come with it

How do you refurbish the existing pipelines to be able to transport hydrogen?

H2 production cost

storage volumes, pressures, delivery rates



Generation of hydrogen from renewable sources; utilization at utility and distributed level

Is there a working group interested specifically in catalysts for hydrogen fabrication and utilization?

Expansion of Federal & State incentives for hydrogen and carbon capture

Storage & Transmission

zero carbon

Ammonia production and transportation

Preferred source of hydrogen

State and federal level programs and funding sources

How does a place get started?

Data on blending natural gas with hydrogen for consumer use.

Green hydrogen, blue hydrogen and scale-up How it will be used in Kentucky. Needed legislative or regulatory changes to make CCUS a reality? Process / production info please **Environmental impacts** Economically competitive source of hydrogen supply. public education, clean production Education Production benefits of one type of hydrogen over

another from a production standpoint

Production of hydrogen from renewable

energy sources. Optimal use of hydrogen.



Perceived barriers Kentucky Energy Board sees for region, state of technology globally. Roadmap specific to Kentucky taking into account current status of Kentucky.

large scale production of hydrogen for power generation at competitive cost

Additional State Initiatives and Policy in process to accelerate hydrogen adoption.

Capture and transportation

Applications for the utility industry

Availability of clean hydrogen near our end use facilities, carbon footprint associated with those facilities, and cost of hydrogen

How it will be supplied, created, and supply costs.

water electrolysis, fuel cells

Development of local requirements

Marketing product



Additional Comments



Coordination with other hydrogen hubs may end up setting proposals apart. This coordination could mean a direct connection with other states, say hydrogen produced in Kentucky is sent across to an end-use application in another state. It could also mean an openness of data and technology comparisons between hubs. Ultimately, the industry will want to converge on what technologies work best for the U.S. and for certain regions within the U.S. - starting from Day 1 with a plan on how to manage and share data could be worth considering.

Kentucky could be well positioned to bridge the gap between a potential Midwest-regional H2 hub (focused on H2 production from wind and nuclear) and a potential Appalachian-regional H2 hub (focused on H2 production from coal with CCS), with end uses focused on transportation and decarbonizing supply chains (e.g., heavy duty trucks)

It could be more effective having meetings in smaller groups dedicated to specific hydrogen-related topics.

Natural gas produced in Kentucky often sells at a discount to Henry Hub. Everyone involved (state and local governments, and local producers) could experience and uplift by the development of a local industry generating hydrogen and blending it with native natural gas



Next Steps

