

## Summary of Q/A with James Kenney · New Mexico Environment Department Cabinet Secretary

What is the Hydrogen Hub Act's purpose?

- Want to incentivize the type of low carbon hydrogen sought for NM. Useful for certain purposes and furthering NM's decarbonization and climate goals.

Why hydrogen, here and now?

- While we are moving toward wind and solar, and tackling emissions in power, oil and gas, and transportation sectors. Building codes, grid modernization, lowered interest rates on bonds for water infrastructure, other actions. Hydrogen offers ways to decarbonize sectors of the economy we haven't been able to reach yet.
- Why now is partly due to federal and private incentives available currently or soon will be.

What sectors of the economy?

- Transportation - long haul trailers, fork lifts, mining equipment, farm equipment.
- High heat or high energy use industries

Is the act a lifeline to the oil and gas industry?

- In absence of doing anything, we are being asked to help produce hydrogen. Our proposal is incentive based with idea that we step down carbon intensity over time. This will move us from a blue hydrogen basis to a green one. 2 kg/CO2 target.

How would we ensure that no carbon release from production would take place?

- Oil and gas industry needs to clean up its act, using as sticks methane rule at EMNRD and ozone rule at NMED. Thus if you have leaks you can't use benefits and credits from the state to produce hydrogen.
- MOA with a firm called Sky to detect methane leaks; coupled with flyovers we will increase compliance.

Is there a risk that a push toward use of H2 will distract from momentum toward renewables and increased energy efficiency?

- We haven't seen research to that effect. If you are going to move toward using H2 you likely don't have any decent alternatives. Mining, cement production, asphalt production, incinerators and ports of entry of long haul tractor trailers, are examples of where use of solar or wind would be unlikely.

Does it make sense to build up a H2 infrastructure today when fossil fuels are likely to be phased out in a decade or two?

- Fossil fuel investments are indeed fairly short term. H2 investments are much longer term – 30+ years. Thus the equity market is speculating H2 will be a long term fuel source.

- It makes sense for NM to become involved and not left behind, just a sacrifice zone in the state with money made outside the state.

What did you hear at COP26 on H2?

- Remarks by the Glasgow environmental chief shows H2 in use as part of the energy mix.
- Premise that we get to net zero without H2 by many in NM. Environmental groups are cautious about unintended consequences. NMED focus on H2 as part of the solution.

What about studying the question of H2 without legislation now?

- That's why a discussion draft has been sent out.
- Studies should that it not be done in lieu of acting now. How does the H2 economy get shaped without NM's involvement? MLG is a governor of action, wants to see movement. Have not yet briefed the Legislature, as preferred.

Water use

- Brackish water is a potential feedstock instead of potable water for electrolyzed process to produce green H2. Thus, NM is not precluded from a green H2 future if one assumes that it can use brackish water.

Cautions

- Hydrogen is a highly combustible gas
- Hydrogen from natural gas produces significant GHGs
- Carbon capture and storage is not yet proven to be effective
- Lifecycle of a hydrogen production operation using fossil fuels is likely to be much longer than the appetite to use fossil fuels
- Concerns that hydrogen hub focus will trump renewable energy expansion