

Hydrogen Energy a Controversial Priority In New Mexico's Upcoming Legislative Session

An emerging hydrogen energy industry was a key priority of the administration of Gov. Michelle Lujan Grisham during the regular 2022 Legislative Session scheduled to commence next month.

And while the governor and other policy leaders in New Mexico touted hydrogen as a cleaner, less-polluting energy source than higher-carbon fuels like oil and gas, environmentalists in Lujan Grisham's state criticized the effort as perpetuating the state's reliance on fossil fuels.

Earlier this year, Lujan Grisham announced the Hydrogen Hub Act, a bill intended to be introduced during the January 30-day lawmaking session to help build the sector in New Mexico.

Thirty-day sessions are typically reserved for budgetary issues, but the governor has the power to set other priorities.

She said she hoped to establish New Mexico as a primary state in the development of the U.S. hydrogen energy, part of a broader goal to shift the state and country away from its reliance on oil and gas and to address the impacts of pollution on climate change.

The Act would provide tax incentives to attract companies to New Mexico aiming to develop hydrogen power, requiring such projects be below a specified threshold of carbon emissions, which would decrease every two years.

Such incentives would not be available for hydrogen produced using fresh water, and the act would also create workforce training programs for the industry in New Mexico.

“Leaders around the world acknowledge the enormous potential that clean hydrogen holds for our economy and for our environment,” Lujan Grisham said. “But the time for action is now, and my administration is committed to fostering a clean hydrogen economy that carries New Mexico to net zero by 2050.”

The New Mexico Environment Department (NMED) announced in December about \$7.6 million in grant funding for emission reduction projects in the transportation sector, with a preference for hydrogen based on auto-industry trends.

The funding was provided by a national settlement with Volkswagen and the Clean Diesel Program through the U.S. Environmental Protection Agency Diesel Emission Reduction Act.

Eligible projects included the replacement of freight trucks, school or transit buses and locomotives.

NMED reported it would give priority to projects using hydrogen fuel cell technology.

“Hydrogen fuel cells do not emit greenhouse gases, contribute to ozone formation (smog) or emit other pollutants that cause respiratory health problems,” NMED Cabinet Secretary James Kenney. “We look forward to receiving innovative project proposals that further our thriving clean energy economy across the state.”

But despite its purported environmental benefits, groups in New Mexico were doubtful of hydrogen’s ability to wrestle the state’s economy away from fossil fuels and decrease pollution.

They argued that most U.S. hydrogen production required fossil fuels, and that burning hydrogen was worse for the environment than coal.

To produce hydrogen for energy, it is extracted from fossil fuels, biomass, water or a mixture. The U.S. Department of Energy considered hydrogen a “clean fuel” as it requires no combustion to produce and only generates water as a byproduct.

The International Energy Agency (IEA) reported natural gas is presently the primary global source of hydrogen, accounting for about 75 percent worldwide, followed by coal, oil and electricity.

Renewable energy could be an emerging source of the power, the IEA report read, as the costs of solar and wind power declined. This could increase interest in electrolytic hydrogen, read the report.

“The production cost of hydrogen from natural gas is influenced by a range of technical and economic factors, with gas prices and capital expenditures being the two most important,” read the EIA report.

Despite these recent advancements, the Rev. David Rogers of Carlsbad in the oil-rich Permian Basin in southeast New Mexico, worried the proliferation of hydrogen could mean continued pollution in his community alongside oil and gas.

“The suggestion that hydrogen constitutes an alternative to fossil fuel extraction is an explosive smokescreen that masks the truth,” Wilson said. “This proposed legislation will not only increase fossil fuel extraction but will also accelerate the dangerous emissions driving climate change. It is a proposal that must be rejected on all levels.”

Jeremy Nichols, climate and energy program director at Santa Fe-based environmental non-profit Wild Earth Guardians said the proposed hydrogen development would lead to expanded use of hydraulic fracturing to extract

precursors of the energy source and would continue to threaten the environment.

He said Lujan Grisham's proposal was contrary to her priority of addressing climate concerns.

“With spills, leaks, and explosions happening daily, the oil and gas industry has proven it's no friend to New Mexicans,” Nichols said. “We can't frack our way to a safe climate. Any efforts that propel more fracking are dangerous, destructive, and diametrically at odds with meaningful climate action.”

The offered incentives in the Act would likely go to fossil fuel producers, argued Erik Schlenker-Goodrich with the Western Environmental Law Center, supporting an industry he said should be curbed to undo threats to public health.

He said New Mexico should focus on building its renewable energy sectors like wind and solar.

“Fossil gas hydrogen isn't a climate solution and it's problematic to throw state taxpayer subsidies at fossil gas hydrogen developers and their investors under the pretext that this will somehow trickle down to the benefit of New Mexico communities and workers,” Schlenker-Goodrich said.

“The state should focus its resources on transforming New Mexico into a global climate and renewable energy leader that prioritizes protection of the land, communities, and working families—not powerful oil and gas interests.”

During a speech earlier this year before the New Mexico Oil and Gas Association – a trade group representing fossil fuel producers throughout the state – Lujan Grisham said it was the fossil fuel industry that would lead the development of hydrogen in New Mexico toward a lower-carbon energy supply.

“This is another place where New Mexico leads, and we don’t get to lead in the hydrogen space without the companies and the men and women who are represented right here today in this room,” Lujan Grisham said to the oil and gas companies in attendance.

New Mexico’s Democrat U.S. Sens. Martin Heinrich and Ben Ray Lujan also supported the governor’s initiative, introducing a package of bill to Congress earlier this year to support hydrogen’s use in the shipping and construction sectors along with providing power for homes and transportation.

“Clean hydrogen offers real potential as a solution to these challenges, and it could prove to be a major new economic driver in energy producing communities,” Heinrich said.