



## **Colorado Eyeing 'Significant' Opportunity with RNG**

Richard Nemec

October 31, 2019

Touting a report that it commissioned earlier this year, the Colorado Energy Office (CEO) said the state could benefit from producing and using renewable natural gas (RNG) in medium- and heavy-duty transportation.

CEO Executive Director Will Toor said his office now plans to complete a "phase II roadmap" on RNG.

"With RNG, the replacement of diesel fuel and mitigation of methane emissions from agricultural, municipal and commercial waste management practices could provide meaningful climate and clean air benefits through reduced greenhouse gas and nitrogen oxide emissions," Toor said.

New York City-based Energy Vision completed the RNG transportation market study to assess the benefits and potential barriers to advancing more widespread use of the renewable fuel in the state.

"As a large state with significant agricultural activity and a growing population, Colorado has a significant potential for producing RNG at wastewater facilities, landfills, anaerobic digestion facilities for animal manure and similar digestion units for residential, commercial and manufacturing food waste," said Energy Vision's Matt Tomich and Phil Vos, who co-authored the study.

Vehicles and other end-uses for conventional natural gas are potential markets for RNG in Colorado, the authors noted. Relying more on RNG could displace conventional natural gas and diesel use in transportation, mitigate against methane emissions from energy operations and waste management practices by industry and government, resulting in reduced emissions.

"We strongly support the CEO's recently released [report]," said Sam Wade, the RNG Coalition's regulatory affairs director. The "report serves as a first step toward increasing Colorado's production and use of RNG in both transportation and in homes and businesses, and potentially preventing the equivalent of 1.4 million metric tons of carbon dioxide emissions each year," he said, adding that the coalition reviewed the study in advance of its release.

Colorado Oil and Gas Association CEO Dan Haley said RNG may not be as economically favorable as some other options, but "it would be helpful for the state to explore ways to increase demand for natural gas vehicles and allow the fuel mix to mature." He cited the "co-benefit" natural gas also provides in the increased reliance on solar and wind power.

"It's why many states often champion all-of-the-above energy strategies," Haley said. "We've long held that natural gas would be a beneficial fuel for medium- and heavy-duty vehicles. With lower emissions than diesel fuel and a commodity price that is expected to remain low for the foreseeable future, it would be useful" to add compressed natural gas and liquefied natural gas vehicles to the state's transportation mix.

Energy Vision estimated Colorado's RNG potential for production is nearly 20 Bcf annually, or the equivalent of 142 million gallons of diesel fuel. That amounts to nearly a quarter of the state's annual on-road diesel consumption in medium- and heavy-duty truck sector. "To date, however, Colorado's potential remains largely untapped," Tomich and Vos said.

Colorado has one operational RNG project at a wastewater plant in Grand Junction and two wastewater RNG projects under development in Longmont and Englewood. Dairy and farm waste projects are in the planning stage.

RNG production has been expanding in several states including California, Texas, Minnesota and Pennsylvania.

Nationally, there are more than 2,200 U.S. biogas projects covering farm waste, food waste, landfills and wastewater treatment facilities, compared to a potential for 14,000-plus, more than 8,000 of which would be on farms and dairies. There are around 220 in operation, under construction and planned RNG facilities nationally, 89 now operating.