

Renewable gas: A sound option to fight organic waste

BY NINA KAPOOR POSTED 06.11.2019



Let's play a game: what would you do with 25 million tons of organic waste annually?

Here are a few tidbits to spark your imagination: Organic waste includes food and green waste, landscaping and pruning waste, lumber, fiber, sewage and sludges.

The Puente Hills Landfill in Los Angeles is the largest landfill in the United States (rising 500 feet high and covering 700 acres) and it has a capacity of 700 million tons. However, there is one caveat for this exercise that I forgot to mention — none of the organic waste can go to a landfill.

Renewable gas is a clean, renewable alternative to fossil natural gas.

As it turns out, this is not a game. This is the reality that will be faced by local governments and the Department of Resources Recycling and Recovery beginning in 2025.

In 2016 California once again established itself as a global environmental leader with the passage of SB 1383 by former state Sen. Ricardo Lara. This groundbreaking legislation included a target of achieving a 75 percent reduction in the level of the statewide disposal of organic waste by 2025.

In acknowledgement of the fact that methane is a greenhouse gas up to 80 times more potent than carbon dioxide, this legislation also established a methane emission reduction target of 40 percent by 2030.

California has identified the reduction of short-lived climate pollutant emissions, including methane emissions, as one of the five key climate change strategy pillars necessary to meet California's target to reduce GHG emissions 40 percent below 1990 levels by 2030 as established in California's landmark Global Warming Solutions Act of 2006.

That means that without a workable organic waste strategy California will not meet its climate goals.

Also, a subset of the methane target is a 40 percent reduction in methane emissions by 2030 from livestock manure. So please add a few million tons of livestock manure to that list from earlier....

So, what can be done with 25 million plus tons of organic waste?

We can generate renewable gas. Renewable gas is a clean, renewable alternative to fossil natural gas. As organic waste breaks down it emits methane that can be collected and processed to meet natural gas pipeline quality standards. This renewable gas can be used to displace fossil natural gas that otherwise fuels end-use applications including space and water heating, cooking appliances, heavy-duty vehicles and stationary fuel cells.

The benefits of renewable gas are well-documented.

According to the California Air Resources Board, in addition to the ultra-low and even carbon-negative footprint of the fuel, renewable gas projects can produce significant reductions in a multitude of local pollutants including nitrogen oxide, particulate matter, carbon monoxide, hydrogen sulfide, and ammonia. It can also reduce odors and improve water quality. All of these benefits are achieved in some of California's most disadvantaged communities while simultaneously reducing demand for fossil fuels.

Which brings us back to the impetus for this commentary: a recent opinion piece that was published in Capitol Weekly entitled, "Renewable gas really is too good to be true."

The authors of that piece advocate for the electrification of all natural gas end-uses instead of any deployment of renewable gas. It's a narrowly focused strategy that may reduce demand for fossil fuels; however the suggested policy does not result in the local benefits of renewable gas production identified by the California Air Resources Board, it

does not reduce organic methane, and it does nothing to address the organic waste challenge.

Environmental policy should not be developed in silos. Policymakers do not have the luxury of ignoring reasonable solutions when they are the bodies ultimately held responsible for achieving the state's ambitious goals.

I would challenge the authors of the aforementioned opinion piece to answer the question: What would they do with 25 million tons of organic waste? Remember, this is not a game.

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Editor's Note: Nina Kapoor is the state government affairs director for the Coalition for Renewable Natural Gas.