

DAILY NEWS

New York, wake up on methane emissions

By TRISTAN BROWN | NOV 09, 2021

Methane has [climbed the national and global climate policy agendas](#), and has been much talked about in the corridors of COP26 in Glasgow. Meanwhile, implementation of New York's landmark climate bill, the 2019 Climate Leadership and Community Protection Act (CLCPA) is still in its early stages.

It mandates an 85% cut in New York's greenhouse gas emissions (GHG) by 2050. To meet that target, Gov. Hochul [signaled](#) she wants to reduce fossil natural gas in the state's energy mix. That's because natural gas is mostly methane, a powerful warming agent more than 80 times more potent than carbon dioxide over 20 years. We'll need to cut New York's methane emissions rapidly to meet the CLCPA goal.

In August, a new [report](#) from the Intergovernmental Panel on Climate Change found methane has caused a third of modern global warming. In September, the U.S. and the European Union launched a [global pledge](#) to cut methane emissions 30% by 2030. Over 100 countries have signed it so far, and major foundations committed \$223 million for implementation. This week, the U.S. Environmental Protection Agency announced [tighter regulation](#) of methane leaks from the oil and gas industry.



Governor Kathy Hochul makes a green jobs announcement in Alabama, NY.
(Mike Groll/Mike Groll/Office of Governor Ka)

New York's annual methane emissions total nearly 800,000 metric tons and are rising. Under CLCPA rules, which take account of methane's large impact on warming over a 20-year timeframe, that represents about a third of New York's total climate footprint. Meeting the CLCPA goal of shrinking our climate footprint 85% by 2050 therefore depends on cutting New York's methane emissions deeply. And that depends on cutting emissions from organic waste deeply.

No, we can't ignore methane emissions from oil and fossil gas distribution systems, but they aren't the biggest part of our methane problem. Oil and gas systems account for an estimated [14%](#) of the state's anthropogenic (human-caused) methane emissions. The biggest source — 66% — is decomposing organic wastes in New York's 152 landfills, 640 wastewater treatment plants, and 600,000-plus cows on our dairy farms.

Anaerobic digesters offer a practical way to cut those emissions. They process organic waste in an airless, controlled environment, capturing the methane biogases emitted as the waste decomposes. The biogases can be combusted to produce heat or electricity, or further refined into low carbon renewable natural gas (RNG) and used as a transportation fuel. Extracting fossil natural gas generates methane emissions. But anaerobic digestion and RNG production capture and prevent methane emissions, turning them into renewable energy.

Directing New York's massive food and other organic waste streams to anaerobic digesters diverts them from landfills, which now account for more than half of the state's methane emissions. On dairy farms and at wastewater treatment plants, these facilities can process manure and sewage to capture methane emissions. Food waste can be mixed in to maximize RNG output, emissions cuts and economic benefits.

This is starting to happen in New York, but not fast enough. According to the non-profit Energy Vision, over 200 facilities will be producing RNG in the U.S. by the end of this year, but only seven are in New York.

One of those is Brooklyn's [Newtown Creek](#) municipal wastewater plant, where digesters process sludge from up to a billion gallons of New York City wastewater a day, as well as food waste diverted from landfills. Once fully operational, it will produce enough RNG to displace diesel for thousands of heavy-duty vehicles, or to power 5,000 homes, saving 90,000 metric tons of greenhouse gases a year.

There are also about 25 anaerobic digesters on New York farms, and more than 70 wastewater anaerobic digesters in NYC, capturing biogas and generating renewable electricity. But there is potential for many more which, if realized, could eliminate most emissions from the state's largest methane sources.

The CLCPA and Albany should prioritize and incentivize these facilities' development. New York's 2017 [Methane Reduction Plan](#) did focus on reducing landfill and manure emissions using anaerobic digesters, which would have addressed most of the state's methane emissions. However, a complete methane reduction plan should include wastewater, and ultimately requires relentless focus on implementation.

We applaud Gov. Hochul's leadership in scaling back fossil natural gas in New York. Now, like the IPCC, and world leaders in Glasgow this week, we need her to prioritize methane and the proven technologies that can help us slash our methane emissions statewide.

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