

Food waste-to-energy plan changes course on power generation



A rendering of the proposed facility at Long Island Compost. Credit: American Organic Energy/American Organic Energy

By Mark Harrington | March 12, 2020

Long Island's first large-scale facility that would turn food waste into renewable natural gas to fuel a small power plant in Yaphank has changed course and will nix the electric-power portion of the project, a company official said this week.

American Organic Energy, a startup affiliate of Long Island Compost in Yaphank and Westbury, cited unspecified "Brookhaven landfill" issues and the economics of the electric portion of the project in explaining the change of direction.

Instead, said chief executive Charles Vigliotti, the company plans to pursue a new business model that will sell nearly all the plant's gas to transportation-fuel markets in California, which has adopted incentives for producers through a state-run low-carbon fuel standard.

At the same time, Vigliotti is working to advance legislation that would establish such a standard in New York. Sen. Todd Kaminsky (D-Long Beach), who last year pushed through a law that requires grocers and restaurants to send their food waste to the digesters, now is backing legislation that would establish a low-carbon fuel standard as part of the state budget.

"We need to do all we can to reduce our reliance on fossil-fuel transportation," Kaminsky said Tuesday. "The other places that have adopted [the standard] are seeing benefits."

But the proposed standard for New York has a notable opponent in Assemb. Steve Englebright (D-Setauket), one of the State Legislature's key environmentalists.

Englebright's main issue with establishing a new standard, he said Wednesday, is that the digesters produce methane, one of the worst greenhouse gases. He's also concerned that the standard would raise gasoline prices for typical Long Island customers, favoring instead incentives for customers to buy electric cars.

“There are very few things I can think of that are a worse idea” than incentivizing the production of more methane gas, Englebright said, adding it’s one reason anaerobic digesters were removed from the state Climate Leadership and Community Protection Act last year.

“A very substantial part of the methane problem is from an inability to safely manage the production and transport of methane,” he said. “A lot of the problem is from escaped gas. Producing more methane is locking us into a methane transport system that we know is helping to drive our climate problem.”

Englebright also said companies that stand to gain financially shouldn’t be influencing state climate policy. “Objectivity really matters,” he said.

American Organic Energy first proposed the anaerobic digester in Yaphank in 2013, then a \$50 million facility that would modernize his plant and turn up to 180,000 tons of food waste a year into renewable natural gas, compost and various levels of liquid fertilizer and wastewater. Last year, the company said the \$90 million plant was to break ground by August.

But Vigliotti said financial realities and issues relating to the nearby landfill complicated his original plan.

“The facility is quite expensive,” he said. “It cannot exist without a robust source of income for the energy it produces.” Selling renewable natural gas on the regular wholesale market through National Grid pipelines wasn’t viable, he said.

In the end analysis, that robust source of income is the market for biofuels in California, which has a low-carbon fuel standard that incentivizes renewable gas while requiring that conventional fuel producers such as gasoline and diesel pay more for special credits, thus subsidizing the cleaner alternatives.

“We couldn’t do both” electricity and renewable bio gas, Vigliotti said. “We had to make a choice for what is the most economically viable way to maximize post-digestion income. For right now, for vehicle fuel is the way to go.” He added that “electricity is not off the table permanently, it’s just not the best economics for us at this time.”

Vigloitti has had state backing for his project. Last year, the Long Island Power Authority approved a contract to buy energy from the Vigliotti’s proposed generator, which was to produce 6 megawatts to power the digester plant and sell up to 4 megawatts back to the regional electric grid. Vigliotti’s LIPA contract, which for now will not be enacted, was valued at \$83 million over 20 years.

Kaminsky’s efforts to push a state low-carbon fuel standard has the backing and advocacy of the New York League of Conservation Voters, whose executive director said she has won backing in the State Senate. “It’s my hope and it’s very possible that this happens this year,” said Julie Tighe, the league’s president, of passage of a bill.

But the Environmental Advocates of New York, another advocacy group, opposes the bill. New York should not be encouraging fleet owners to transition from one combustible fuel to another when the overall goal is zero emissions,” the group said.

Colin Murphy, deputy director of the Policy Institute for Energy, Environment and the Economy at UC Davis, said the standard has been successful in California, which implemented it in 2011: “In general it’s an effective way to reduce emissions in the transportation space.”

He noted it has had varying degrees of impact on gasoline prices in the state, which has among the highest gas prices in the country. In 2020, the impact is around 17 cents a gallon, he said.