

New report finds substantial benefit to NYC wastewater plants' upgrade

June 15th, 2023

A report by the NGO Energy Vision has found that upgrading New York City's wastewater plants could produce clean energy, reduce greenhouse gas emissions, divert food waste from landfills and economically benefit the City.

Entitled *Gotham Gas Goes Green*, the independent report assesses the benefits of applying innovations piloted at Newtown Creek, the City's largest wastewater plant, to more of its 14 wastewater resource recovery facilities (WRRFs).



WRRFs operated by the city's Department of Environmental Protection have a total of 75 anaerobic digesters which break down sewage sludge and capture the methane biogases emitted as it decomposes.

Historically, WRRFs have flared this methane as a digester byproduct, but it is a potentially valuable energy resource.

To realize that potential, DEP and its project partners upgraded the Newtown Creek plant. Food waste collected and supplied by Waste Management now augments the sewage sludge the digesters process, which has boosted methane production.

A new facility built on site by National Grid refines this methane into renewable natural gas (RNG) fuel. Newtown Creek RNG will be injected into National Grid's pipelines and used to heat over 5,000 Brooklyn homes.

This waste-to-renewable energy model has big potential benefits, the report found. If more of DEP's 14 WRRFs adopted it, they could produce enough RNG to power the City's entire fleet of heavy-duty trucks, EV's report added.

This would cut GHG emissions from City operations 15%, generate up to \$80 million (€73.8 million) a year in cost savings or new revenue, and process 30% of New York's 1.2 million tons of food waste annually, keeping it out of landfills.

Using RNG fuel in City trucks or buses could displace 25 million gallons of diesel fuel, avoiding pollution and health damage from diesel exhaust.

"New York has a golden opportunity here," said Matt Tomich, president of Energy Vision. "Generous tax credits and incentives in the Inflation Reduction Act could help finance WRRF upgrades. DEP is seeking partners to put WRRF biogas to use, and private capital is interested in renewable energy projects. Between diverting food waste from landfills, capturing WRRF methane, *and* replacing fossil natural gas, the climate benefits of these projects are immense."