



Waste-to-Fuel Revolution

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The use of renewable natural gas (RNG) is seeing a dramatic uptick by businesses and municipalities throughout the U.S. RNG is made by breaking down organic material found in wastewater, agricultural waste, decomposing food and yard waste to produce biogas. The process uses **anaerobic digesters** and then refined into an ultra-low-carbon, low-emissions source of energy and transportation fuel, all using a fraction of the carbon footprint of diesel, gasoline or other petroleum-based fuels.

In New York City, almost two million tons of organic waste is generated, which, if converted to RNG, could fuel the city's entire heavy-duty fleet. The **Newtown Creek wastewater plant in Brooklyn**, the largest of New York City's 14 wastewater treatment plants, features eight new RNG anaerobic digesters that visibly resemble large, futuristic stainless steel-clad eggs that process as much as 1.5 million gallons of sludge every day.

On a smaller scale, this year, **Impact Bioenergy** installed America's first **micro-anaerobic digester** at the **Fremont Brewing Company in Seattle, WA.**, with a unit known as **HORSE**, which costs an affordable \$60,000. Small and medium businesses can now turn their wastes into RNG (for heat, power or transportation fuel) and liquid bio-fertilizer. **AgEnergy USA, LLC**, has developed **Heartland Biogas** which is a Denver-area facility making RNG from dairy farm and food waste in anaerobic digesters. It's the largest digester project of its kind in the world. Nationally, the **U.S. Environmental Protection Agency (EPA)** has included RNG in its **Renewable Fuel Standard (RFS2)**, which has been pivotal in driving development and deployment of RNG as a net carbon-*negative* transportation fuel.

Just last week, **Energy Vision**, a national non-profit which researches and promotes technologies and strategies for a sustainable, low-carbon energy and transportation future, awarded the above mentioned business and government leaders who are accelerating the movement to convert the country's vast flow of organic wastes into renewable natural, RNG. There's a new **bipartisan bill in Congress** to drastically cut federal excise taxes on trucks that run on RNG. Vancouver BC recently **announced** it would phase out non-renewable natural gas by 2050 and is working to use more RNG in its trucks. London recently **announced** it would stop buying or leasing diesel trucks for its fleets. A New York Times **oped** recently argued NYC municipal fleets should stop buying diesels and start buying RNG trucks now in order to meet the city's ambitious emissions goals. The co-author Joanna Underwood, who was at the Energy Vision event says the New York City administration of Mayor Bill de Blasio "has set clear, aggressive goals for reducing greenhouse gas emissions that would make the city a national leader in mitigating climate change.