RENEWABLE NATURAL GAS (RNG) IN THE GREATER WASHINGTON AREA

What would RNG look like in the Greater Washington DC metropolitan region?

The Greater Washington D.C. metropolitan area is an urbanized region. Therefore wastewater, landfill gas, and diverted food waste represent the best RNG project opportunities in our area.

DC Water

Water Resource Recovery Facilities (WRRF)

There are **four wastewater facilities in the local area** that have anaerobic digestion systems, including DC Water's Blue Plains Advanced Wastewater Treatment Plant, which is the largest WRRF of its type in the world. DC Water is currently assessing opportunities to expand biogas production and **potentially produce pipeline-quality RNG**.

2.5 tBtu/y
Total Annual RNG Potential in DC Area

Prince William County Landfill

Landfill Gas Facilities (LFG)

Landfill gas (LFG) is captured from the anaerobic digestion of waste and produces a mix of gases, including biogas. There are **eight large landfills in the Washington Gas service territory** that have more than one million tons of waste-in-place. One of the largest is the Prince William County Landfill, which **could produce 1.1 tBtu/y alone**.

17 tBtu/y
Total Annual RNG Potential in DC Area

DC Restaurants

Food Waste Facilities

More than 75% of food waste is landfilled. **Food waste can be diverted to a processing facility** where it can be treated in an anaerobic digester. Adoption of new waste diversion mandates in the local area **could spur RNG development**. Sustainable DC's 2.0 Plan identified the need for a new organic waste processing facility to capture diverted food.

6.2 tBtu/y
Total Annual RNG Potential in DC Area

What are the best local uses for RNG?

THERMAL APPLICATIONS

RNG can be injected into pipelines to facilitate thermal applications, such as for cooking, heating, and cooling. This will support decarbonization initiatives while using existing natural gas infrastructure.

TRANSPORTATION USE

Replacing one diesel-burning heavy-duty truck with one, new Ultra Low-NOx natural gas heavy-duty truck is the emissions equivalent of removing 119 traditional combustion engine cars from our roadways.

Washington Gas
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