WHAT IS RENEWABLE NATURAL GAS (RNG)?

Renewable Natural Gas (RNG) is a proven, commercial, ultra-low or no-carbon energy option.

RNG is derived from biomass or other renewable resources, and is a pipeline-quality gas that is fully interchangeable with conventional natural gas. As RNG is a "drop-in" replacement for natural gas, it can be safely employed in any end-use typically fueled by natural gas, including heating and cooling, industrial applications, electricity production, and for transportation fuel. Today, 50 tBtu per year of RNG from landfills, dairy digesters and water resource recovery facilities (WRRFs) is injected into U.S. pipelines, with production growing every year.

RNG CAN BE CARBON-NEUTRAL OR CARBON-NEGATIVE

HOW MUCH RNG IS AVAILABLE?

Estimated Annual National RNG Production Potential (tBtu/y), "Achievable" Scenario, by 2040

(Source: ICF RNG Study)

Landfill Gas
866 tBtu/y

Farm Waste
462 tBtu/y

Waste Water
34 tBtu/y

Food Waste
64 tBtu/y

Ag Residue
641 tBtu/y

Forest Residue
236 tBtu/y

Energy Crops
838 tBtu/y

Municipal Waste
695 tBtu/y

Washington Gas
A WGL Company

AltaGas

How is RNG Produced?

1 **FEEDSTOCKS**

Sources for biogas include wastewater treatment plants, landfills, food waste facilities, and agricultural waste (dairies, farms, etc.)

2 **PRODUCTION**

Biogas is produced through a biochemical process, such as anaerobic digestion, or by thermochemical means, such as gasification

3 **UPGRADING**

Biogas is treated/ upgraded through a series of processes (filtering, cooling, compression) to produce pipeline-quality natural gas (RNG)

4 **END-USE**

After upgrading, the finished product, RNG, is typically injected into an interstate pipeline system for transport to end-users