

RENEWABLE NATURAL GAS (RNG)

What is the RNG project?

The MWMC has added to its sustainability efforts with new infrastructure to purify biogas, a byproduct of the wastewater treatment process, to produce renewable natural gas (RNG). Biogas is comprised of primarily methane and carbon dioxide. The equipment installed as part of this project "scrubs" the biogas to strip it of carbon dioxide and other contaminants, resulting in pure methane/RNG, which is then injected into NW Natural's system. The MWMC is proud to be the first public agency in Oregon to complete a project of this kind.

Image to left shows what the completed RNG facilities look like from an aerial view.

Environmental Benefits

Through this project, the majority of biogas the MWMC produces will be converted into RNG, allowing what could potentially be a waste product to be used beneficially through resource recovery. Previously, the MWMC utilized about 60% of its biogas to power the treatment plant, and the remaining 40% was flared to the atmosphere. This project will enable us to minimize flaring and convert nearly all the biogas to clean energy. RNG can hep to offset dirtier fossil fuels, resulting in air quality benefits and emissions reductions.





The Metropolitan Wastewater Management Commission (MWMC) is a partnership between the Cities of Eugene and Springfield and Lane County. The MWMC protects our community's health and the environment by providing high-quality wastewater services to the Eugene-Springfield metropolitan area.

Metropolitan Wastewater MANAGEMENT COMMISSION













Financial Benefits

Selling RNG will potentially provide the MWMC with an additional revenue source, offsetting future costs for Eugene-Springfield ratepayers. The project was paid for with the MWMC's existing capital reserves.

HOW IS RNG MADE?

What is Renewable Natural Gas (RNG)?

RNG is biogas (a methane byproduct of the wastewater treatment process) that has been purified, so that the remaining gas is around 98% methane and can be used interchangeably with conventional fossil fuel natural gas. RNG can be compressed and injected into natural gas pipelines for distribution, or it can be liquefied or compressed and transported by truck. RNG is a resource that can be used and created in perpetuity from renewable sources.

How We Make RNG

Solids from wastewater are processed on-site at the treatment plant in anaerobic digesters, generating biogas (primarily methane and carbon dioxide) as a byproduct. RNG is produced by removing the carbon dioxide and impurities from the biogas, leaving pure methane which is essentially the same as natural gas.



DID YOU KNOW?

Biogas, which is similar to RNG, has been safely handled at the wastewater treatment plant in Eugene since it began operating in the 1950s. The MWMC has preventative measures in place to ensure safety with RNG at the wastewater treatment plant, including maintenance practices, staff training, and equipment requirements.

NW Natural has one of the tightest and most modern pipeline systems in the nation. Learn more about NW Natural's Pipeline Integrity Management Program at nwnatural.com.







