

# Renewable Natural Gas

## *RNG can be used to achieve net-zero greenhouse gas emissions*

A net-zero future is possible, and natural gas infrastructure will play a vital role in our nation's effective transition to a clean energy future. At Nicor Gas, we're leading the way by modernizing our system and exploring next generation energy solutions like RNG that support the company's goal to achieve net-zero GHG emissions from operations by 2050 and efforts to empower sustainability solutions for our customers. We are committed to leading the industry in reducing the environmental impact of natural gas usage and leveraging our infrastructure to capture and beneficially use methane from other sources through innovative programs like TotalGreen and the Renewable Gas Interconnection Pilot.



**RNG** is interchangeable with geologic gas

RNG is an alternative fuel produced from methane that is captured primarily from landfills, agriculture, wastewater and food waste sites. It is interchangeable with geologic natural gas and can be used in existing natural gas appliances, equipment and infrastructure. Customers can enjoy the emissions reduction benefits of RNG without changing their equipment or energy consumption.



**RNG** is a critical component to support greenhouse gas emission reductions in Illinois

Producing RNG from landfills and other biowaste not only addresses the emissions that would otherwise be created from that waste stream, but also displaces the need for geologic gas. The use of RNG by customers reduces the amount of waste methane and CO<sub>2</sub> that reaches the atmosphere, lowering total overall GHG emissions. Customers who use RNG can achieve net zero, or in some cases net-negative, GHG emissions from their use of natural gas.

Small amounts of RNG can significantly affect GHG emissions and help Illinois meet its sustainability goals.

- 🕒 Nicor Gas estimates that replacing only 1.5% of its 2022 gas throughput with RNG would equate to approximately 408,000 metric tons of emission reductions.<sup>1</sup>
  - This small amount of RNG would equate to the amount of energy to heat over 70,000 homes annually.
  - The reductions would be equivalent to 111 wind turbines running for a year or the same amount of carbon sequestered from 482,433 acres of U.S. forests.<sup>2</sup>
- 🕒 Illinois ranks 14<sup>th</sup> out of 50 states for its biogas production potential.<sup>3</sup>

<sup>1</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

<sup>2</sup> EPA Carbon Equivalency Calculator

<sup>3</sup> <https://americanbiogascouncil.org/resources/state-profiles/illinois/>



**RNG** is a sustainable solution that benefits customers and our communities

By converting captured biomethane into a renewable fuel that is interchangeable with traditional natural gas, RNG is a practical and sustainable solution that turns waste into clean energy. RNG not only provides a sustainable alternative source of natural gas that decreases the carbon intensity of our fuel, but also boosts customer value and local economies while providing resilient energy.

Just one RNG project can yield over \$475 million in total economic output over the project life, resulting in 225 jobs created during construction and 45 from project operations.<sup>4</sup>

Through the **Renewable Gas Interconnection Pilot**, Nicor Gas proposes to introduce renewable gas to its service area. We actively receive new requests for interconnection to renewable gas facilities and are working with local suppliers to integrate more renewable fuels into our system. The Renewable Gas Interconnection Pilot allows Nicor Gas to invest up to \$3.2 million per project in the development of RNG facilities to help offset or defray the cost of interconnection, up to a total investment of \$16 million.

**TotalGreen** is a voluntary, pilot program designed to be a flexible option for customers to offset the emissions associated with use of natural gas purchased from Nicor Gas through RNG environmental attributes (e.g., credits) and carbon offsets. By participating in TotalGreen, customers are helping to foster the growth of projects and practices that offset or reduce CO<sub>2</sub> being released into the atmosphere.



<sup>4</sup> McLean Economic Impact Study—EcoEngineers, 2020