

Background on Renewable Natural Gas

As waste breaks down, it emits methane – a potent greenhouse gas. Renewable Natural Gas (RNG) projects capture this methane from food waste, animal manure, wastewater sludge and garbage, redirecting it away from the environment and removing harmful contaminants from the atmosphere.

By converting the captured bio-methane into a renewable fuel that looks and acts like natural gas, RNG provides a practical, cost-efficient and replicable solution that turns waste into clean energy for our homes and businesses.

Benefits of Renewable Natural Gas for Families and Households

- RNG is a smart fuel choice for all of us. It saves money, reduces our carbon footprint and provides a consistent source of reliable energy.
- RNG is a clean, affordable and reliable energy option, available today as electricity, natural gas or even hydrogen.
- A majority of consumers report that they are supportive of RNG, with almost a quarter interested in participating in a voluntary RNG program.¹
- RNG can replace conventional natural gas in all heating applications in a home. It is a true "dropin" fuel that requires no upgrades or adjustments to existing appliances – including cooktops, furnaces or boilers.
- Consumers say they are more supportive of enabling energy choice rather than transitioning to electrification.
- In a power outage, RNG can be tapped to provide reliable and sustainable energy, which is why it is already being used to support essential services for food storage, airports, universities, hospitals and other mission-critical facilities.

Benefits of Renewable Natural Gas for Farmers

- RNG provides farmers with responsible options for their waste. What has historically been a burden has now become a long-term financial asset.
- RNG is sourced from various feedstocks, including food waste, crop residues, municipal solid
 waste, animal manure and wastewater sludge, making it a viable source of income and energy
 for U.S. farmers.
- Some farms can create revenue streams, not only from efficiently handling their own farm waste but also from the sale of RNG to others.
- RNG production through anaerobic digestion of materials yields valuable by-products like more
 effective fertilizer and even animal bedding. The direct-use or sale of these recycled materials
 can add an important revenue stream and/or savings to farms.

¹ 3Degreees on behalf of the Coalition for Renewable Natural Gas. (2020, December). 2020 National Consumer Sentiment Survey.

Benefits of Renewable Natural Gas for the Economy

- RNG is an economic driver and job creator in communities across the country, bringing millions
 of dollars in capital investment to local economies.
- RNG facilities support hundreds of thousands of clean energy-sector jobs in construction, operations, maintenance, manufacturing and engineering in some states. In fact, each new RNG production facility creates 5-7 times more jobs than an equivalently sized petroleum refinery and up to 172 direct and indirect jobs per project.²
- The RNG industry has experienced unprecedented growth in recent years, with over 150 operational RNG facilities and another 150 projects under construction or development in North America.³
- Under a public-private partnership, an RNG production facility can increase revenue for communities when operational costs are shifted away from local governments.
- Two-thirds of consumers say they would look favorably upon companies that integrate RNG into their operations.
- While other green energy options often involve major, costly structural changes to homes and businesses, RNG offers consumers and businesses the ability to utilize current gas infrastructure for natural gas while shifting to a clean energy alternative.
- RNG offers consumers and businesses choice and affordability.

Benefits of Renewable Natural Gas for the Environment

- RNG helps to reduce the impacts organic wastes have on the environment while fueling a
 greener future.
- Solid waste is expected to grow nearly 70% by 2050 RNG is the near-term solution to address this growing problem and convert the waste for clean, productive everyday use.⁴
- RNG sources from landfill diverted food and green waste can provide 125 percent carbon dioxide reduction, and RNG from dairy manure can result in a 400 percent carbon reduction when replacing traditional vehicle fuels.
- RNG can be produced from methane that would otherwise escape into the atmosphere as a short-lived climate pollutant and greenhouse gas.
- RNG is a complement to intermittent renewable electricity sources, like wind and solar, because it is storable and can be combined with other power generation resources.
- RNG, like electrification, is one essential piece of the puzzle. To effectively address environmental challenges now, we need a diverse portfolio of solutions that can work together.
- Because of its compatibility with the conventional gas system we have today, RNG is a big driver in reducing near-term greenhouse gas emissions.
- Investments in RNG are investments in better waste management practices, including collection and digestion of inedible food waste and manure.

² ICF. (2017, May). Economic Impacts of Deploying Low NOx Trucks fueled by Renewable Natural Gas.

³ Coalition for Renewable Natural Gas. (2021, February). RNG Production Facilities in North America.

⁴ The World Bank. (2018, September). <u>Global Waste to Grow by 70 Percent by 2050 Unless Urgent Action is Taken:</u> <u>World Bank Report</u>.

• RNG can provide the system benefits of natural gas without the net carbon emissions typically caused by unmanaged organic farm waste.

The Coalition For Renewable Natural Gas (RNG Coalition)

RNG Coalition advocates for sustainable development, deployment and utilization of renewable natural gas (RNG) so that present and future generations will have access to domestic, renewable, clean fuel and energy.

A member-led non-profit organization, RNG Coalition is dedicated to the sustainable advancement of RNG as a clean, green, alternative and domestic energy resource - and as a key component and partial solution to addressing global climate change.

RNG Coalition was formed to provide an education platform and advocacy voice to protect, preserve and promote the RNG industry in North America.

RNG Coalition's diverse membership proudly includes each sector of the RNG industry: waste collection, waste management & recycling companies, renewable energy/gas developers, engineers, banks, financiers, investors, gas/power marketers, gas/power transporters, manufacturers, technology & service providers, environmental advocates, research organizations, organized labor, law firms, consultants, non-profits, airports, municipalities, universities, utilities and individual ratepayers.