Decarbonize Transportation with Renewable Natural Gas

Affordable and proven natural gas vehicle technology fueled with biomethane (RNG) collected at local landfills, wastewater treatment plants, commercial food waste facilities, and agricultural digesters can yield a carbon-negative lifecycle emissions result.

Note: California Air Resources Board (CARB), LCFS Pathway Certified Carbon Intensities.

2019 NGV Fuel Use
717 Million GGE Total
In 2019, 39%, of all on-road fuel used in natural gas vehicles was RNG

- Conventional Natural Gas
  440 Million GGE
- Renewable Natural Gas
  277 Million GGE

RNG Production Facilities

- 110 in operation
- 40 under construction
- 58 in development

Note: In U.S. and Canada as of 4/1/20

IEA: “Biogas and biomethane production in 2018 was... only a fraction of the estimated overall potential. Full utilisation of the sustainable potential could cover some 20% of today’s worldwide gas demand.”


RNG Growth

- 2015: 95.8
- 2016: 139.9
- 2017: 188.6
- 2018: 242.6
- 2019: 305.3
- 2020: 404.4

RNG use as a transportation fuel has increased 291% over the last five years, displacing close to 7.5 million tons of carbon dioxide equivalent (CO2e).

Note: GGE = gasoline gallon equivalent. EGE = ethanol gallon equivalent. EGE units are converted to GGE using a 0.63 multiplier (77,000 Btu/12,400 Btu). Total Natural Gas in Transportation Figure derived from U.S. EIA’s Annual Energy Outlook (2020). RNG numbers derived from U.S. EPA RFS Reporting. Total greenhouse gas emissions and associated carbon dioxide equivalent (CO2e) metric tons identified using average carbon intensity of landfill gas as reported by producers under CARB’s Low Carbon Fuel Standard program.

Put into Perspective, RNG as a Transportation Fuel is...

- Lowering GHG emissions equivalent to 18,568,079,404 miles driven by the average passenger car
- That’s equal to 745,676 trips around the earth
- Reducing CO2 emissions equal to 842,009,227 gallons of gasoline consumed
- That’s equal to the total amount of fuel used by 63,171 transit buses every year
- Sequestering carbon equal to growing 123,731,931 tree seedlings for ten years
- Or 9,772,367 acres of U.S. forests for one year

Note: Assumes 7,482,936 metric tons of CO2e reduced over the last five years through increased RNG usage calculated using CARB’s LCFS carbon intensity numbers, GHG equivalency results calculated using the U.S. EPA’s calculator, Transit bus fuel use provided by U.S. DOE ATDC.

This 2019 on-road RNG use report was issued by NGV America and the Coalition for Renewable Natural Gas, April 2020. Find out more at RNGCoalition.com or NGVAmerica.org.