

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.

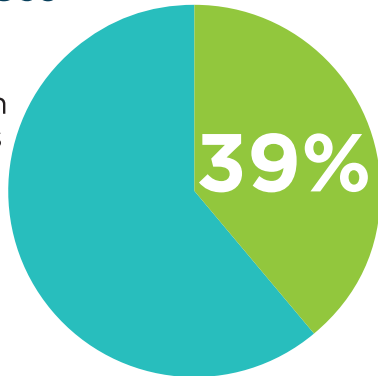
Note: California Air Resources Board (CARB), LCFS Pathway Certified Carbon Intensities.

2019 NGV Fuel Use

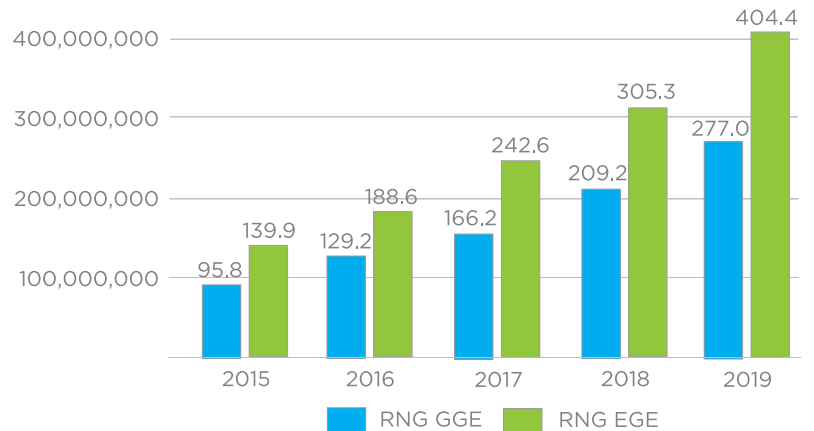
717 Million GGE Total

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 Growth



RNG Production Facilities



110

in operation



40

under construction



58

in development

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

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 0.69 multiplier (77,000 Btu/112,400 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.

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."

Note: "The Outlook for Biogas and Biomethane," International Energy Agency, March 2020.

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 AFDC.

THE COALITION FOR
**RENEWABLE
NATURAL GAS**

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.

NGV AMERICA

Natural Gas Vehicles for America