



June 6, 2023

## CALIFORNIA FLEETS FUELED WITH BIO-CNG REPURPOSING A CAPTURED CLIMATE POLLUTANT FOR USE AS CARBON-FREE MOTOR FUEL

### Bio-CNG Achieved Annual Average Carbon Intensity Score of -98.98 gCO<sub>2</sub>e/MJ for 2022

**Washington, DC** – Natural Gas Vehicles for America (NGVAmerica) and Coalition for Renewable Natural Gas (RNG Coalition) – with partners California Natural Gas Vehicle Partnership and California Renewable Transportation Alliance – today announced that California fleets fueled with bio-CNG achieved carbon-negativity in their transportation operations last calendar year for the third straight year.

Renewable natural gas (RNG) accounted for 97% of all on-road fuel used in natural gas vehicles in California in 2022. According to data from the California Air Resources Board (CARB) the annual average carbon intensity score of bio-CNG in that mix was -98.98 gCO<sub>2</sub>e/MJ.[1]

Captured above ground from organic material in agricultural, wastewater, landfill, or food waste, RNG can produce carbon-negative results when fueling on-road vehicles like short- and long-haul trucks, transit buses, and refuse and recycling collection vehicles.

“When used as a transportation fuel, RNG displaces gasoline and diesel in applications that are difficult – if not virtually impossible – to electrify,” said Daniel Gage, President of NGVAmerica. “California fleets running on RNG achieve a carbon negative result today, making RNG better than zero.”

The use of RNG as a transportation fuel in California grew 169 percent over the last five years. NGVAmerica and RNG Coalition report that in 2022 a total of 197.45 million gallons (DGE)[2] of natural gas were used as motor fuel in the state. Of that, 190.46 million gallons (DGE) were from renewable sources.[3]

“RNG facilities address methane emissions from society’s inevitable waste streams, mitigate the environmental impacts of those emissions and convert captured methane into domestic, renewable, clean fuel and energy,” said Johannes Escudero, Founder & CEO of RNG Coalition. “These numbers highlight the critical role that RNG plays in decarbonizing the transportation sector today.”

Data from CARB’s Low Carbon Fuel Standard program confirms that bio-CNG remains the only net-zero carbon motor fuel in California’s alternative motor fuel portfolio, which includes ethanol, biodiesel, renewable diesel, bio-CNG, bio-LNG, electricity, alternative jet fuel, and hydrogen.[4]

In addition to their negative greenhouse gas (GHG) emissions, ultra-low NO<sub>x</sub> medium- and heavy-duty RNG-fueled trucks and buses perform at levels that are 95 percent below the federal nitrogen oxide (NO<sub>x</sub>) standard and 98 percent below the federal particulate matter (PM 2.5) standard.[5] NGVs virtually eliminate criteria pollutant emissions that contribute to asthma, heart disease, and poor air quality.

Aggressive goals to decarbonized transportation over the next decade will only be achieved by prioritizing the transition of heavy-polluting, high mileage commercial fleets to cost-effective, carbon-negative solutions like RNG fueled trucks. These trucks are commercially available now, accruing and compounding significant clean air and carbon reductions today.

Unlike still-in-development ZEV options, battery electric and hydrogen, RNG-fueled trucks and buses have access to an established California public fueling infrastructure and a mature network of servicers and suppliers. RNG trucks are affordable and scalable, meeting range and operations requirements for any commercial medium- and heavy-duty application. And RNG fueled trucks and buses do not rely on components sourced and controlled overseas.

Details of today's report – including graphics – can be accessed at: NGV America's website [HERE](#) and RNG Coalition's website [HERE](#).

###

***NGV America** is a national trade association of sustainability solutionists and experts in the clean transportation field. Our roughly 200 members are dedicated to the development of a growing, profitable, and sustainable market for vehicles, ships and carriers powered by natural gas and biomethane. NGV America member companies produce, distribute, and market natural gas and biomethane across North America, manufacture and service natural gas vehicles, engines, and equipment, and operate fleets powered by clean-burning gaseous fuels. Find out more at: [www.ngvamerica.org](http://www.ngvamerica.org).*

***Coalition for Renewable Natural Gas** is the non-profit association providing public policy advocacy and education for the sustainable development, deployment, and utilization of renewable natural gas in North America. RNG Coalition membership is comprised of 380+ leading companies, municipalities, ports and airports, colleges, and universities throughout the United States and Canada. Find out more at: [www.rngcoalition.com](http://www.rngcoalition.com).*

#### CONTACTS:

Dan Gage (NGV America)  
[dgage@ngvamerica.org](mailto:dgage@ngvamerica.org)

Lesley Dalton (RNG Coalition)  
[lesley@rngcoalition.com](mailto:lesley@rngcoalition.com)

[1] California Air Resources Board, Low Carbon Fuel Standard Program, Certified Fuel Pathways. Available at: <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>.

[2] DGE = diesel gallon equivalent.

[3] Total Natural Gas in Transportation Figure derived from U.S. EIA's Annual Energy Outlook (2023) and RNG numbers derived from U.S. EPA Renewable Fuel Standard Program reporting with adjustments made based on fueler member reporting.

[4] California Air Resources Board, Low Carbon Fuel Standard Program, Certified Fuel Pathways. Available at: <https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>.

[5] Cummins, Inc. Available at: <https://www.cummins.com/engines/natural-gas>.

---

# Decarbonizing California

with Renewable Natural Gas Transportation



For the third consecutive year, California fleets fueled with in-state bio-CNG were **carbon negative in 2022**, based on an annual average carbon intensity score of **-98.98 gCO<sub>2</sub>e/MJ**. Biomethane sourced from dairy digesters, local landfills, wastewater treatment plants, commercial food waste facilities, and agricultural operations provides the most affordable and proven solution to decarbonize medium- and heavy-duty transportation today.

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

## Carbon free fueling now...

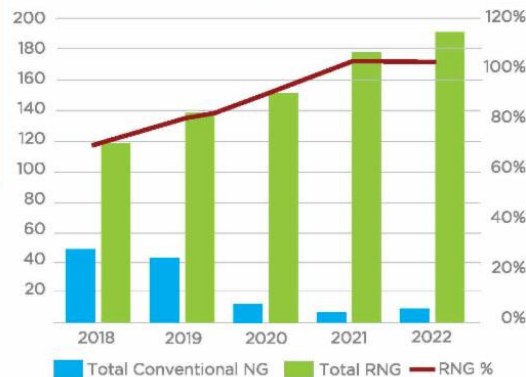
### 2022 CA NGV Fuel Use

**197.45 Million DGE Total**  
In 2022, **97%** of all on-road fuel used in natural gas vehicles in California was RNG

 Renewable Natural Gas  
**190.46 Million DGE**
 Conventional Natural Gas  
**6.99 Million DGE**



### RNG Growth in California in Diesel Gallon Equivalents (DGEs)



RNG use as a transportation fuel in California has increased **169%** over the last five years. In 2022 alone, RNG use resulted in the displacement of **4.34 million metric tons** of carbon dioxide equivalent (CO<sub>2</sub>e), equivalent to **removing 965,796 gasoline-powered cars** from California roadways for one year.

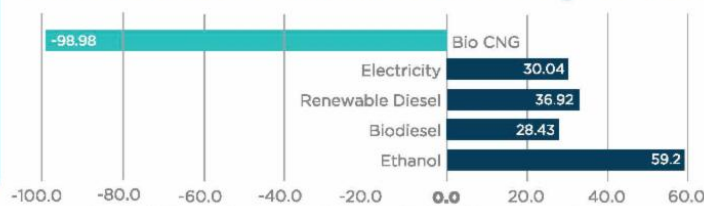
Note: Natural gas volumes and emission reductions calculated using figures available from CARB's Low Carbon Fuel Standard Reporting Tool Quarterly Summary at <https://ww3.arb.ca.gov/fuels/lcfs/lrtqsummaries.htm>.



**Fuel Up on Fact:**  
at **-98.98**, bio-CNG holds the lowest carbon intensity of any clean fuel option on California roadways today.

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

### CA LCFS 2022 Renewable Fuels Average CI Score



Note: bio-LNG not listed as it accounts for less than 2% of all RNG used in on-road vehicles. Data from CARB's LCFS Quarterly Data Summary for 2022.

Report produced June 2023 by:

**NGVAMERICA**  
Natural Gas Vehicles for America



Supporting Partners:



CALIFORNIA  
NATURAL GAS VEHICLE  
PARTNERSHIP



Follow RNG Coalition on Social Media



RNG Coalition | 1017 L Street, #513, Sacramento, CA 95814

[Unsubscribe david@rngcoalition.com](mailto:unsubscribe_david@rngcoalition.com)

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent by [info@rngcoalition.com](mailto:info@rngcoalition.com) powered by



Try email marketing for free today!