



# What is Natural Gas?

**Natural, Affordable, Domestic.**



Geologic natural gas is the Earth's cleanest fossil fuel and is colorless, odorless, and non-toxic in its natural state.<sup>1</sup>



Natural gas is used in a broad range of applications, including electricity generation, home heating, residential and industrial direct use, and as a transportation fuel.<sup>2</sup>



Low domestic natural gas prices have led to savings of almost \$50 billion for utility customers who have used natural gas over the past four years. Households that use natural gas for heating, cooking and clothes drying save an average of \$874 per year compared to homes using electricity for those applications.



Between 80 and 90 percent of the natural gas used in the United States is domestically produced.<sup>3</sup>

<sup>1</sup><https://www.aga.org/natural-gas/energy-education/>

<sup>2</sup><https://www.aga.org/natural-gas/affordable/>

<sup>3</sup>[https://afdc.energy.gov/fuels/natural\\_gas\\_production.html](https://afdc.energy.gov/fuels/natural_gas_production.html)



Find out more about clean fleet initiatives at [NGVAmerica.org](https://www.ngvamerica.org).

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Natural Gas Vehicles for America

## Natural Gas can be Compressed (CNG) or Liquefied (LNG); Both Fuel Natural Gas Vehicles (NGVs)

Natural gas is a **clean-burning alternative fuel** for vehicles. Natural gas powers more than 175,000 vehicles in the United States and roughly 23 million vehicles worldwide. The advantages of natural gas as a transportation fuel include its domestic availability, widespread distribution infrastructure, **zero tailpipe emission equivalence**, and **reduced greenhouse gas (GHG) emissions** over conventional gasoline and diesel fuel.<sup>4</sup>



### What is Renewable Natural Gas (RNG)?

RNG is biogas or biomethane that is captured as organic waste breaks down above the Earth's surface. Captured from food waste, animal manure, wastewater sludge and garbage, this **gas is removed from the atmosphere** and repurposed as a clean energy source. Depending on the feedstock, **RNG can be carbon-neutral or even carbon-negative**.<sup>5</sup>

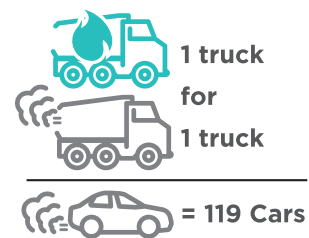
Put another way, RNG is a clean, affordable and reliable waste-derived fuel, **powering heavy-duty vehicles with carbon-neutral or carbon-negative footprints and ultra-low emissions**. Like geologic natural gas, RNG can be stored, distributed, and used as transportation fuel in either its compressed (RCNG) or liquified (RLNG) state.

RNG is compatible with existing natural gas engines and infrastructure. RNG holds the lowest carbon intensity of any on-road vehicle fuel, including fully renewable electric from solar or wind.<sup>6</sup>



### What Kinds of Vehicles are NGVs?

Natural gas can be used to fuel any light-, medium-, and heavy-duty vehicle application, from heavy-duty over the road trucks to waste and recycling vehicles and school and transit buses. Off-road uses such as high-horsepower heavy machinery, construction and mining equipment, and applications in rail and marine are increasingly transitioning to natural gas for its **immediate and affordable environmental benefits**. In the U.S., roughly 50 different manufacturers produce 100 models of light-, medium-, and heavy-duty vehicles and engines.



NGVs Provide a Solution to our Climate Emergency. Replacing one diesel burning heavy-duty truck with one new ultra-low NOx natural gas heavy-duty truck is the **emissions equivalent of removing 119 traditional combustion engine cars** from our roads.<sup>7</sup>

<sup>4</sup>[https://afdc.energy.gov/vehicles/natural\\_gas.html](https://afdc.energy.gov/vehicles/natural_gas.html)

<sup>5</sup><https://www.rngcoalition.com/about-rng>

<sup>6</sup><https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities>

<sup>7</sup><https://www.ngvamerica.org/vehicles/>



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