



Liquefied Natural Gas (LNG) Fact Sheet

What is LNG?

LNG, or liquefied natural gas, is simply natural gas that has been converted into a liquid by cooling it to -260° Fahrenheit. This process reduces its volume by a factor of more than 600 – similar to reducing the volume of a beach ball to the volume of a ping-pong ball. This allows natural gas to be transported more efficiently, whether it be rail, ship, or over the road. It is the same gas that millions of Americans trust to cook their food, heat their homes, and power their generators. It also works very well as a vehicular fuel.

Emissions Reductions Attainable by Switching from Diesel to LNG:

LNG is the cleanest hydrocarbon known to man. Relative to diesel and gasoline powered vehicles, natural gas powered vehicles can attain tremendous emissions reductions.

Emission	Reduction in Emissions by using natural gas vehicles ¹
Carbon Monoxide	70-90%
Carbon Dioxide	20-30%
Sulfur Dioxide	99%
Nitrogen Oxide	75-95%
Particulate Matter	90%
Volatile Organic Compounds	89%

As the world shifts towards renewable energy sources, LNG can serve as a bridge fuel, curbing our dependence on conventional gasoline and diesel fuel while we develop even cleaner fuel alternatives.

Safety:

- Methane gas, the base fuel of LNG, is the safest hydrocarbon known to man. In the event of a spill, LNG will quickly evaporate instead of pooling like either diesel or gasoline.
- Relative to either diesel or gasoline, LNG has a higher flammability limit, meaning there must be a higher ratio of natural gas to oxygen in the air before the gas can ignite. In practice, the higher flammability limit makes LNG less likely to combust around an ignition source and therefore allows more time to detect a spill and evacuate if you fear a spill has occurred.
- LNG has a combustion point that is almost four times greater than diesel fuel, meaning it must reach a much higher temperature before it can combust.
- As a Federal requirement, CNG and LNG cylinders undergo stringent testing and evaluation to ensure that the tanks will maintain their structural integrity during a crash, much more testing than is required of diesel or gasoline tanks.

¹ Compiled from: Environmental Protection Agency, Department of Energy, Chesapeake Energy, and NGVAmerica