

What is LNG?



non-toxic & non-corrosive



lighter than air



non-flammable in liquid form



fills 1/600th the volume of the gas phase

Liquefied Natural Gas, or LNG, is natural gas that has been cooled to the point of liquefying.

LNG is odorless, colorless, non-corrosive, non-toxic, and non-flammable in liquid form.

It is also much denser than gaseous natural gas, occupying only about 1/600th of the space. This significant volume reduction means LNG can be transported and stored much more efficiently than gaseous natural gas.

LNG is also much lighter than water by volume, and will float if spilled in water.

LNG has been part of the US energy landscape for over 100 years, with commercial production of the fuel beginning in 1917.

How does natural gas become a liquid?

LNG primarily consists of methane (CH₄) and is created when natural gas is cooled to -260° Fahrenheit. Impurities such as water, carbon dioxide, nitrogen, sulfur, and other hydrocarbons are removed as the gas cools; if these impurities remained, they could damage downstream facilities and/or freeze rather than liquefy.

Gas



Supply is extracted from the earth

Process



Impurities removed: water, CO₂, & heavy hydrocarbons

Liquefy



Temperature reduced to -256°F (-162°C)

Transport



Transported via ship to users around the world

What are the uses of LNG?



The majority of LNG is re-gasified at its destination and distributed using conventional natural gas pipelines for a variety of uses. Natural gas is used for power generation, to heat homes, office buildings, schools, hospitals, and other structures, and to provide fuel for cooking and household appliances such as water heaters, clothes dryers, air conditioners, space heaters, and more. It is also used in the industrial sector as the main fuel source for producing such items as paper, glass, clothing, and metal. However, LNG is also increasingly being used to power vehicle fleets, which reduces vehicle maintenance and lowers greenhouse gas emissions by as much as 30%-40% compared to gasoline.