

**U.S. Department of Energy - Energy Efficiency and Renewable Energy  
Alternative Fuels Data Center**

**What is Natural Gas?**

Natural gas is a mixture of hydrocarbons—mainly methane (CH<sub>4</sub>)—and is produced either from gas wells or in conjunction with crude oil production. Natural gas is consumed in the residential, commercial, industrial, and utility markets.

The interest in natural gas as an alternative fuel stems mainly from its clean burning qualities, its domestic resource base, and its commercial availability to end users. Because of the gaseous nature of this fuel, it must be stored onboard a vehicle in either a compressed gaseous state (CNG) or in a liquefied state (LNG).

Chemical Properties: The main constituent of natural gas is methane, which is a relatively unreactive hydrocarbon. Natural gas as delivered through the pipeline system also contains hydrocarbons such as ethane and propane; and other gases such as nitrogen, helium, carbon dioxide, hydrogen sulfide, and water vapor. See the fuel properties table ([PDF 116 KB](#)). [Download Adobe Reader](#).

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Content Last Updated: 08/04/2005