

PROPANE: AN ECONOMIC & ENVIRONMENTAL FUEL CHOICE

Propane, one of the nation's most versatile sources of energy, supplies about 4 percent of total domestic energy needs. Opportunities exist to expand its use as a cost-effective strategy to limit vehicle emissions.

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In addition to reducing dependency on petroleum imports, alternative, cleaner fuels play a key role in addressing worsening environmental problems caused by rising consumption of conventional fuels. Propane is rapidly establishing itself as an important alternative fuel with its impressive environmental benefits and inherent practical and cost advantages over gasoline, diesel, and other alt-fuels.

RELIABLE SUPPLY AVAILABLE

Propane, also known as liquefied petroleum gas (LPG), is one of the nation's most versatile sources of energy, supplying about 4 percent of total domestic energy needs and fueling more than 10 million vehicles worldwide.

AT A GLANCE

In addition to being nontoxic and producing minimal emissions, propane also offers a mix of:

- Long driving range.
- Durability.
- Performance.

Approximately 90 percent of the U.S. propane supply is produced domestically, while the majority of the remaining 10 percent is imported from Canada and Mexico. Approximately 55 percent of propane is produced from natural gas processing and 45 percent comes from the refining of crude oil. Thus, propane is a readily available, secure energy source whose environmental benefits are widely recognized. Propane is also an approved, alternative clean fuel listed in the 1990 Clean Air Act, as well as the National Energy Policy Act of 1992 and 2005.

SAFE REPUTATION UPHELD

Propane has a remarkable safety record, due in large part to the stringent codes and regulations developed by the propane industry and the National Fire Protection Association (NFPA). Among propane use benefits are:

- Only ignites, when combined with air, if the source of ignition reaches 940° F.
- Gas is nontoxic and produces minimal emissions.
- Not harmful to soil or water.
- The Propane Emergencies Program established to train first responders.

ENVIRONMENTAL CHARACTERISTICS

Propane has long been recognized as a "green" energy. Nontoxic and insoluble in water, propane use can help cut emissions and protect the environment. Because it is released as a gas, it does not spill, pool, or leave a residue.

Propane exhaust creates 60- to 70-percent less smog-producing hy-

drocarbons than gasoline, according to studies by the Southwest Research Institute (SWRI).

Compared to gasoline, propane yields 12-percent less carbon dioxide, about 20-percent less nitrous oxide, and as much as 60-percent less carbon monoxide, according to 2003 figures from the World LP Gas Association and California Energy Commission.

Propane cuts emissions of toxins and carcinogens such as benzene and toluene by up to 96 percent compared to gasoline, according to studies by the SWRI.

ECONOMIC ADVANTAGES

Infrastructure. The cost of building propane fueling stations is similar to, or lower than, comparable-sized gasoline dispensing systems. Propane refueling facilities are designed in compliance with nationally recognized standards and local building and fire codes, which must follow stringent safety regulations and are commonly deployed throughout the country.

