

Propane Vehicles

There are more than 270,000 propane vehicles on the roads in the United States, including at least 15 in our region. For the most part, propane vehicles are used in fleets and for medium- and heavy-duty vehicles, including school buses, street sweepers, forklifts and trucks. Light-duty propane vehicles are not available for sale. There is, however, the option to retrofit many light-duty vehicles for propane operation and the potential for bi-fuel propane vehicles.

What is a Propane Vehicle?

Propane vehicles work much like gasoline-powered vehicles with spark-ignited engines. Dedicated propane vehicles are designed to run only on propane; bi-fuel propane vehicles have two separate fueling systems that enable the vehicle to use either propane or gasoline.

Liquid Propane Injection (LPI) vehicles have the most potential for success. Most similar to gasoline injection, LPI systems utilize a separate liquid propane gas (LPG) tank. Rather than vaporize the propane, LPI engines inject propane into the combustion chamber in liquid form. Liquid injection systems have proven reliable in terms of power, engine durability, and cold starting.

Benefits of Propane Vehicles:

Low maintenance cost, low emissions, and comparable power are among the benefits of propane vehicles. Propane vehicle power, acceleration, and cruising speed are similar to those of gasoline-powered vehicles. Propane's high octane rating (104 to 112 compared with 87 to 92 for gasoline) and low carbon and oil contamination characteristics have resulted in documented engine life of up to two times that of gasoline engines.

Incentives:

Many federal and state incentives encourage use of propane (also known as liquefied petroleum gas or LPG) as an alternative fuel. For example, in Louisiana legislature Act 35 of 1998 exempts propane from local sales when used for farming purposes. For more information on federal propane-specific tax incentives, see CleanFUEL USA at http://www.cleanfuelusa.com/index.php?/cleanfuel/tax_incentives. Or visit our Incentives page for general information.

Additional Information:

For further reading on Benefits and Availability of Propane Vehicles visit <http://www.eere.energy.gov/afdc/vehicles/propane.html>.

For further reading on Liquid Propane Injection technology and fleets visit <http://www.cleanfuelusa.com/>.

Source: U.S. Department of Energy, Energy Efficiency and Renewable Energy, Alternative Fuels & Advanced Vehicles Data Center (<http://www.eere.energy.gov/afdc/>)