



A Brighter Outlook For Autogas

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WHY DO FOLKS IN THE "GREEN" COMMUNITY think that propane autogas is poised for growth as an alternative fuel?

Propane autogas has caught the attention of fleet and transportation managers that are focused on the environment, economics and energy security.

Our domestic energy market has certainly changed. But it's the new development of light- and medium-duty propane vehicles for fleet use that triggered renewed interest from the U.S. automakers. Many believe that these new vehicle platforms will be a catalyst for growth in the autogas industry.

WHAT IS AUTOGAS?

Propane autogas is a term for propane when fueling an on-road vehicle. It is also known as liquefied petroleum gas (LPG). Globally, there are about 17 million propane autogas vehicles in service. It is the third most common engine fuel behind gasoline and diesel.

One of the cleanest burning fossil fuels, propane autogas is considered an alternative fuel listed in the 1990 Clean Air Act, and the Energy Policy Act of 1992.

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Propane autogas has several advantages in the alternative fuel market. Good tailpipe numbers, abundant domestic supply, and an impressive number of fueling stations with public access.

Currently, there are more than 270,000 on-road propane vehicles in the U.S., many are used in fleet applications such as police cars, shuttles and school buses.

There is an abundant domestic supply of propane, produced as a byproduct of both natural gas processing and the crude oil refining process. About 97 percent of the propane consumed in the U.S. is produced in North America.

AUTOGAS VS. GASOLINE

Lower maintenance costs are one reason behind propane's popularity for use in light-duty vehicles such as pickup trucks and taxis; and for heavy-duty vehicles such as school buses.

Propane has a higher octane rating compared to gasoline, along with low carbon and oil contamination characteristics. Autogas vehicles typically experience extended engine life with less frequent oil changes when compared to gasoline engines.

Additionally, because the fuel's mixture of propane and air is completely gaseous, cold start problems associated with liquid fuel are reduced.

Compared to gasoline, propane autogas has a smaller carbon footprint. By using propane autogas, a vehicle's environmental impact is significantly reduced with 60 percent less carbon monoxide, 20 percent less nitrogen oxide, and up to 24 percent less greenhouse gas emissions.

AUTOGAS VS. CNG

A big selling point for the autogas industry is their 2,586 public fueling stations across the United States. Propane autogas vehicles can be refueled at both on-site and public infrastructure. In comparison, there are only 578 public CNG refueling sites and 32 public LNG sites.

CNG vehicles in commercial and municipal fleets with limited driving distances could make economic sense because they can benefit from shared refueling locations and infrastructure cost.

Propane autogas is a more affordable option for smaller light-duty fleets. A CNG fueling station installation typically costs

more than 10 times what a comparable autogas fueling station would cost.

Your vehicle costs are less expensive too. Autogas vehicle conversions are less than comparable CNG conversions. The cost to convert a light-duty vehicle from gasoline to propane use ranges from \$4,000 to \$12,000. The upfront costs to convert fleet vehicles to propane can be offset by lower operating and maintenance costs over the lifespan of the vehicles. Conversion to a dedicated or bi-fuel propane vehicle can be an attractive option.

Of course, the payback period would depend on the average distance traveled by fleet vehicles, and the fueling station's installation costs. Fleet vehicles typically are high-mileage, high-fuel-consumption vehicles operating in a limited area, so the payback period on propane fleet vehicles can be fairly quick.

AUTOGAS VS. HYBRIDS

Currently, more than 35 percent of U.S. public transit buses use alternative fuels or hybrid technology. Compared to hybrids, the higher cost to convert a propane autogas vehicle could make hybrid vehicles a more cost-effective option to alternative fuels.

TAX INCENTIVES

The federal government and many states offer programs to encourage the use of alternative fuels. There are tax credits and incentives available for installing propane autogas infrastructure. Additionally, fleet operators are eligible for a 50 cents per gallon federal tax credit or rebate for each gallon of propane autogas the operator sells at the facility.

SUPPLY OPPORTUNITIES

Fleet and transportation managers looking toward corporate stewardship will find propane autogas a sustainable choice. With an industry well prepared with a good foundation for market growth, propane autogas has the potential to become a dynamic player in the growing alternative fuels arena. 

