



U.S. DEPARTMENT
of ENERGY

Office of Critical Minerals
and Energy Innovation

Propane Vehicles and Fueling Infrastructure

**Find research-based information
on the Alternative Fuels Data
Center website**

Learn about the technology behind propane vehicles and fueling infrastructure, explore the benefits and considerations of using propane to power vehicles, and access tools and datasets.



AFDC.ENERGY.GOV/FUELS/PROPANE

Considering a Propane Vehicle?

Also known as liquified petroleum gas, propane is an odorless hydrocarbon gas at normal pressures and temperatures.

Propane is a byproduct of natural gas processing and crude oil refining.

The advantages of propane include its domestic availability, high-energy density, and relatively low cost.

For decades, fleets around the United States have successfully implemented propane vehicles in many types of applications, including school buses,

shuttle buses, step vans, and law enforcement vehicles. Propane is also frequently used in off-road applications, such as forklifts, commercial landscape equipment, and farm equipment.

The potential for lower maintenance costs makes propane a popular choice for high-mileage vehicles. Propane's high-octane rating, combined with its low-carbon and low oil-contamination characteristics, has resulted in improved engine life compared to conventional

gasoline engines. While propane vehicles can cost several thousand dollars more than comparable gasoline vehicles, the cost of the fuel itself is typically lower than gasoline, so the return on investment can be quick. Fleets can use existing public infrastructure or work with local propane marketers to establish private infrastructure and a pricing structure, which can greatly reduce the end cost of the fuel.

Dive Into the Details: What You'll Find on the AFDC

- Basics of propane as an alternative fuel, including production and distribution and renewable propane
- Considerations such as vehicle and infrastructure availability, fuel economy and performance, and energy security
- Propane fueling station locations and infrastructure
- Types of propane vehicles, how they work, vehicle availability, and conversions
- Laws and incentives related to propane in your area



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For more information, visit: afdc.energy.gov
DOE/GO-102025-6803 • December 2025