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Get To Know The Technology

When you use propane autogas, you get to choose from five types of refueling options. Before you learn the ins and outs of installation and working with a propane supplier, you should first learn about the technology available.



On-Site Refueling

Nothing beats the convenience of having your own centralized refueling location. With this option, the fuel is delivered straight to you by your local propane supplier. Working with a fuel supplier will allow you to negotiate a contract to buy fuel in bulk to save more.

On-site refueling includes large capacity fuel storage tanks equipped with a pump, meter, and one or more dispensers. This is a great option for growing fleets, since the same fuel pump and motor can be used to refuel vehicles with no electrical or site upgrades as the fleet expands. The exact configuration of on-site refueling equipment depends on the size of your fleet.

If you have a large fleet of 50 vehicles or more, your propane supplier may recommend an advanced private station. It includes a highcapacity tank, canopy, and multiple fuel dispensers. Either you or your supplier own the infrastructure. If you own it, you pay for the canopy, propane tank, pump, motor, and dispensers with card lock and vehicle tracking capabilities. If your supplier owns the infrastructure, you're only responsible for the cost of site preparation, like crash protection bollards and electrical work.

If you have a fleet with fewer than 50 vehicles, your supplier will likely recommend a standard private station. It includes a 1,000- to 3,000-gallon tank, plus a single propane autogas fuel dispenser. Like an advanced private station, you or your propane supplier own the infrastructure. If you own it, you purchase the propane tank, pump, motor, and dispenser. If your supplier owns the infrastructure, you are only responsible for the site preparation.

ADVANCED PRIVATE STATION: YOUR COST

SUPPLIER OWNED

\$5,000 - \$75,000 Site Pren

FLEET OWNED

\$60,000 - \$225,000

\$5,000 - \$75,000

STANDARD PRIVATE STATION: YOUR COST

SUPPLIER OWNED

\$1,500 - \$15,000 Site Prep

FLEET OWNED

\$20,000 - \$60,000 Infrastructure

\$1,500 - \$15,000 Site Prep

Temporary Refueling

When your fleet is in the process of building permanent refueling infrastructure, you can take advantage of a temporary refueling solution. The setup includes a dispenser, pump, and fuel storage tank mounted on a trailer. Your propane supplier owns all of the equipment, and your fleet refuels using the tank and dispenser as long as necessary.

Mobile Refueling

Mobile refueling is a good option for fleets that don't have infrastructure investment plans yet, but want to get started with propane autogas. At a scheduled time, your propane supplier will come to your location and refuel your vehicles onsite with a propane delivery truck. Cost and situations vary; talk to your supplier for more details.



Public and Private Refueling Networks

Propane autogas is an option even if you don't have enough space for on-site refueling infrastructure. Public and private refueling networks are accessible 24/7 through a card lock system — and best of all, they require no infrastructure investment on your part. Go to afdc.energy.gov/stations to search for propane autogas stations in your area, along with open hours — when a key card isn't needed — and payment options.

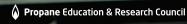
If there isn't a network available in your area, a propane supplier may create one for your fleet, if it's large enough. Multiple fleets may also team up to provide adequate load for requesting a refueling network.





QUICK-CONNECT NOZZLES

Be sure to ask your propane supplier about installing quick-connect nozzles. These nozzles make filling up with propane autogas easy, just like your experience with gasoline or diesel. They may be used one-handed and may not require protective eyewear or gloves. The refueler simply clicks the nozzle into place, fills up the tank, and gets back on the road. Because of the secure connection, there's also a reduced risk of releasing emissions into the air during refueling.





How To Get Started with Propane Autogas Infrastructure

Now that you can picture the different refueling options available, you're ready to consider what it takes to get started.



Permanent infrastructure, as well as mobile and temporary refueling solutions, require adequate space for maneuvering vehicles in and around during the refilling and refueling processes. First, you should meet with your propane and infrastructure suppliers to discuss your fleet needs and request assistance in conducting a detailed review of the selected refueling option and requirements. If you choose to install permanent on-site infrastructure, work with your suppliers to develop detailed infrastructure specifications, including traffic flow requirements. Also, this is a

good time to discuss future fleet growth and expansion plans with your suppliers because these requirements may need to be factored into the refueling strategy.

Propane autogas allows for more flexibility when installing a refueling station. Because the EPA classifies propane autogas as a non-contaminant of air, land, and water, the infrastructure can be installed in areas where other traditional and alternative fuels cannot.

Working With a Propane Supplier

You now know what to expect for the cost of an on-site refueling station, and you're ready to find a propane supplier. Before you contact a supplier, consider those basic costs and how it will factor into your ROI calculations. How soon do you want to break-even after installation? Even a rough estimate will help your propane supplier assist you in picking the right option for your business.

Do a little research upfront on propane suppliers in your area. Are they specialized in the propane autogas market? Are they servicing other fleets in your community? Go to **retailers.propane.com** to search for propane suppliers in your area.

Once you choose a propane supplier and infrastructure supplier, you'll work together to determine exactly the right infrastructure for your site based on your fleet size and budget. They'll also help you understand all necessary equipment needed for your setup, such as electrical and crash protection considerations, and how those could affect your investment.



Installations: What to Expect

Your propane supplier will help establish a project timeline and contingency plan for the infrastructure installation. Be sure to ask questions and clarify which tasks related to installation are your responsibility to coordinate, like electrical work and site preparation.

Double-check with your supplier whether your current data management system is compatible with the infrastructure solution you plan to install. Fortunately, most certified propane autogas dispensers are able to communicate with modern fuel management systems. However, confirming this up front will help prevent installation delays or unexpected costs later.

"It's very convenient, and it's very economical."

JOHN SISSON CEO Delaware Transit Corporation





Getting up to Code

Finally, talk to your propane supplier about the permitting process for the Authority Having Jurisdiction and how it will impact your installation timeline. The design and installation requirements must meet the National Fire Prevention Association (NFPA) 58 Vehicular Liquefied Petroleum Gas Code, which your propane supplier will ensure happens.

Refueling with propane autogas is a similar experience to refueling with gasoline or diesel. Regardless, anyone dispensing propane autogas is required by national codes to be properly trained. Training is available from your local propane or infrastructure supplier, the Propane Education & Research Council, and the NFPA. Talk to your propane supplier about how to get started.

Depending on your location, there may be additional state or local codes and ordinances to meet. Talk to your local fire marshal or planning and zoning staff to learn more — your propane supplier may help facilitate the conversation.

Install a Tank, Change Your Bottom Line

Breaking away from the constraints of conventional fuel and running your fleet on propane autogas is a sure way to reduce your total cost-of-ownership. By working closely with your local propane supplier and asking the right questions, you can ensure a smooth installation, and your drivers will be ready to hit the road using cleaner, lower-cost fuel in no time.

Resources

- propane.com/on-road-fleets
- retailers.propane.com
- afdc.energy.gov/stations



