



NEAR-ZERO EMISSION PROPANE ENGINES



800.59.ROUSH

ROUSHcleantech.com



ABOUT US

Company Background & History

Enterprise Brand Portfolio

ROUSH[®]

ROUSH Industries

OEM manufacturing, engineering, prototyping and design



Roush Fenway Racing

Dominant NASCAR Sprint Cup racing team



ROUSH Performance

Industry leading high performance vehicles

ROUSH[®]
CLEANTECH































ROUSH CleanTech

Propane autogas powered commercial vehicles.



- Founded in 2010.
- Dedicated to developing quality alternative fuel solutions.
- Propane autogas focus.
- EPA and CARB certification ability.
- Platform customization to suit customer needs.
- Reduces operating costs, carbon footprint.
- OEM support through Ford and BPN dealers.
- Creating opportunities for partner companies.
- Using American fuel and American technology.

Your Fuel Options

					
Ease of Adoption					
Energy Independence					
NOx Emissions					
Fuel Infrastructure					
Cost of Ownership					
Range					
Maintenance					
Scalable					
Cold Weather Operation					



MYTHS & BARRIERS

Myth #1: Infrastructure

- **Myth:** Infrastructure isn't easily accessible
- **Fact:** There are more than 3,500 propane stations throughout the country.



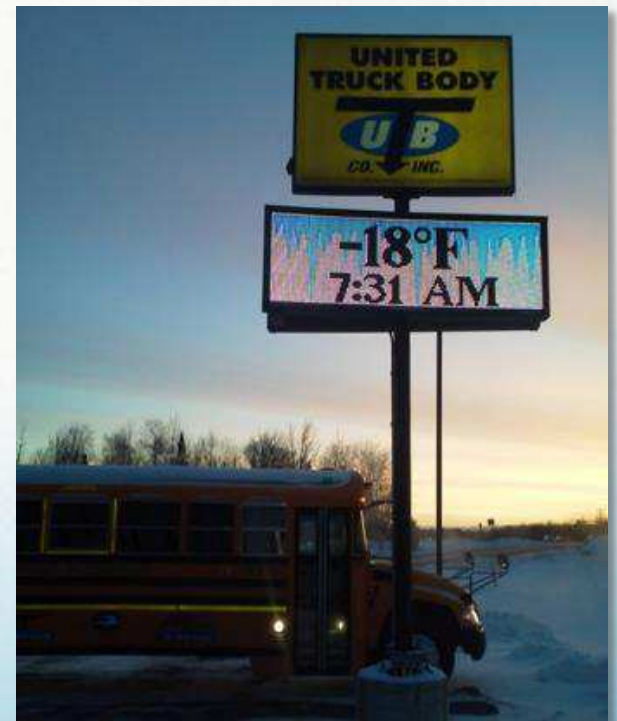
Myth #2: Performance

- **Myth:** Propane vehicles don't have as much power as a gasoline or diesel vehicle.
- **Fact:** There is no loss of horsepower or torque with propane vehicles.



Myth #3: Cold Weather

- **Myth:** Propane vehicles don't operate well in cold weather.
- **Fact:** Propane vehicles actually operate best in cold temperatures.
 - There are no cold starting issues
 - Starts in -50 °F temperature
 - Does not require a block heater
 - Quicker cabin heat





PROPANE ADOPTION



Linen



Food/Bakery



Beverage



Transit



Vending



Logistics



Propane

Ford E-350 / E-450
6.8L V10 2V



Ford F-450 / F-550
6.8L V10 3V Low NOx



Ford F-650 / F-750
6.8L V10 3V Low NOx



Ford F-53 / F-59
6.8L V10 3V Low NOx



Additional Industries:

- Airport
- Tree and Landscape
- Towing
- Government



Operating **112 units** in Delaware.



146 propane-powered Ford E-450 shuttles in service.



138 units deployed fleet in conjunction with school district.



San Diego Metropolitan Transit System

Industry: Paratransit

Location: San Diego, CA

Vehicles: 101 Ford F-550 Buses



By The Numbers:

- Reduce emissions by **2 million pounds** per year.
- Will save **\$5.8 million** over lifecycle of vehicles.
- Reduce carbon intensity by **71%**.



Industry: Food & Beverage

Location: Stamford, CT

Vehicles: 600 Ford F-650 Trucks

By The Numbers:

- **50% less** for fuel costs per gallon compared to diesel
- **Reduced** noise level



“Becoming a better steward of our environment is a priority for Nestlé Waters. We’ve been running propane autogas vehicles since 2014. Because of the proven emissions reductions and cost savings, we knew it was the right choice to expand our fleet with this domestically produced alternative fuel.”

- **Bill Ardis, National Fleet Manager**, Nestlé Waters North America

Boston Public Schools



ABC Student Transportation

Industry: Schools

Location: Detroit, MI

Vehicles: 129 Blue Bird Propane Visions

By The Numbers:

- **75% less** for fuel costs per gallon compared to diesel
- ABC installed a 12,000-gallon onsite autogas fuel stations



“The use of propane autogas school buses is a step in the right direction to significantly decrease vehicle emissions and improve the air quality for our students. This also provides opportunities for students and the community to observe and learn first-hand about alternative transportation technologies,”

- **James Minnick, Executive Director, Detroit Public Schools**



THANK YOU

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