# FerrellAutogas



Propane Autogas: The only financially viable, clean, alternative fuel with a business case to prove it.

## **Propane Autogas Explained**

- Introducing Ferrellgas
- Propane: Clean & Green
- Economic Justification
- Vehicle Offering
- Refueling Options
- Incentives
- CNG Comparison



## Introducing Ferrellgas









#### **Introducing Ferrellgas: An Overview**

- Founded in 1939
- The nation's leading autogas provider
- America's premier propane provider
- Top "Green Fleet" with over 1,000 propane-powered vehicles
- Serving approximately 1 million Customers
- Ferrell North America: Dedicated supply chain
- Blue Rhino: More than 40,000 retail selling locations
- NYSE listed: FGP



#### **Introducing Ferrellgas: Best in Class**

- Employees are trained and held to the highest safety standards
- 24/7 access to Customer care representatives
- Flexible billing options to meet Customer needs
- Hand held computers to record delivery statistics and signature
- Satellite tracking of delivery vehicles
- State-of-the-art scheduling and routing software
- Employee-owned company with over 600 locations



#### Introducing Ferrellgas: The One Stop Shop

- Partnering with conversion experts
- Fueling infrastructure
- Fuel contracts
- Employee training
- Service after the sale
- Consulting / grant writing assistance



# Propane: Clean & Green



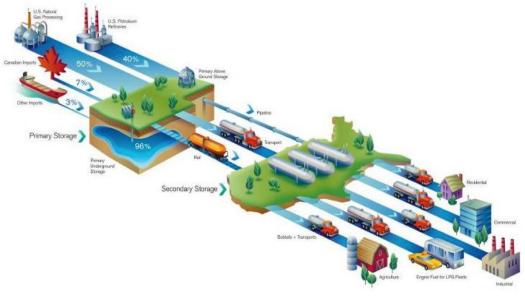
#### Clean & Green: What is Propane?

- Propane is non-toxic and does not contaminate ground water or soil.
- Propane is a federally designated clean fuel. as stated in the Clean Air Act of 1990 and National Policy Act of 1992 and 2005
- Propane (C<sub>3</sub>H<sub>8</sub>) is sometimes referred to as liquefied petroleum gas, LP-gas, LPG, or autogas.
- Propane is not a greenhouse gas if released into the atmosphere.



#### Clean & Green: Where Does Propane Come From?

- More than 90% of domestic propane consumed is produced in the U.S.
- One third of the world supply is produced in Texas.
- More than 50% of U.S. propane comes from processing natural gas.





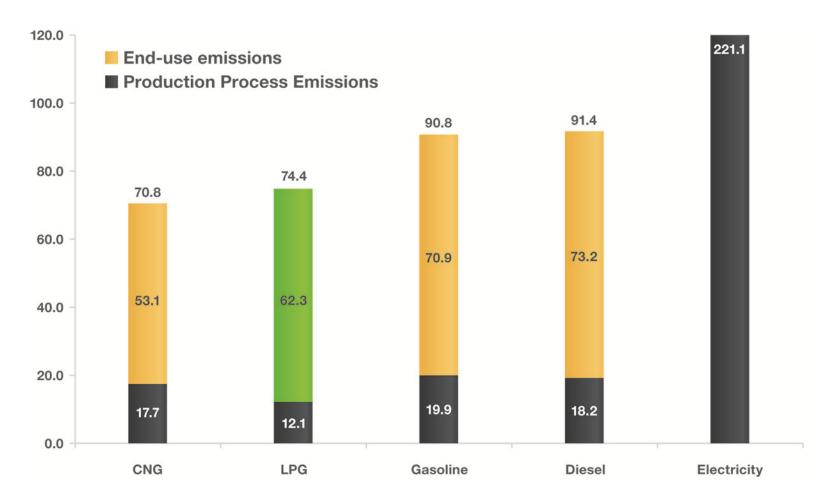
#### Clean & Green: Essential for Your Fleet

- It's environmentally friendly.
- It's domestically produced and the **most widely** available alternative fuel in the United States.
- Costs 30% less than gasoline.
- Low-cost fuel infrastructure and vehicle conversions.
- It is the 3rd most widely used engine fuel in the world.



#### Clean & Green: Well to Wheel Greenhouse Gas Emissions

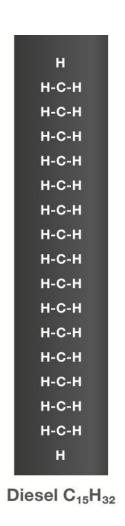
Greenhouse gas emissions converted to kg CO<sub>2</sub> equivalent per million Btu.



Source: Energetics Inc., Propane Reduces Greenhouse Gas Emissions: A Comparative Analysis, June 2009



#### Clean & Green: Propane is the Low Carbon Fuel



NOx Reductions / Particulate Matter Comparison



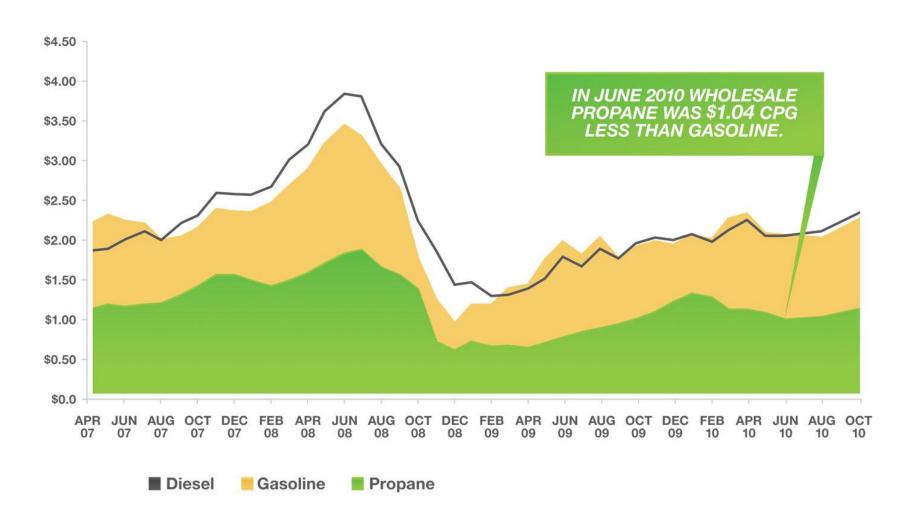




# Propane: Economic Justification



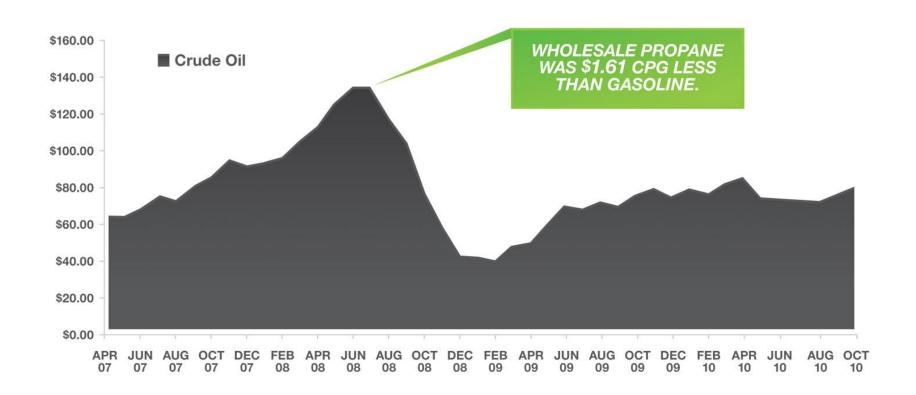
#### **Economic Justification: Wholesale Price Comparison**





#### **Economic Justification: Crude Oil Prices**

When the economy rebounds crude will continue to rise. Can your budget handle \$4.00+ gasoline?





#### **Economic Justification: Return on Investment**

	Gasoline	Propane	Savings
Vehicle Purchase Price	\$25,000	\$35,400	-\$10,400
Miles Driven	200,000	200,000	
Average Miles Per Gallon of Fuel	13	11.50	
Gallons of Fuel Consumed	15,385	17,391	
Cost Per Gallon of Fuel	\$3.00	\$1.95	
Total Cost of Fuel (Line 3 x 4)	\$46,154	\$33,913	\$12,241
Federal Excise Tax Amount (\$0.18 x Line 3)	\$2,831	\$3,183	-\$352
Cost of Scheduled Maintenance Per Mile	\$0.03	\$0.015	
Total Maintenance Cost	\$6,000	\$3,000	\$3,000
Loss from Fuel Pilferage/Theft	\$800	0	\$800
Total Savings Per Vehicle			\$5,289



#### **Economic Justification: Fleet Case Study**

- CARTS is a transit fleet in state of Texas.
- Service area size: 7,500 square miles
- Transports 350,000 passengers annually
- Annual transit bus mileage: 1.6 million miles
- Annual usage of propane: 150,000 gallons
- 33 propane transit buses
  - Annual savings: \$150,000



# Vehicle Offering



#### Vehicle Offering: Roush CleanTech

#### **ROUSH Propane Powered Vehicles**

- 60% Less Carbon Monoxide
- 24% Fewer Greenhouse Gas Emissions
- 20% Less Nitrogen Oxide

Serviceable at any Ford Dealership

**Ford Factory Warranty Maintained** 

- 5 yr / 60,000 mile Powertrain
- 3 yr / 36,000 mile Drivetrain





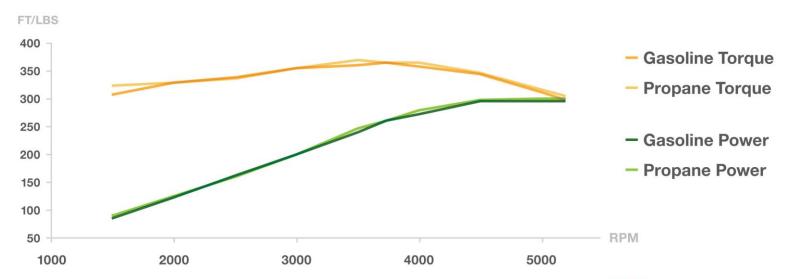


#### Vehicle Offering: Roush CleanTech

#### **ROUSH System Overview**

- Entire system consists of only 13 components.
- System uses existing factory PCM calibration.

#### 2010 Ford F-250 / 5.4L Engine Power & Torque Comparison





#### Vehicle Offering: Roush Future Development

- Ford F-450 / F-550 6.8L V10 (3V)
- Ford F-59 Strip Chassis 6.8L V10 (3V)
- Ford F-250 / F-350 6.2L V8 (3V)
- Ford Transit Connect
- Ford F-650/750
- Ford F-150













#### **OEM School and Shuttle Bus Options**

#### **Collins Bus Company "Nexbus"**

- Type A up to 28 passengers
- GM 6.0 L Dedicated LPI System
- Range: ~300 miles



#### Blue Bird "Vision"

- Type C up to 77 passengers
- Dedicated LPI system
- Same range as a 60-gallon capacity diesel bus





#### **Vehicle Offering: Additional Vehicles**



















## Refueling Options



#### **Refueling Options: Propane Fleets**

































#### **Refueling Options: Fueling Your Fleet**

- Install private scalable infrastructure for your fleet.
- Fill at any Ferrellgas location nationwide.
- On-site resupply via Ferrellgas delivery truck.
- 24/7 emergency roadside assistance from Ferrellgas.







## Incentives



#### Alternative Fuel Infrastructure Tax Credit

Effective 12/31/2005 through 12/31/2011

A tax credit for installation of propane autogas fueling stations. The credit is up to 30% of the cost, not to exceed \$30,000.

Fueling station owners who install qualified equipment at multiple sites are allowed to use the credit towards each location. For more information, see IRS Form 8911 and/or Form 3800, which are available via the IRS Web site.

For a complete listing of incentives:

http://www.afdc.energy.gov/afdc/incentives\_laws.html



#### **Alternative Fuel Excise Tax Credit**

Effective through 12/31/2011, retroactive to 1/1/2010

A \$0.50 per gallon tax incentive is available for propane that is sold for use or used as a fuel to operate a motor vehicle.

For an entity to be eligible to claim the credit, they must be liable for reporting and paying the federal excise tax on the sale or use of the fuel in a motor vehicle. Tax exempt entities such as state and local governments that dispense qualified fuel from an on-site fueling station for use in vehicles qualify for the incentive.

Eligible entities must be registered with the Internal Revenue Service (IRS). The incentive must first be taken as a credit against the entity's alternative fuel tax liability; any excess over this fuel tax liability may be claimed as a direct payment from the IRS. For more information, see IRS Publication 510 and IRS Forms 637, 720, 4136, and 8849.



# **CNG** Comparison

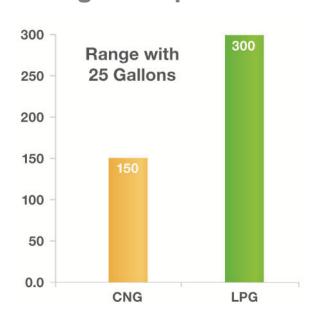


#### **CNG Comparison: Propane Advantages**

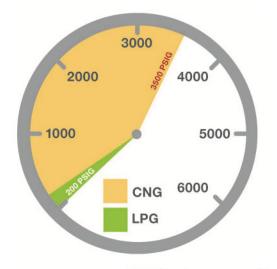
#### CNG tanks are more than four times the size of a propane tank.

- CNG 20 gal tank is 600 lbs, which equal to approx. 4.5 passengers.
- A CNG extra range tank adds 280 lbs. for only 9 more gallons.
- Total 29 gal capacity = ~900 additional lbs.

#### **Range Comparison**



#### **Tank Pressure Comparison**





#### CNG Comparison: Propane Advantages continued

- CNG's increased weight contributes to:
  - Premature brake and tire wear
  - Less load capacity (Weight / Volume)
  - Reduced plowing / towing / 4x4 capabilities
  - Lower fuel economy ratings
- CNG vehicle tanks requires an inspection every 36k miles.
- Propane tanks have no similar inspection requirement.
- CNG vehicles have a potential loss of power and torque.
- Propane vehicles have no noticeable difference in performance.
- Propane van conversion: \$10,000
- CNG: \$16,500



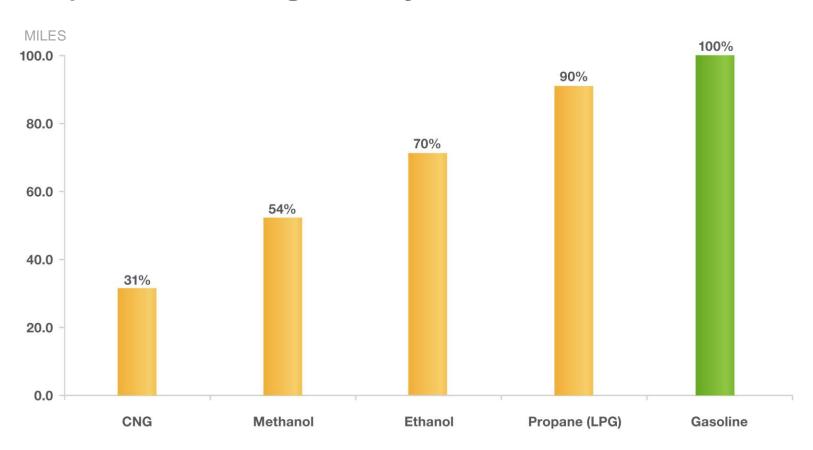
#### CNG Comparison: Propane Advantages continued

- Propane requires a five to ten h.p. electric motor for refueling, while CNG dispensers require four-stage compressors which typically operate on 460V, 3-phase electric motors.
- The pump rate for propane is 10-14 gallons per minute, comparable to gasoline pump rates.
- Slow fill CNG stations may require up to 12 hours to fill a vehicle.
- CNG stations cost upwards of \$900,000 \$1,500,000 to install.
- Propane stations can cost as little as \$20,000, and in some cases free with a propane fuel contract.
- Propane stations can be installed within weeks of an order and require a very small physical footprint.
- Propane is not a greenhouse gas when released directly into the atmosphere. Natural gas is.



#### **CNG Comparison: Propane Advantages**

#### **Propane Cures "Range Anxiety"**





#### **CNG Comparison: Propane Advantages**

What will you do if you run out of fuel?



Call a tow truck.



Call us and we'll fill you up.



### **Propane Autogas**

The only financially viable, clean, alternative fuel with a business case to prove it.

