South Shores Clean Cities
Propane Autogas
August 14, 2018
Enterprise Brand Portfolio

**ROUSH Industries**
OEM manufacturing, engineering, prototyping and design

**Roush Fenway Racing**
NASCAR racing team(s)

**ROUSH Performance**
Industry leading high performance vehicles

**ROUSH CleanTech**
Propane autogas powered commercial vehicles.

800.59.ROUSH
ROUSHcleantech.com
• Founded in 2010.

• Dedicated to developing quality alternative fuel solutions.

• Propane autogas focus.

• EPA and CARB certification.

• 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.
Our Scorecard

17,500 VEHICLES ON THE ROAD

ACCUMULATED OVER 430 MILLION MILES

OVER 720 SCHOOL DISTRICTS
Why The Hockey Stick?

- Reliable Technology & Robust Service Program
- Strong OEM Partners/Ford & Blue Bird
- Diesel Displacement/Medium Duty
- 1,000 Customers & 400 Million Miles of Data
- Low Cost Infrastructure and Easy to Scale
- Safe
- Plentiful Fuel
- Emerging Low NOx Certifications
ARB is encouraging all Manufacturers of Record (MORs) to overachieve on the NOx standard to support smog reduction.

ARB has issued alternative standards at 0.1, 0.05 and 0.02g/bhp-hr for NOx.

The recent VW settlement also includes funding that supports NOx reductions across all 50 states that offsets the increase in NOx caused by their diesel emissions.
RCT Status of Low NOx

July 31, 2018 ROUSH CleanTech announces achievement of very low NOx with the 6.8L V10 Engine.
STUDENT TRANSPORTATION
A Growing Trend

OVER 10,000 SCHOOL BUSES

OVER 720 SCHOOL DISTRICTS
### Model Year
2018

### Engine Size
6.8L V10 (3V) Ford Engine with exclusive ROUSH CleanTech Propane Fuel System

### Applications
- 169” / 189” / 217” / 238” / 252” / 273” / 280” wheelbase configurations
- 6-speed automatic transmission

### Fuel Tank Capacity
- Short: 47 gallons (usable)
- Standard: 67 gallons (usable)
- Extended: 93 gallons (usable)

### Technical Specifications
- EPA and CARB approved.
- GVWR: 33,000 lbs.
- Up to 77 passengers

### Order Availability
Blue Bird dealers

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**Blue Bird Vision**
(Type C)
## Product Overview

### Micro Bird G5

**Micro Bird G5**

**(Type A)**

### Model Years
- 2018

### Engine Size
- 6.8L V10 (2V)

### Applications
- 158” / 176” / 186” / 190” wheelbase configurations.
- Chiller required for vehicles operating in temps ≥ 110°F
- 5-speed automatic transmission.

### Fuel Tank Capacity
- Aft-Axle: 41 gallons (usable)

### Technical Specifications
- EPA and CARB approved.
- GVWR: 14,500 lbs.
- Up to 30 passengers

### Order Availability
- Blue Bird dealers
COMMERCIAL FLEET
Propane Autogas Product Lineup

- Medium duty Ford trucks, chassis cabs, cutaways, and stripped chassis
- Factory Ford warranty maintained.
- No loss of HP / torque / towing capacity.
- Serviceable with existing diagnostic equipment.
- EPA & CARB Certified
- HD OBD Compliant
## Industry Reach – Ford Commercial Trucks

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- **Additional Industries**
  - Airport
  - Tree and Landscape
  - Towing
  - Government
Ford F-450 / F-550 – Class 4 / 5

- 6.8L V10 3 Valve – Low NOx
- <19,500lbs GVWR
- >169”WB and 64”CA
- Driver / Passenger Side and After Axle
- Tank Options
- 35, 50, and 65 Usable Gallons
- Range: 150 – 320 Miles
Ford F-650 / F-750 – Class 6 / 7

- 6.8L V10 3 Valve – Low NOx
- <33,000lbs GVWR
- All Configurations
- Dual Saddle Mount Short Tanks -
  - Drop Frame – Non Clean C/A
- 55 Usable Gallons
- Range: 160 – 220 Miles
- RPO Frame Piercing
Ford F-650 / F-750 – Class 6/7

- 6.8L V10 3 Valve – Low NOx
- <33,000lbs GVWR
- All Configurations
- Driver Side Tank
- 50 Usable Gallons
- Range: 160 – 230 Miles
- RPO Frame Piercing
Ford F-53 / F-59 – Class 5 / 6

- 6.8L V10 3 Valve – Low NOx
- 16,000lb – 26,000lb GVWR
- All Configurations
- Driver Side and After Axle Tank
- 45 and 65 Usable Gallons
- Range: 200 – 320 Miles
- <300lbs
Ford E-350 / E-450 – Class 3 / 4

- 6.8L V10 2 Valve
- <14,500lbs GVWR
- Any WB and CA
- After Axle Tank
- 41 and 64 Usable Gallons
- Range: 240 – 380 Miles
In Summary…

- Strong OEM Partners
- OEM Purpose Built and Proven Engine/Fuel System
- Robust and Proven
- Nationwide Service Network
- HDODB Compliant
- EPA and CARB Compliant
- Ultra-LOW NOx; 0.02 g/bhp-hr
- Domestic and Economic Fuel
- Diesel Displacement
- Low Cost Infrastructure and Easy to Scale
THANK YOU

800.59.ROUSH
ROUSHcleantech.com

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