Corporate Overview

Corporate Wheel of Capability
A SOLUTION

Why Propane AutoGas for the School Bus Industry?
Why? Worlds Most Popular Alternative Fuel

- ~270,000 propane vehicles in USA
- ~17M propane vehicles worldwide
- Australia: Every third vehicle off Ford’s assembly line is propane autogas powered
- Turkey: More propane autogas sold last year than gasoline + diesel combined

Source: World LP Gas Association, Autogas for America
Natural gas liquids production from shale gas is expected to increase by more than **6.9 Billion Gallons** per year between 2010 and 2015.

- 1.8 billion gallons of new propane supply by 2015 and 3.6 billion gallons by 2020.
- 3.3 billion gallons of new ethane supply by 2015 and 6.7 billion gallons of by 2020.

Estimated increase of 17% between 2009 and 2020 from crude and 33% from natural gas.

Source: ICF Consulting
Why? Cheaper

“We’re saving a total of 32 cents per mile with propane autogas.”

“We needed these buses to perform without issue from the moment we got them, and they did. They’ve been reliable and inexpensive to operate.”

Ron Latko, Director of Transportation, Mesa Unified School District No. 4 in Phoenix, Arizona.

Dixie Pipeline Posted Prices
January 4, 2013
$0.93 – Milner GA
[add freight, supplier fees, taxes]
NEW: $0.50/gge tax credit is back!
Why? Cleaner

- 12% reduction in Carbon Dioxide (CO2) emissions
- 20% reduction in Nitrogen Oxide (NOx) emissions
- 60% reduction in Carbon Monoxide (CO) emissions
- 80% reduction in Particulate Matter (PM) emissions

Source: Autogas for America
Safe & Non-Toxic

- Low pressure (~ 200 psig)
- Narrow flammability range
- Requires a higher temperature to ignite than gas/diesel
  - Autogas ignition temperature is 920-1020F v 495-536 for gasoline
- Does not puddle – vaporizes and dissipates into the air
  - Nontoxic, Nonpoisonous, Insoluble in water
- Cannot be accidentally ingested

Among alternative fuels, propane has the narrowest flammability range.

Flammability Range

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Flammability Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>0.6% – 5.5%</td>
</tr>
<tr>
<td>Gasoline</td>
<td>1.0% – 7.6%</td>
</tr>
<tr>
<td>Propane Autogas</td>
<td>2.2% – 9.6%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>5.3% – 15.0%</td>
</tr>
<tr>
<td>Ethanol</td>
<td>3.3% – 19.0%</td>
</tr>
<tr>
<td>Methanol</td>
<td>6.0% – 36.5%</td>
</tr>
</tbody>
</table>
Why? Cheaper

Safe & Non-Toxic

- Fuel tanks are 20 times more puncture resistant than gasoline
- Built-in safety devices and shut-off valves

16 Mounting Points Located Inside Frame Rails

- Meet strict set of rules and regulations

800.59.ROUSH
ROUSHcleantech.com
### Why? Product Line to Meet Diverse Fleet Needs

<table>
<thead>
<tr>
<th>Model</th>
<th>Telecomm.</th>
<th>Food &amp; Beverage</th>
<th>Government</th>
<th>Military</th>
<th>Propane</th>
<th>Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ford F-250 / F-350</strong>&lt;br&gt;5.4L V8</td>
<td></td>
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</tr>
<tr>
<td><strong>Ford E-150 / E-250 / E-350</strong>&lt;br&gt;5.4L V8</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ford E-350 DRW</strong>&lt;br&gt;5.4L V8</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ford E-450 DRW</strong>&lt;br&gt;6.8L V10</td>
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<td></td>
</tr>
<tr>
<td><strong>Blue Bird Vision</strong>&lt;br&gt;6.8L V10&lt;br&gt;(Available February, 2012)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ford F-250 / F-350</strong>&lt;br&gt;6.2L V8&lt;br&gt;(Available Summer, 2012)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ford F-450 / F-550</strong>&lt;br&gt;6.8L V10&lt;br&gt;(Available Q1, 2013)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Ford F-650</strong>&lt;br&gt;6.8L V10&lt;br&gt;(Available Q1, 2013)</td>
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</tr>
</tbody>
</table>
Product Overview – Blue Bird Vision

Blue Bird Vision

Model Years: 2012 - Newer
Engine Size: 6.8L V10 (3V)
Tank Sizes: 67 usable gallons
Order Availability: Blue Bird Dealers
Certification: EPA, CARB
Available: Now
Warranty: 5 year/100K miles

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Class A Propane G5 by Micro Bird

Ford E-450 DRW Cutaway

Model Years: 2009 – 2012

Engine Size: 6.8L V10

Applications: Dual rear wheel cutaway
5-speed auto transmission

Tank Sizes: Aft-Axle: 41 gallons

Order Availability: Now

Certification: EPA
CARB
Propane Fuel System – Simple Design

- Propane Packaging & Design
- Fuel Container
- Common Fuel Rail
- Evaporative Canister
Zero Compromise

Warranty & Serviceability
- Ford warranty coverage goes unchanged
- Ford alt. fuel prep package
- Uses standard Ford diagnostic equipment

Service Locations
- Ford dealers
- We train your mechanics to continue maintaining own vehicles

Training Program
- On-site & Web-based

Warranty Coverage
- In-house warranty staff
- Processes in place to manage claims

Service Parts
- Available director from ROUSH CleanTech
RETURN ON INVESTMENT:

A Positive Return, Even Without Government Incentives
### Savings Calculator

#### Assumptions:
- 71 passenger base bus, no options
- Propane bus up-charge based on current state contract
- MPG estimates for diesel and propane are based on customer feedback
- Propane fuel price is based on state contract pricing structure.
- School responsible for crash and electrical related to infrastructure installation.
- At least a 25% reduction in maintenance cost is assumed based upon customer feedback.

#### Capital Costs

<table>
<thead>
<tr>
<th></th>
<th>71p Blue Bird ISB13 Diesel</th>
<th>Propane (6.8L V10)</th>
<th>Savings or (Cost) to Convert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Ford Vehicle Purchase Price</td>
<td>$85,035.00</td>
<td>$92,035.00</td>
<td>$ (7,000.00)</td>
</tr>
<tr>
<td>Federal Alternative Motor Vehicle Tax Credit (propane only)</td>
<td>$10,016.00</td>
<td>$10,016.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Total Capital Savings or Investment to Convert:</strong></td>
<td>$95,051.00</td>
<td>$102,051.00</td>
<td>$ (7,000.00)</td>
</tr>
</tbody>
</table>

#### Operating Costs (fuel)

<table>
<thead>
<tr>
<th></th>
<th>71p Blue Bird ISB13 Diesel</th>
<th>Propane (6.8L V10)</th>
<th>Savings or (Cost) Over Life of Vehicle:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Vehicle Life (miles)</td>
<td>190,260</td>
<td>190,260</td>
<td>$22,412.31</td>
</tr>
<tr>
<td>Average Miles per Gallon</td>
<td>8.9</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Gallons of Fuel Used Over Life of Vehicle</td>
<td>16,000</td>
<td>24,200</td>
<td></td>
</tr>
<tr>
<td>Fuel Price (per gallon)*</td>
<td>$3.50</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>+ Federal excise tax credit / gallon (propane only)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>+ Adjusted Fuel Price (per gallon)</td>
<td>$3.50</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fuel Savings or Cost Over Life of Vehicle:</strong></td>
<td>$ 59,832.31</td>
<td>$ 36,420.00</td>
<td>$ 22,412.31</td>
</tr>
</tbody>
</table>

#### Operating Costs (misc.)

<table>
<thead>
<tr>
<th></th>
<th>71p Blue Bird ISB13 Diesel</th>
<th>Propane (6.8L V10)</th>
<th>Savings or (Cost) Over Life of Vehicle:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Rate per mile (tune-ups, oil, engine life, etc.)*</td>
<td>$0.045</td>
<td>$0.034</td>
<td></td>
</tr>
<tr>
<td>Maintenance Costs</td>
<td>$4,916.70</td>
<td>$3,687.53</td>
<td></td>
</tr>
<tr>
<td>Fuel Loss from Spillage &amp; Theft ($100 per year)</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Misc. Savings or Costs Over Life of Vehicle:</strong></td>
<td>$4,916.70</td>
<td>$3,687.53</td>
<td>$1,229.18</td>
</tr>
</tbody>
</table>

### Gross Vehicle Lifetime Savings or Loss:

$23,641.48

### Net Vehicle Lifetime Savings or Loss:

$16,641.48

### Number of Years Vehicle is in Use:

12

### Number of Years to Break Even:

3.55
# Savings Calculator

<table>
<thead>
<tr>
<th>Capital Costs</th>
<th>Gasoline (6.2L V8)</th>
<th>Propane (6.2L V8)</th>
<th>Savings (Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Ford Vehicle Purchase Price</td>
<td>$30,060.00</td>
<td>$30,375.00</td>
<td>($3165.00)</td>
</tr>
<tr>
<td>ROUSH CleanTech Propane Conversion</td>
<td>$0.00</td>
<td>$10,350.00</td>
<td></td>
</tr>
<tr>
<td>State or Federal Incentive (if applicable)</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Capital Savings (or Investment)</strong></td>
<td><strong>$30,060.00</strong></td>
<td><strong>$40,725.00</strong></td>
<td><strong>($10,665.00)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Costs</th>
<th>Gasoline (6.2L V8)</th>
<th>Propane (6.2L V8)</th>
<th>Savings (Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Vehicle Life (miles)</td>
<td>200,000</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Average Miles Per Gallon*</td>
<td>12.00</td>
<td>10.10</td>
<td></td>
</tr>
<tr>
<td>Gallons of Fuel Over Lifetime</td>
<td>16,666.67</td>
<td>19,807.84</td>
<td></td>
</tr>
<tr>
<td>Fuel Price (per gallon)**</td>
<td>$3.25</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>Fuel Tax Credit / Gallon</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Adjusted Fuel Price / Gallon</td>
<td>$3.25</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fuel Savings (or Costs)</strong></td>
<td><strong>$5,166.67</strong></td>
<td><strong>$29,411.76</strong></td>
<td><strong>$24,245.09</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous Costs</th>
<th>Gasoline (6.2L V8)</th>
<th>Propane (6.2L V8)</th>
<th>Savings (Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Rate (per mile)**</td>
<td>$0.030</td>
<td>$0.033</td>
<td></td>
</tr>
<tr>
<td>Maintenance Costs</td>
<td>$6,000.00</td>
<td>$4,500.00</td>
<td></td>
</tr>
<tr>
<td>Fuel Loss From Filtration / Theft**</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Misc. Savings (or Costs)</strong></td>
<td><strong>$6,000.00</strong></td>
<td><strong>$4,500.00</strong></td>
<td><strong>$1,500.00</strong></td>
</tr>
</tbody>
</table>

**Gross Vehicle Lifetime Savings (Loss)** $26,254.90

**Net Vehicle Lifetime Savings (Loss)** $15,589.90

<table>
<thead>
<tr>
<th>How many years will the vehicle be used?</th>
<th>Number of years to break even</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Gross Vehicle Lifetime Savings (Loss)** $28,505.35

**Net Vehicle Lifetime Savings (Loss)** $17,240.35

<table>
<thead>
<tr>
<th>How many years will the vehicle be used?</th>
<th>Number of years to break even</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1.6</td>
</tr>
</tbody>
</table>
## Emissions Calculator

<table>
<thead>
<tr>
<th>Emissions Reductions</th>
<th>Gasoline</th>
<th>Propane</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Vehicle Life (miles)</td>
<td>200,000</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Average Miles per Gallon</td>
<td>11.00</td>
<td>9.35</td>
<td></td>
</tr>
<tr>
<td>Gallons of Fuel Used Over Life of Vehicle</td>
<td>18,181.82</td>
<td>21,390.37</td>
<td>(3,208.56)</td>
</tr>
<tr>
<td>Carbon Mass per Gallon Fuel (lb. / gal.)</td>
<td>5.10</td>
<td>3.47</td>
<td></td>
</tr>
<tr>
<td>Mass of CO₂ per Gallon Fuel (lb. / gal.)</td>
<td>18.70</td>
<td>12.72</td>
<td></td>
</tr>
<tr>
<td>Total lbs. of CO₂ Produced During Vehicle Life</td>
<td>339,920.00</td>
<td>272,047.06</td>
<td>67,872.94</td>
</tr>
</tbody>
</table>

### Fewer lbs. of CO₂ Produced Using Propane Autogas

Ford E-250 Cargo Van

800.59.ROUSH ROUSHcleantech.com
INCENTIVES:
Encouraging Adoption of Alternative Fuels
Virginia Encourages Alternative Fuel Conversion

More Information:
Tax Incentives: Federal

HR8 Extends Fuel Excise and Infrastructure Tax Credits

- Retroactive to Jan 1, 2012
- $0.50/GGE for propane autogas
- $30,000 per refueling infrastructure installation

- www.AFDC.Energy.Gov : Click on “Laws & Incentives” or follow
- http://www.afdc.energy.gov/laws/fed_summary
Upcoming Funding Opportunities

**US EPA**
- National Clean Diesel Campaign

**US DOT**
- CMAQ
- VALE
- TIGGER

**Useful Websites**
- Grants.gov
- AFDC.Energy.Gov
- CleanCities.Energy.Gov
  - http://www1.eere.energy.gov/cleancities/related_opportunities.html
TESTIMONIALS:
Real-World Feedback From
Real-World Customers
STUDENT TRANSPORTATION, INC. PLACES LARGEST PROPANE-POWERED SCHOOL BUS ORDER IN INDUSTRY HISTORY WITH ENVIRONMENTALLY-FRIENDLY BLUE BIRD VISION SCHOOL BUSES

Blue Bird to supply more than 400 school buses with ROUSH CleanTech propane autogas fuel systems to Student Transportation, Inc. for use in Omaha, Nebraska.

OMAHA, Neb. (December 19, 2012) — Blue Bird and ROUSH CleanTech commend the Metropolitan Omaha Education Consortium and Student Transportation, Inc. (STI) for collaborating to deploy more than 400 Blue Bird Propane-Powered Vision school buses. This contract will cost-effectively transport the students of Omaha while reducing exhaust emissions.

Serving Millard and Omaha Public Schools, the contract is the largest transportation agreement in STI’s history. It is also the biggest single order to date of propane buses for Blue Bird, the leading provider of propane autogas powered school buses utilizing the industry-leading ROUSH CleanTech fuel system.

“We are thrilled that STI and Omaha Public Schools made the decision to move to propane autogas, making Omaha a greener city by dramatically reducing the emissions produced in transporting children to school each day,” said Phil Horlock, president and CEO of Blue Bird Corporation. “This order – the single largest in the industry’s history – shows Omaha’s...
Case Study – Mesa County Schools

Industry: Student Transportation
Location: Mesa, AZ
Vehicles: 21 Micro Bird G5 Type A
       6 Blue Bird Propane Vision Type C
       1 F-250 Ford Pick-Up
Fueling: 18,000 gallon on-site refueling station
       2,000 gallon satellite on-site refueling station

By The Numbers:
– $5,667 in fuel savings/yr/bus
– $.326 per mile reduction in operating costs
– $1.31 / gal for propane autogas
– $3.54 / gal for diesel
– 7,200 pounds carbon dioxide eliminated/bus/yr
Case Study – Portland Oregon Schools

- Portland School District has used propane-autogas-fueled buses for more than 30 years
- Owns and operates about 75 buses
- In addition, First Student owns and operates a large fleet for the school district

“As you can imagine, when you operate as many fleet buses as we do in a large city like Portland, occasionally, accidents are going to happen. I’ve been here for six years and I don’t know of any propane autogas safety issues that we’ve ever encountered as the result of an accident. These buses and their fuel tanks are extremely durable.”

-- Eric Stewart, Fleet Service Coordinator
Portland, Oregon Public School District
Video Testimonials

Blue Bird Customer Testimonials:

http://youtu.be/3gok3DO0zkY
Customer Adoption
America is a net exporter of propane: 5 Billion Gallons/year
BE THE CHANGE

800.59.ROUSH
ROUSHcleantech.com

Chelsea Jenkins
Fleet Account Manager – Eastern Region

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Chelsea.Jenkins@roush.com