Webinar: Renewable Diesel and Biodiesel Blends for Fleets
February 8, 2018

Ann Vail
Executive Director
Local Partnerships: Clean Cities Coalitions

- National network of nearly 100 local coalitions
- 82% of the total U.S. population lives inside coalition boundaries
- Nearly 500,000 alternative fuel vehicles (AFVs)
Clean Cities Portfolio of Technologies

**Alternative Fuels & Vehicles**
- Biodiesel & Renewable Diesel
- Electricity
- Ethanol
- Hydrogen
- Natural gas
- Renewable Natural Gas
- Propane

**Fuel Economy**
- Fuel efficiency
- Behavioral changes
- Vehicle maintenance initiatives
- Vehicle miles traveled (VMT)

**Hybrids**
- Light- and Heavy-duty HEVs
- PHEVs

**Idle Reduction**
- Heavy-duty trucks
- School buses
- Truck stop electrification
About LCF

• LCF is a non-profit housed at the Louisiana Department of Natural Resources.

• LCF became a designated affiliate of the U.S. Department of Energy’s Clean Cities program in 2000.

• One of two Clean Cities Coalitions in Louisiana

• Since 2000, we have worked within the five-parish air quality non-attainment area to develop the infrastructure to support the adoption of clean fuel powered vehicles. In 2013, we expanded to 56 parishes.
<table>
<thead>
<tr>
<th>Parishes</th>
<th>Covered by Louisiana Clean Fuels</th>
</tr>
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<tbody>
<tr>
<td>Acadia Parish</td>
<td>Concordia Parish</td>
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<td>LaSalle Parish</td>
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<td>Allen Parish</td>
<td>DeSoto Parish</td>
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<td>Assumption Parish</td>
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<td>Tensas Parish</td>
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<td>East Feliciana Parish</td>
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<td>Jefferson Davis Parish</td>
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<td>St. Helena Parish</td>
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<td>Claiborne Parish</td>
<td>Lafourche Parish</td>
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<tr>
<td>St. James Parish</td>
<td>Winn Parish</td>
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</tbody>
</table>

[Map of Louisiana showing locations covered by Louisiana Clean Fuels]
Our Louisiana Alternative Fuels Family

[Logos and icons of various alternative fuels]
AFDC Alt Fuel Station Locator

Alternative Fuels Data Center

Alternative Fueling Station Locator
Find alternative fueling stations near an address or ZIP code or along a route in the United States. Enter a state to see a station count or see stations data by state.

203 biodiesel stations in the United States
Excluding private stations

Location data is subject to change. We recommend calling the stations to verify location, hours of operation, and access.

ABOUT THE DATA
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Louisiana Clean Fuels
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www.louisianacleanfuels.org

Center for Sustainable Energy
San Diego, CA
(858) 633-8579
http://www.energycenter.org/fleet
Troy Shoen  
Sr. Manager, Marketing,  
Renewable Energy Group

• Troy Shoen has been an expert in marketing various aspects of the advanced biofuels industry for the past seven years. For six years he managed marketing efforts for a biofuels feedstock and animal feed ingredient company before joining Renewable Energy Group as Senior Manager, Marketing in July 2015.

• He currently leads the efforts to promote the economic and value-added benefits of integrating biodiesel into distributor and retailer fuel programs.

• Troy holds a Master’s in Business Administration from the University of Iowa in addition to Bachelor Degrees in Journalism and Communication Studies.
Fueled by Performance
Biodiesel Basics and Implementation
Best Practices for Sustainable Fleets
Safe Harbor Statement

This presentation contains certain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 as amended. These forward-looking statements are based on current expectations, estimates, assumptions and projections that are subject to change, and actual results may differ materially. Factors that could cause actual results to differ materially include, but are not limited to, potential changes in governmental programs and policies and federal and state governmental tax credits and incentives requiring or encouraging the use of biofuels, including RFS2, and biomass-based diesel production; changes in the spread between biomass-based diesel prices and feedstock costs; the future price and volatility of feedstocks; the future price and volatility of petroleum and products derived from petroleum; risks associated with fire or explosion at our facilities, including potential losses associated with the fires at our Geismar facility; the effect of excess capacity in the biomass-based diesel industry; unanticipated changes in the biomass-based diesel market from which we generate almost all of our revenues; seasonal fluctuations in our operating results; competition in the markets in which we operate; our dependence on sales to a single customer; technological advances or new methods of biomass-based diesel production or the development of energy alternatives to biomass-based diesel; our ability to successfully implement our acquisition strategy; our ability to use our development stage life sciences technologies to produce renewable chemicals, fuels and other products on a commercial scale and at a competitive cost, and customer acceptance of the products produced; the significant capital expenditures required to produce commercial quantities of renewable chemicals; and other risks and uncertainties described from time to time in REG’s annual report on Form 10-K for the year ended December 31, 2015, quarterly reports on Form 10-Q and other periodic filings with the Securities and Exchange Commission.

This presentation reports Adjusted EBITDA, a non-GAAP financial measure. A reconciliation of Adjusted EBITDA to net income, the most comparable GAAP measure, is provided in the Appendix to this presentation.
REG enables a cleaner world through lower carbon intensity products and services.
Advanced biorefining leadership

<table>
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<th>Multiple Feedstock Capable</th>
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<tbody>
<tr>
<td>Albert Lea, MN</td>
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<td>Danville, IL</td>
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<td>Emden, Germany</td>
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<td>Geismar, LA</td>
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<td>Madison, WI</td>
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<td>Mason City, IA</td>
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<td>New Boston, TX</td>
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<td>Newton, IA</td>
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<td>Oeding, Germany</td>
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<td>Seneca, IL</td>
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<table>
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<tr>
<th>Refined Feedstock</th>
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<tbody>
<tr>
<td>Grays Harbor, WA</td>
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<td>Houston, TX</td>
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<tr>
<td>Ralston, IA</td>
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<tr>
<td>Okeechobee, FL</td>
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<td>Burlo, Germany</td>
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<tr>
<th>Partially Completed or Repairs Required</th>
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</thead>
<tbody>
<tr>
<td>Atlanta, GA</td>
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<tr>
<td>Clovis, NM</td>
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<tr>
<td>Emporia, KS</td>
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<tr>
<td>New Orleans</td>
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</tbody>
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Broad Marketing & Logistics Capabilities

REG STATS:

20+ YEARS
REG has been producing biodiesel since 1996.

502 MMGY
Over 500 million gallons per year of total biofuel production capacity
Fueled By Convenience

REG can make it easier to manage all your fuel needs

• REG-9000 biodiesel
• REG-9000 Renewable Hydrocarbon Diesel
• #2 ULSD
• Heating oil
• Blended fuels
  ---B2-B20 & higher
  ---RD/B20
Biodiesel
Benefits of Biodiesel

- Blends with petrodiesel in any percentage
  - Once it is blended it does not separate back out
- Higher Cetane
  - Over 50 vs. average petrodiesel around 44
  - Smoother, more complete burn
- Higher Lubricity
  - 2% biodiesel ‘fixes’ even bad diesel
- Virtually Zero Sulfur
  - Meets ULSD limits of 15 ppm or less
- Zero Aromatics Reduces Toxicity and Burns Cleaner
- 11% Oxygen Provides Superior Lubricity and Reduces Black Smoke (Particulates)
- High Flash Point Makes it Safer
  - Non hazardous shipping (over 200 F)
Biomass-based Diesel Emissions

Note: All emissions data taken from 2006 Cummins ISM 370 on Federal Test Procedure driving cycle, as reported in Durbin, Thomas D., et al. “CARB Assessment of the Emissions from the Use of Biodiesel as a Motor Vehicle Fuel in California “Biodiesel Characterization and NOx Mitigation Study.”” California Air Resources Board: Sacramento, CA (2011). Comparisons with Federal ULSD were conducted based on a linear comparison with CARB ULSD data. All biodiesel data shown is taken as an average of the means of high and low cloud point biodiesel emissions results, where available.
What Is Biodiesel?

- Biodiesel is methyl esters made from biological oils and fats (triglycerides) by transesterification*

*Transesterification is the process of swapping one alcohol (i.e. methanol) for another alcohol (i.e. glycerol)
Biodiesel Quality

• ASTM D6751 provides biodiesel specifications*
  • 20 tests (currently)
  • Includes both quality and performance indicators
  • No specification that restricts feedstock options
  • Represents the minimum acceptable quality

• Certificate of Analysis
  • A “C of A” should be available for every lot of biodiesel
  • Should provide a complete list of specifications and test results
  • May contain additional tests beyond ASTM D6751

*ASTM = American Society for Testing and Materials
## REG-9000 Production Specification

<table>
<thead>
<tr>
<th>Test Name</th>
<th>ASTM D6751 Specification</th>
<th>REG-9000® Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Glycerin</td>
<td>0.020 %mass, max</td>
<td>0.014 %mass</td>
</tr>
<tr>
<td>Total Glycerin</td>
<td>0.240 %mass, max</td>
<td>0.16 %mass</td>
</tr>
<tr>
<td>Water &amp; Sediment</td>
<td>0.05 %vol, max</td>
<td>0.01 %vol</td>
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<td>Acid Number</td>
<td>0.50 mg KOH/g, max</td>
<td>0.40 mg KOH/g</td>
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<tr>
<td>Kinematic Viscosity @ 40 °C</td>
<td>1.9 - 6.0 mm²/sec</td>
<td>3.8 - 5.0 mm²/sec</td>
</tr>
<tr>
<td>Copper Strip Corrosion</td>
<td>No. 3, max</td>
<td>No. 1a</td>
</tr>
<tr>
<td>Na and K, combined</td>
<td>5.0 ppm, max</td>
<td>1.5 ppm</td>
</tr>
<tr>
<td>Ca and Mg, combined</td>
<td>5.0 ppm, max</td>
<td>1.5 ppm</td>
</tr>
<tr>
<td>Cold Soak Filtration</td>
<td>360 sec, max</td>
<td>200 sec</td>
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<tr>
<td>Oxidation Stability*</td>
<td>3.0 hr, min</td>
<td>6.0 hr *</td>
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<tr>
<td>Monoglycerides</td>
<td>Not required</td>
<td>0.40 %mass</td>
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<tr>
<td>Diglycerides</td>
<td>Not required</td>
<td>0.20 %mass</td>
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<tr>
<td>Triglycerides</td>
<td>Not required</td>
<td>0.15 %mass</td>
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<tr>
<td>Moisture (Karl-Fischer)</td>
<td>Not required</td>
<td>400 ppm</td>
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<tr>
<td>Visual Inspection (Haze rating)</td>
<td>Not required</td>
<td>1</td>
</tr>
<tr>
<td>Density @ 15 °C</td>
<td>Not required</td>
<td>0.87—0.89 g/mL</td>
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</table>
REG-9000 Product Lineup

<table>
<thead>
<tr>
<th>REG-9000/1</th>
<th>REG-9000/5</th>
<th>REG-9000/10</th>
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</thead>
<tbody>
<tr>
<td>Cloud Point</td>
<td>Cloud Point</td>
<td>Cloud Point</td>
</tr>
<tr>
<td>-2 - +2 °C</td>
<td>3-7 °C</td>
<td>8-12 °C</td>
</tr>
<tr>
<td>(28-36°F)</td>
<td>(37-45°F)</td>
<td>(46-54°F)</td>
</tr>
</tbody>
</table>

- Marketing biodiesel on finished fuel attributes, not feedstock sources
- Provides unprecedented options for high quality biodiesel from a single supplier
- REG-9000 specifications exceed ASTM D6751
What is BQ-9000?

- Voluntary quality assurance program created for the North American biodiesel industry

- **BQ-9000**: Producers & Marketers
  - Rigorous, externally-monitored quality programs
  - **Producer**: no “off spec” biodiesel leaves the plant
  - **Marketer**: no “off spec” biodiesel leaves the distribution tank

- REG performs **additional tests** on every lot (reported on C of A)
  - Mono-, di-, and triglyceride content
  - Moisture content
  - Particulate Contamination
  - Ester Content
B20 Fuel Efficiency

• Four published studies showed no statistically significant difference between the fuel efficiency of B0 and B20

• The absolute difference in actual averages, without accounting for variance, showed a small improvement to a small decrease

• Theoretical energy content of B20 is 1.3% less than petro diesel
  • B20 performs better than theory suggests
  • Improved combustion and better lubricity
NREL Study Summary

- Nine 40-ft Orion V transit buses in Boulder, CO
- No additional wear from use of B20
- B20 reduced emissions

Purdue Study Summary

- 20 Class-8 trucks evaluated for entire year
- Difference in fuel economy was less than 1%
- Improved lubricity of biodiesel
  - Wear scar diameter of B20 was half that of #2 ULSD
- “B20 performed very similar to the #2 ULSD fleet in terms of fuel economy, fuel properties, engine oil samples, and operation and maintenance issues.”

U.S. Retailers Selling Biodiesel Blends of B10 to B20
Renewable Diesel
Benefits of RHD

- Reduced emissions
- Exceptional Cetane number
  - Greater than 65 (diesel specification limit is 40)
  - Cetane number is an indicator of combustion quality
- Desirable Cloud Point
  - Cloud Point ranges from -10 °C to -20 °C
  - Winter pipeline specs for diesel are around -10 °C
- Pipeline approved in blends up to 5%
- Can be blended at any level with diesel and biodiesel
REG Geismar, LLC

- 75 million gallon per year capacity
- High and low free fatty acid feedstocks
- Inbound unloading via truck and rail; outbound fuel loading via truck

36187 Hwy 30
Geismar, LA 70734
Biomass-based diesel comparison

Renewable Hydrocarbon Diesel and Biodiesel

**Feedstock**
Both processes can utilize any fat or oil.
- Saturated fat
- Unsaturated oil

**Process**

**Renewable Hydrocarbon Diesel**
- React with hydrogen (hydrotreat & isomerize)
- Convert C₃ backbone to Renewable LPG
- Convert oxygen to H₂O

**Biodiesel**
- React with methanol (transesterification)
- Convert C₃ backbone to glycerol

**Product**

- Paraffin
- FAME

**Specification**

- **Renewable Hydrocarbon Diesel**
  - Meets the diesel spec, ASTM D975
  - Molecules are familiar constituents of ULSD petro diesel

- **Biodiesel**
  - Meets the biodiesel spec, ASTM D6751
  - Different molecules than those in petro diesel

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Renewable Energy Group, Inc.
## REG-9000®/RHD Specification

<table>
<thead>
<tr>
<th>Property</th>
<th>REG-9000® Limit</th>
<th>D975 ULSD Limit</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud point:</td>
<td>Report</td>
<td>Report</td>
<td>°C</td>
</tr>
<tr>
<td>Water &amp; Sediment:</td>
<td>0.05</td>
<td>0.05</td>
<td>% volume</td>
</tr>
<tr>
<td>Conductivity:</td>
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<td>25, min</td>
<td>pS/m</td>
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<tr>
<td>Flash point:</td>
<td>52, min</td>
<td>52, min</td>
<td>°C</td>
</tr>
<tr>
<td>Ramsbottom Carbon:</td>
<td>0.35</td>
<td>0.35</td>
<td>% mass</td>
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<tr>
<td>Ash:</td>
<td>0.01</td>
<td>0.01</td>
<td>% mass</td>
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<tr>
<td>Kinematic Viscosity (40 °C):</td>
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<td>1.9 – 4.1</td>
<td>mm²/sec</td>
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<tr>
<td>Distillation Temperature at 90%:</td>
<td>282 – 338</td>
<td>282 – 338</td>
<td>°C</td>
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<tr>
<td>Copper Corrosion:</td>
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<td>No. 3</td>
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<td>Sulfur:</td>
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<td>15</td>
<td>ppm</td>
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<tr>
<td>Aromaticity:</td>
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<td>35</td>
<td>% volume</td>
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<tr>
<td>Cetane Number:</td>
<td>65, min</td>
<td>40, min</td>
<td>N/A</td>
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<td>65, min</td>
<td>40, min</td>
<td>N/A</td>
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</table>
RHD Production

Left: Crude Feedstock
Middle: Hydrocarbons after hydrotreating
Right: Finished (isomerized) RHD
Biodiesel Myths
Feedstock Myth

**BIODIESEL IS:**
Made from a variety of feedstocks

**BIODIESEL ISN’T:**
Made from soybean oil only
Feedstock Myth

**REG 2016 MIX:**

<table>
<thead>
<tr>
<th>Diverse feedstocks provides predictable pricing and supply.</th>
<th>Captures the best properties of different feedstocks.</th>
<th>Achieve lower carbon intensity scores.</th>
</tr>
</thead>
<tbody>
<tr>
<td>72% Animal fat, used cooking oil &amp; inedible corn oil</td>
<td>28% Soybean and canola oil.</td>
<td></td>
</tr>
</tbody>
</table>
Filter Clogging Myth

BIODIESEL IS:
A high-quality fuel that improves engine efficiency

BIODIESEL ISN’T:
A diesel alternative that will clog filters
Filter Clogging Myth

- Biodiesel has inherent cleansing and solvency properties
- Cleans out residue build up from ULSD
- Filters may need to be changed more frequently at first, but then business as usual
Performance Stays Strong with Biodiesel

“When we switched to biodiesel there was zero degradation in fleet performance. It was a huge success.”

– Vince Buonassi, G&D Integrated, a for-hire carrier
Cold Weather Myth

**BIODIESEL IS:**
A year-round fuel

**BIODIESEL ISN’T:**
Limited to the summer months
Cold Weather Myth

Voyageurs National Park:

- Diesel fleet of pickup trucks, dump truck, snow groomer, skid steer and boats
- Uses biodiesel year-round
- Used B20 at -30° F
OEM Warranty Myth

**BIODEISEL IS:**
A widely-used fuel that is supported by OEMs

**BIODEISEL ISN’T:**
A fuel that will void my warranty at all blend levels
## OEM Support

### 100%
OEMs support B5 and lower

### 90%
Medium- and heavy-duty truck OEMs support B20

<table>
<thead>
<tr>
<th>OEMs Supporting B20</th>
<th>OEMs Supporting B100</th>
<th>OEMs Supporting B5</th>
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<tr>
<td>Arctic Cat</td>
<td>Case IH</td>
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<tr>
<td>Buhler</td>
<td>Deutz AG</td>
<td>BMW</td>
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<td>Caterpillar</td>
<td>Fairbanks Morse</td>
<td>Hustler Turf Equipment</td>
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<td>Chrysler — Ram &amp; Jeep</td>
<td>New Holland</td>
<td>Mercedes-Benz</td>
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<tr>
<td>Cummins</td>
<td></td>
<td>Mitsubishi Fuso</td>
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<tr>
<td>Daimler Trucks, including:</td>
<td></td>
<td>PACCAR, including:</td>
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<tr>
<td>• Detroit Diesel</td>
<td></td>
<td>• Kenworth</td>
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<tr>
<td>• Frightliner / Custom Chassis</td>
<td></td>
<td>• Peterbilt</td>
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<tr>
<td>• Thomas Built Buses</td>
<td></td>
<td>• Volkswagen</td>
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<tr>
<td>• Western Star</td>
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<td>Mack</td>
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<td>BMW</td>
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<td>GMC &amp; Chevrolet</td>
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<td>Hustler Turf Equipment</td>
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<td>HDT USA Motorcycles</td>
<td>Tomcar</td>
<td>Mercedes-Benz</td>
</tr>
<tr>
<td>Hino Trucks</td>
<td>Toro</td>
<td>Mitsubishi Fuso</td>
</tr>
<tr>
<td>Navistar — International / MaxxForce</td>
<td>Volvo Trucks</td>
<td>PACCAR, including:</td>
</tr>
<tr>
<td>IC Bus</td>
<td>Workhorse</td>
<td>• Kenworth</td>
</tr>
<tr>
<td>Isuzu Commercial Trucks</td>
<td></td>
<td>• Peterbilt</td>
</tr>
<tr>
<td>John Deere</td>
<td></td>
<td>• Volkswagen</td>
</tr>
</tbody>
</table>

Source: National Biodiesel Board
Infrastructure Myth

BIODIESEL IS:
A drop-in, sustainable fuel that improves emissions with no infrastructure modifications required

BIODIESEL ISN’T:
A renewable fuel that requires modifications
Biodiesel Blending
Economic Considerations
Biomass-Based Diesel Policies

Note: Current as of 4/29/2015
Source: DOE Alternative Fuels Data Center and Individual State Statutes

New York City

LEGEND
- Low Carbon Fuels Standard
- Mandate - Fuel use or Bioheat
- Tax Incentive - sales
- Tax Incentive - production
- Fleet Requirement
- Bioheat Mandate passed – Awaiting Surrounding States
- Policy currently suspended
- No major policy
Biodiesel Blending Economics

No. 2 ULSD = $1.65/gal
REG Plant Price (B99) = $2.95/gal
Less RINS Values ($1.00) = ($1.50)/gal
Net Biodiesel Price = $1.45/gal

Additional saving potential if Blenders Tax Credit is reinstated and retroactive for 2017.
Five steps for successful fleet integration and vehicle use
Step One

Consider your comfort level with blending

• Do it yourself — invest in dedicated biodiesel system:
  • Dedicated biodiesel tank (>10,000 gallons).
  • Piping that allows biodiesel and #2 ULSD tanks to feed the dispenser B5-B20 blends.
  • Manages flow of correct blend to dispenser.
  • Telemetry that allows store to digitally change blend quickly.

• Buy B5-B20 blended product off the rack or direct from producer
Step Two

Confirm the quality of your biodiesel supply

- Meet ASTM D6751 standards
- Produced by a BQ-9000 accredited producer
- If purchasing fuel direct, always request a CoA
- Work with a producer that will provide technical support
Step Three

**Determine your blend-level**

- If you’re hesitant, start at a B2 and step up to B20 over time
- If starting in winter, consider starting at a lower blend
- If emission quality is a key driver, start at a higher blend
Step Four

Educate your employees

- Make sure everyone understands the product and what to expect
- Educate people about the sustainability benefits of biodiesel
Step Five

Reap the benefits

- Reduced emissions
- Increase lubricity and engine performance
- Diverse fuel line-up
- Positive impact for employees, customers and communities
Case Studies
Case Study

G&D Integrated: The Situation

FOR-HIRE CARRIER and THIRD-PARTY LOGISTICS provider

Fleet of over 400 VEHICLES travels up to 26 MILLION MILES PER YEAR

More of its customers are emphasizing ENVIRONMENTAL SUSTAINABILITY

“Many of our customers analyze their entire supply chain for environmental impact, and some have even gone as far as incorporating sustainability into their purchasing departments.”

—Vince Buonassi
Group Manager of Transportation Programs, G&D Integrated
Case Study

G&D Integrated: The Solution

💧 FUELING WITH BIODIESEL BLENDS for several years
✓ THOROUGHLY TESTED biodiesel before switching
❄️ USES B20 YEAR-ROUND, including winter
ลม Biodiesel has HELPED G&D WIN BIDS
☑️ LOWER FLEET EMISSIONS

“There’s really no sense in fighting the tide of sustainability. A lot of other truck carriers will. At G&D, we feel it is our duty to be good environmental custodians, and it makes business sense for us.”

—Vince Buonassi
Group Manager of Transportation Programs, G&D Integrated
Case Study
Harvard University: The Situation

- **FLEET STARTED RESEARCHING ALTERNATIVE FUELS** in early 2000s

- **MANY OPTIONS COST-PROHIBITIVE**, including natural gas

- **STARTED USING BIODIESEL** in 2004

- **2004: 35,000 GALLONS, 2016: 100,000+ GALLONS**

- **90 DIESEL VEHICLES** fueled by B20 blend year-round

“When we were presented with biodiesel, it was almost the simplest sustainable solution.”

— David Harris Jr.
Director of Transit and Fleet Management, Harvard University
Case Study

Harvard University: The Solution

WHEN AGGRESSIVE SUSTAINABILITY PLAN ADOPTED IN 2014, fleet was ahead of the curve

FROM SPRING 2015 – SPRING 2016, HARVARD FLEET’S USE OF BIODIESEL REDUCED:

- Hydrocarbon and sulfur dioxide by 20%
- Carbon dioxide by 15%
- Carbon monoxide by 12%
- Particulate matter by 12%

AWARD-WINNING COMMITMENT

2016 Environmental Merit Award from EPA

“Biodiesel has really helped improve the overall efficiency and quality of the diesel fleet … We have been able to run our diesel vehicles over the 100,000-mile mark with no problem.”

—David Harris Jr.
Director of Transit and Fleet Management, Harvard University
Case Study

Iowa DOT: The Solution

EXPERIENCED FILTER PLUGGING ISSUE at the dispenser
REG LAB ANALYZED fuel sample and filter
REG DETERMINED RARE PROBLEM with pipeline additive, not biodiesel
NO OTHER FUEL LAB had ever heard of issue

“REG has a world-class laboratory with world-class professionals working there. They’re always interested in getting to the bottom of [fuel-related questions] and their response is always timely.”

—David May
Fleet Manager, Iowa DOT

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Case Study

Rochester Public Transit: The Situation

- **52-BUS MUNICIPAL FLEET**
- **1.1 MILLION** miles and **1.7 MILLION** passengers per year
- **CLEAN AIR A PRIORITY** for residents and city officials
- **BUDGET ALWAYS A PRIORITY** as a public agency

“If people were to look out their windows and see black smoke pouring out of buses, that would not be acceptable. We are very sensitive to that.”

— Tony Knaur  
Rochester Transit and Parking Manager
Case Study

Rochester Public Transit: The Solution

- FUELING WITH BIODIESEL since late 1990s
- RECENTLY SWITCHED TO B20 to reduce emissions further
- B20 17 CENTS/GALLON CHEAPER than petro in 2016
- STRONG PERFORMANCE, including in winter

“We haven’t experienced anything negative with biodiesel. Since switching to B20, we’ve had no engine issues. We haven’t had any issues with fuel filters. And the lubrication from biodiesel has been a good thing given the lack of lubricity in modern diesel fuel.”

— Roger Ritchie
Rochester Public Transit Manager
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