

## Biodiesel in WNC August 18, 2014

### What Is Biodiesel

 Biodiesel is a renewable, clean-burning diesel replacement that is reducing U.S. dependence on foreign petroleum, creating jobs and improving the environment.

 Compatible with all diesel engines - no modifications needed

### **Benefits of Biodiesel**

- No special handling or storage needed "drop-in fuel"
- Blends with petroleum diesel from 2% to 99%
- Reduces greenhouse gases and improves air quality
- Biodegradable, non-toxic, and non-carcinogenic
- Improves vehicle performance by cleaning the fuel system
- Higher lubricity extends engine life
- Creates new jobs in North Carolina
- Reduces dependence on foreign oil and increases fuel security
- Is an internationally recognized and regulated fuel

# Tips on Using Biodiesel

### Biodiesel acts as a solvent and will clean out fuel systems.

- Filter Issues As the fuel system is cleaned out, diesel particulates can clog fuel filters, leading to increased initial replacement.
- Fuel Line Issues Biodiesel will degrade some natural rubber hoses that need to be replaced with a Viton or other suitable hose. Most recent vehicle models have compatible fuel lines.

### Biodiesel is "new" and many OEMs do not test high blends.

 Warranty Issues – Many manufactures now support blends from B5-B20. No warranty covers the fuel used in an engine!

### Biodiesel is made from natural, renewable fats and oils.

 Cold Weather Issues – Biodiesel can gel in cold weather. An antigel helps, but B50 is the highest blend for winter in WNC.

# Who Is Blue Ridge Biofuels

- Started in 2005 as a Community Fuel Provider
  - Fuel made here, sold here, from resources collected here
  - Truly sustainable fuel that is a drop-in replacement for petro diesel
  - Can be used in ANY diesel engine without modifications
  - Better for the environment, better for engines, better for the

economy

- Vertically integrated 3 companies in 1
  - Restaurant Service Provider
  - Biodiesel Manufacturer
  - Fuel Distributor
- Growth approximately doubled annually
- Over 1.6 million gallons B100 sold since
  2005 = over 15,000 tons of CO<sub>2</sub> kept out of the atmosphere

# **Vetting & Compliance**







- BQ9000 Certified Producer
- Living Wage Certified
- Member of the National Biodiesel Board
- Recipient of numerous awards

## Three Companies in One

### 1. Restaurant Service Provider

- Collect used cooking oil from over 550 locations in WNC;
  Upstate of South Carolina; Virginia, & Tennessee
- Purchase used cooking oil from collectors in Southeast
- Facing increased competition from outside companies

### 2. Biodiesel Manufacturing Facility

- 1 million gallon capacity
- Production increasing steadily every year
- All fuel meets ASTM specs
  and is third party tested



#### 3. Fuel Distributor

- Producing 30,000-40,000gallons B100 monthly
- Sold as blends from B5 to B99
- Half sold to local end-users
- Half sold to SE bulk fuel market
- Seven public fuel stations
- Distributed through 4 WNC-based fuel companies
- Fleets (City of Asheville, Grove Park Inn, Metropolitan Sewerage District, UNC Asheville, Progress/Duke Energy, YWCA, NC DOT)
- Farms (Gaia Herbs, Hickory Nut Gap Farms, Dry Ridge Farm, Warren Wilson, Biltmore Estate)
- Off Road (Tennoca Construction, landscapers, etc)
- Bioheat (over 1000 homes in Asheville area)

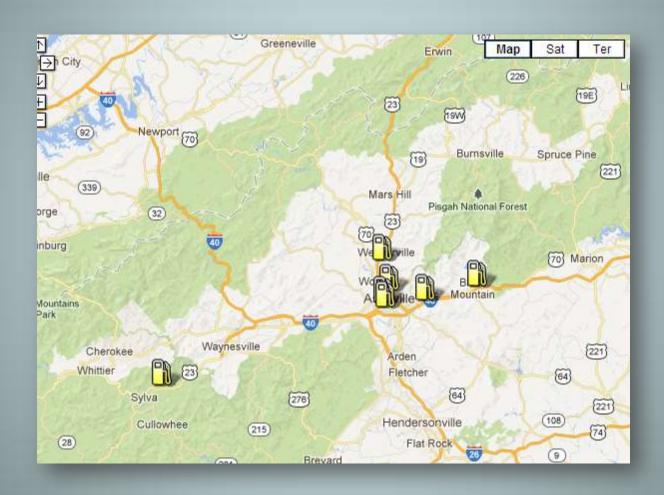


## **Bulk Deliveries**



828-253-1034

## Retail Pump Locations



## Pricing

- Competitive to petroleum diesel
- On Road Rack B99 \$3.969
- Off Road Rack B99 \$3.359

- Federal Biodiesel Tax Credit Expired
  - \$1.00/gallon

# Partnerships & Collaborations

BRB has been able to expand its involvement in the local community in order to be a more responsible business and to help create green jobs and generate additional revenue for the local economy.

### Green Jobs Training

- ABCCM: Trained a total of 52 people in 2 class sessions
- GO: Training and work experience for 3 members in 2012
- Educational Internship Program: Four Interns in 2013

#### Education and Outreach

- Biodiesel presentations for middle and high school students
- Mentorships for high school and college students
- Community college biodiesel classes AB Tech, BRCC, HCC
- Tours, classes, workshops, and community events
- Fleet manager outreach/education
- Automotive technician trainings

# Cooking Oil Recycling Program

- Residents can recycle used cooking oil (UCO)
- Keeps UCO out of sewers less public money
- Low-cost UCO #1 way to reduce fuel costs
- Initially a pilot project in partnership with Metropolitan Sewerage District, Buncombe County Solid Waste, Green Opportunities – funded by Biofuels Center of NC
- 35 used cooking oil bins placed in 7 counties in WNC
- Over 600 gallons collected monthly Hard to Recycle events
- A way for anyone to participate in the "Local Fuel Economy"
- www.CookingOilRecycling.org



# **Biodiesel:**

Better for the environment Better for your equipment Better for the economy



The right choice for WNC



