



Alternative Fuels to the Rescue

ETCFC.ORG

EAST
TENNESSEE
CLEAN FUELS
COALITION

Partnering on Biodiesel & Biodiesel Information: *Get Your Answers Here!*

2005 Regional Biofuels Workshop
Session II-B
Gatlinburg, TN - June 6, 2005

Session II-B Panelists:

*Gary Smith, Dr. Richard Nelson, Dennis
Burnett, Dr. Lynda Smith, Dale Aspy*

Facilitator: *Jonathan Overly*
Executive Director, ETCFC



Today's Agenda

- Partnering
- Production & availability of biodiesel
- Overview of where it's used & where publicly available
- Distribution/Blending/Marketing: How do I get it?
- Identifying barriers to biodiesel use
- NOx-reducing additives



Partnering on Biodiesel Projects

Partners – you’ve got to have them!

- Fuel producers
- Fuel suppliers
- Customers/users
- Clean Cities coalitions
- State departments and agencies (energy, transportation, environment)
- Other health-based advocates

***Quick-n-dirty:** It's about having a network you can rely on to help with information, especially when the times get tough! ~ Fast access to solutions, answers and advice ~*



Production & Availability of Biodiesel

- Nationwide: 30 million gals produced in 2004; estimates vary significantly for '05, but could be 50 million gals +
- 2005 has brought tight times as demand rises (tax incentive, et al.), but several plants are due to come online (roughly 100 million gallons in new capacity in '05)
- Southeast - Producers: 7 producers listed with the NBB in 8 state area; there are several others
- 4-state area - Producers: 3 producers with another ~5 working to become producers
- 4-state area - Suppliers: On the order of 40 blenders/suppliers (GA - 2; NC - 18; SC - 2; TN - 18)

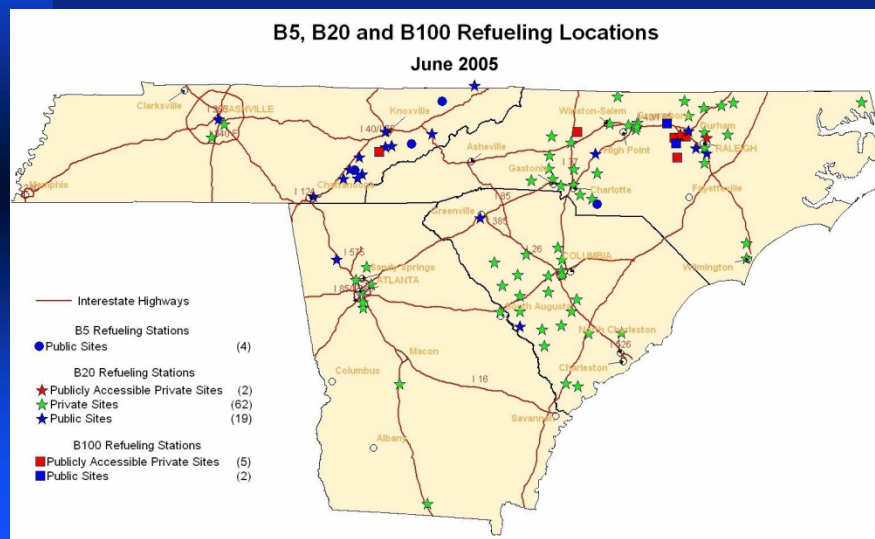


Overview of Where It's Used & Where It's Publicly Available: Part I – 4-state area

- Where used - examples –
 - ◆ GA – big users are Georgia Power, Robbins Air Force Base
 - ◆ NC – big users are NCDOT, City of Greensboro; two universities, eight other municipalities, airport, hospital; other smaller users
 - ◆ SC – big users are state fleet, Santee Cooper (utility), electric coops, Univ. of South Carolina, Clemson Univ.; others
 - ◆ TN – big users are Knoxville Area Transit, Eastman, Alcoa, Inc., west TN farmers; used in ~40 counties out of 95 across the state
- Where publicly available –
 - ◆ GA – 1-B20
 - ◆ NC – 4-B20, 1-B5, 1-B100
 - ◆ SC – 1-B20
 - ◆ TN – 1- B10, 15-B20, 3-B5, 1-B100



Overview of Where It's Used & Where It's Publicly Available: Part II





Distribution/Blending/Marketing: How Do I Get It?

- Distribution – Individual fuel providers serve certain areas and move fuel via trucks (pipelines aren't for biodiesel)
 - Blending – Most blenders are fuel providers
 - Marketing – Varies from provider to provider
1. Check Task Force Web site (www.sealtfuels.org) or contact SEATF or local Clean Cities coalition to find locations of regional suppliers or stations
 2. Check NBB Web site (www.biodiesel.org) for station locations or fuel provider information
 3. ***“Just do it!”***



Identifying Barriers to Biodiesel Use

- Warranty Worries
- Mechanical Issues
- Fuel Frets (e.g., stability, supply)
- Global Oil Issues
- Uncle Sam to the Rescue?
- Quit Stalling
- Misinformation Misery
- In-cent-ive\$





NO_x-reducing Additives

- Most are basically cetane enhancers, which have the side effect of slightly reducing NO_x
- Almost any change in one emission changes the balance in all; some go up, some go down, yet size of change not always equal
- NO_x-reducing effect is usually small – 2-5%, depends on bio-blend, engine age and technology (number of variables)
- Some combine other additives with cetane enhancers to potentially increase the effect beyond 5% reduction
- Southwest Research Institute and NAFTC (WV) doing testing in NO_x inhibitors
- Fischer-Tropsch diesel can be reducer, too



*Be a Part of the Solution,
Not the Pollution*

**Your Link to Alternative Fuels Information in
Tennessee, North Carolina, South Carolina and
Georgia:**

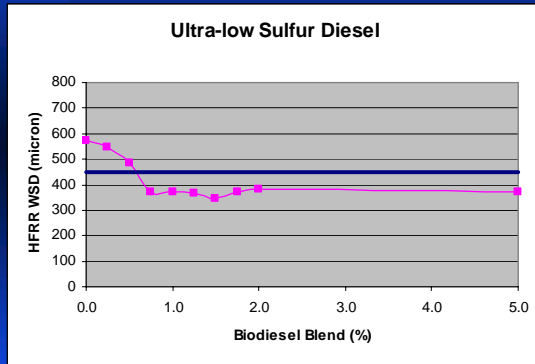
Southeast Alt Fuels Task Force
www.sealtfuels.org

Jonathan Overly Contact info:
jgoverly@utk.edu / (865) 974-3625



Enhanced Lubricity

Information courtesy of Tom Verry and the National Biodiesel Board.



- Equipment benefits
 - ◆ Superior lubricity
 - ◆ B2 has up to 66% more lubricity than #2 Diesel
- EPA requires sulfur reduction in 2006
- No overdosing concerns



Enhanced Lubricity

Information courtesy of Tom Verry and the National Biodiesel Board.

