

ET Clean Fuels Advisor



A quarterly publication of the East Tennessee Clean Fuels Coalition

Bringing alternative fuels and hybrids to the forefront. Alt fuels = biodiesel, electricity, ethanol, hydrogen, natural gas and propane.

Northington Energy Selects Morgan County

What could be East Tennessee's first three million gallon per year biodiesel manufacturing facility is slated to begin producing next May. Northington Energy has selected Morgan County as its production site and is looking forward to being a reliable, quality biodiesel producer for East Tennessee.

The company sprang from a Wyoming-based corporation that was looking for investments in bioenergy and wanted to find a way to help a distressed community. Several of the staff received their degrees from the University



"The thing we were most excited about is bringing people back to work in a green industry, but I think the objective from the beginning has been to help a county that has agricultural potential (as a partner) and needs agricultural support to realize that potential," says Director of New Business Developments Lisa C. Horn.

Northington will be using southeastern U.S. virgin soybean oil to begin but realizes that other raw materials will need to come into play later on. The company wants to see those resources produced in Morgan County.

of Tennessee and--while looking for good locations--thought of East Tennessee. Some investigative work into potential sites in the region led to an introduction to Jerri Johnson with the Morgan County Chamber of Commerce, who helped make several other introductions around the county. What resulted was a partnership between Northington Energy, the Morgan County Chamber, the Morgan County Economic Development Board, County Executive Becky Ruppe and the UT Agricultural Extension service agent for Morgan County.

The facility sits on about six acres in an industrial park that was created expressly for housing greener industry. "It is a perfect fit for us," says Horn.

Northington became the anchor tenant and purchased the two largest lots in the park. The company's facility comprises roughly 12,000 sq ft of enclosed space.

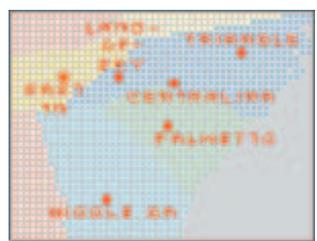
The green park, called Flat Fork Business Park, was created by the Tennessee Valley Authority. Northington will employ about 20 technically trained staff as it ramps up production over the next three years to six million gallons per year. Northington plans to invest roughly \$3 million dollars in Morgan County over the next five years. Company representatives are speaking with several East Tennessee clients for direct sales to end-use customers once production begins next year.

County Executive Ruppe says, "That a little county like Morgan could be one of the first to produce this fuel in East Tennessee that will help us reduce foreign oil dependence and move farmers from Morgan that are now out of the tobacco business back into making a useful product for local consumption is just wonderful."

Six SE Coalitions Win \$586,000 DOE Award

A team of six southeastern U.S. Clean Cities coalitions has been awarded DOE Clean Cities program funding for building public refueling infrastructure for biodiesel and ethanol.

The team included leader Triangle Clean Cities of Raleigh, Centralina Clean Fuels of Charlotte, and Land-of-Sky Clean Vehicles of Asheville, North Carolina; Palmetto State Clean Fuels of South Carolina; Middle Georgia Clean Cities of Macon, Georgia; and the ETCFC.



The grant is positioned to bring 17 new E85 pumps and 12 new B20 pumps into the four states. Of those, several will become stations that offer multiple biofuel pumps.

Ross Benton of Benton Oil played a key role in bringing the other two stations to fruition. One E85 pump will be off of exit 11 on I-75 in Ooltewah. The remaining station will become East Tennessee's first combined E85 and B20 station and will be near downtown Cleveland.

Of the remaining pumps, four E85 and two B20 pumps will be placed in Georgia, five E85 and seven B20 pumps will open in North Carolina, and six E85 and one B20 will open in South Carolina. The project team estimated that more than 2 million gallons of oil would be displaced annually by the pumps.

The project wouldn't have succeeded without the leadership of Tobin Fried of the Triangle Clean Cities Coalition who pushed the team to apply for the award and provided most of the final document writing and assembly. Her eye for concisely reducing a lot of information into an easy-to-read summary is probably what put us over the top. Thanks Tobin!

Inside this Issue

Northington Energy Selects Morgan County	1
Six Southeast Coalitions Win \$586,000 DOE Award	1
DC American Lung Association Forum Focused on Alt Fuels	2
Regional Coordinators Meeting Informative	2
East Tennessee AFV Odyssey a Breeze	2
Gerdau Ameristeel in Knoxville Takes First Bio-Step for U.S. Operations	3
Coordinator's Corner - Addicted to Oil's Price	3
Used Diesel for Sale!	3
Biodiesel Production in Tennessee Summary - Fall 2006	4
Elise Miller Joins the ETCFC Staff	5
Alt Fuel News & Notes	5
Biodiesel Workshops Making	

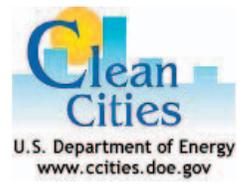


American Fuels Checklist:

2007 is just around the corner and we very much need your help to continue our efforts! Please consider joining the ETCFC; see p. 5.



This project is funded (in part) under agreement with the State of Tennessee Dept. of Transportation.





DC ALA Forum Focused on Alt Fuels



Dr. Anthony DeLucia joins Overly in a picture from the 2005 East Tennessee Environmental Conference.

Contributed by Tony DeLucia (an ETCFC board member). Biofuels 101 might be an adequate description for the intensive one-day meeting hosted in Washington, DC on September 8, 2006 by the American Lung Association entitled "Air Quality and Alternative Transportation Fuel Forum." Speakers topics ranged from supply side to standards, with schools thrown in for good measure, so the day was full of interesting and challenging information. Among the highlights was the discussion of transportation strategies for emissions reductions. Clean diesel programs will remove 20 million tons of particulate matter over their lifetime, saving an estimated \$5 billion in health-related costs. The National Clean Diesel Campaign, with focus on school buses, ports, construction, agriculture, and

freight, was emphasized.

Clearly, a number of Lung Associations were showing interest for good reason. In the Midwest, agricultural products are a key factor, in the Southwest, growing population makes freight, off-road diesel, etc., a source of fine particulate matter, while in DC, highly vulnerable populations such as children and minorities have been identified vis-à-vis standard diesel emissions. For the upwards of one hundred in attendance, including Tony DeLucia, Ph.D., East Tennessee State University, and former national Chairman of the American Lung Association, representing ETCFC, the challenges are worth addressing. Contact Tony at 423-534-1881 for pdf's of the presentations.

Regional Coordinators Meeting Informative

Almost half of the coordinators for Clean Cities coalitions across the U.S. (about 40) gathered in Indianapolis in early November to share information and get updated on national issues.

At these meetings, which are held either annually or biennially, presentations are made by coordinators providing an oversight of what they are working on including newer and on-going initiatives. What is working, and what is not working, is reported. Additionally, presentations and reports are made by DOE Clean Cities officials and industry partners to provide up-to-date information on AFVs, alternative fuels and grants and projects.

This meeting included a half-day tour of 1) a local refueling station that offered several blends of biodiesel and E-85, 2) a Bunge oilseed processing facility and 3) a biodiesel production facility.

The biodiesel production facility was Integrity Biofuels in Morristown, Indiana who does in-line test-



ing of the fuel, helping them do a better job of managing fuel quality and reducing losses.



Top: A coordinator presents. Bottom: Hamilton Co-op General Manager Jim Crouch shows Greater New Haven (Connecticut) Clean Cities Coordinator Lee Grannis the biodiesel blending pump (B5, B10 and B20 are offered).



Top: Scott Curran explains how UTK's hybrid/B20 Chevrolet Equinox works. Middle: Joe Coker of EnviroGard shows off his propane-powered mower. Bottom: Mark Ladd shows the crowd how to ride a Segway. Biodiesel and flex-fuel vehicles are in the background.

East TN AFV Odyssey a Breeze

Yep... it was a windy day, but it could have been much worse with a forecast of rain, which we didn't get! We ended up with well over 150 attendees and a great showcase of AFVs, which is what the whole event was about. One local school, Cherokee High School, brought a bus load. They brought a lot of interest, too!

18 alternative fuel vehicles (AFVs) ranging from a bi-fuel, extended range CNG pick-up to neighborhood electric vehicles to GMC Yukons were on-hand for people to see and learn about.

The Odyssey was held in Kingsport on October 12 at the Toy F. Reid Employee Center at Eastman. Eastman not only donated space for the event but also 1,000 gallons of B20 for regional

folks to try... for free! Old Mercedes diesels came in droves to learn about biodiesel and its benefits.

All attendees received goody bags that included information on basics about alternative fuels, what the ETCFC is doing in the region and national information on the Odyssey.

At 4pm that day, a press conference was held where six new regional biofuel efforts were unveiled ranging from several biodiesel initiatives to the upcoming availability of funding to open public B20 and E85 stations in Sullivan and Washington Counties. Kingsport Mayor Dennis Phillips was on-hand and announced Kingsport's starting the use of biodiesel at the city's construction landfill. "We're happy to get this project started and begin working toward making biodiesel a regular part of the fuel mix in Kingsport," said Phillips.

Collectively, the event and new initiatives showed that biofuels are gaining a stronghold in the Tri-Cities area.





Coordinator's Corner

Gerdau Ameristeel in Knoxville Takes First Bio-Step for U.S. Operations

Contributed by Bruce Parker.

October 18 marked the start of a new era in conservation of resources and focus on the environment for Gerdau Ameristeel's Knoxville Mill. Our first load of biodiesel, for use in the off-road diesel-powered equipment in the mill, was delivered by Kelso Oil Company that day and went into use immediately. We are starting off with a mix of 5 percent biodiesel and 95 percent diesel, known as B5.

Biodiesel is diesel that is produced from vegetable oils rather than petroleum-based products, and has the additional benefits of being much lower in many forms of pollutants. It is lower in sulphur, produces less particulate matter in the exhaust, and is completely biodegradable. The exhaust smell has also been described as much less objectionable, since it smells like a deep-fryer in operation. All of these factors should help us be a better, more ecologically responsible neighbor within our community.

Having a personal interest in biodiesel myself via running it in my own vehicles, I was able to get the ball rolling with Gerdau Ameristeel by introducing the idea of using it in our diesel equipment to my boss Arlan Piepho (our forward-thinking plant manager). Arlan liked the idea so we followed that up by creating a team including our buyer, some environmental personnel, several mobile equipment mechanics, and others who are conscious of the project's value to our plant and community.

It is a further milestone in that we are the FIRST of Gerdau Ameristeel's North American Plants to adopt this as an alternative fuel, but hopefully not the last. The Knoxville Mill has proven itself a leader in responsibility within our community, now we can help lead the way throughout our North American Division.

Gerdau's corporate offices have expressed great interest in this effort. Myself and the rest of our team are working to educate them to the advantages and benefits in all areas of the use of biodiesel. This is an on-going effort as Gerdau Ameristeel works to insure their continuing economical and ecological harmony within the community and surrounding areas.

Addendum by Jonathan Overly – This is the first known use of biodiesel in a railcar application in the south-eastern U.S. Other areas of the country have projects on-going of biodiesel in diesel rail systems, but not here! Congratulations Gerdau Ameristeel for taking a leading role in helping this fuel gain ground in rail systems in the southeast!

GA Vehicles Now Using B5

Top to bottom: One of the two switch cars they operate onsite to move raw material around the site; a Track Mobile; a Caterpillar backhoe; and a Caterpillar loader.



Addicted to Oil's Price

There is no doubt that we consider petroleum the gold standard when it comes to transportation fuel pricing. And that's rational thinking, considering we basically have used no other transportation fuels in significant quantities since...well, since we started using substantial quantities of "rock oil" in the U.S. in the 1950s.

I chose this quarter's topic after speaking with a couple of regional fleet operators who say, "we can't pay any higher prices for fuel." I understand where they are coming from but don't see a lot of vision, considering how much flexibility there is in what they rely on as their fuel price standard. Consider, for instance, that they were paying \$2.70 for fuel six months ago and are now paying \$2.20. Blending in an alternative fuel would affect fuel costs to a much smaller extent than the frequent—and often dramatic—rise and fall of petroleum prices over the past several years... and that doesn't include the offsetting savings that can come from fuel and other cost savings!

How do we break that "oil's price is the standard" mindset? Many will say that you can't debunk it until the world's reserves of oil are basically tapped out or until consumption drives pricing much higher than it is today. But I refuse to agree with that assessment, and actions by regional fleet managers show that that is not the only way to view fuel pricing.

I would agree that there is an upper limit in terms of how much more consumers will pay above current petroleum prices, but what about the periods when the alternative fuels cost less? Why not set your business up so that you can take advantage of that up-front savings when it exists? If you are not using an alternative fuel, then you are not prepared to access that savings.

One of the main issues here boils down to full-cost accounting. You can start a pilot program and watch for current or future costs savings; you just have to know what to watch for. Fuel economy increases and engine oil cleanliness (potentially extending changes) are just some of the potential gains that can result from converting to cleaner fuels.

Used Diesels for Sale!

Thanks to our relationships across East Tennessee, we will start placing some ads for used diesels in this space. The organizations we are working with have agreed to provide the ETCFC \$100 per vehicle sold, so make sure and mention you saw them here to support the ETCFC!

Doug Campbell -- Contact him at <DougCampbell999@hotmail.com>

1. 1984 VW Rabbit-L 93K original miles, 5 sp., white w/ red interior, 2 doors - \$3,300
2. 1981 VW Rabbit Pick Up Truck, 150K miles, 5 speed - \$3,500





Biodiesel Production in Tennessee Summary - Fall 2006

The following information is a late 2006 snapshot of the constantly growing biodiesel production picture in Tennessee. We have done our best to provide accurate, up-to-date information for our readers by contacting the producers to clarify where they stand in getting into this market. [KEY: gy = gal/yr; M = thousand; MM = million; n/a = not available --- Dots - solid = currently producing; open = under construction or planned]



Agri-Energy, Inc. - Lewisburg, TN (Marshall County)
 Capacity, plant size, feedstock = 5 MMgy, n/a, virgin soybean oil
 Production start date = 2/21/06
 BQ9000? = No
 Contact = Michael Tarr, 800-396-6030

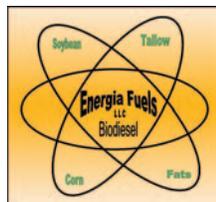
Alabama Bioenergy, Inc. - Bridgeport, AL (Jackson County)
 Capacity, plant size, feedstock = 10 MMgy, 10,000 ft², virgin soybean oil
 Production start date = 1/07
 BQ9000? = Intend to work on
 Contact = William Freeman, 931-212-6003

BioPowerUSA, LLC - Knoxville area
 Capacity, plant size, feedstock = 5 MMgy, n/a, multiple feedstocks
 Production start date = 9/07
 BQ9000? = Intend to work on
 Contact = Mark Troupe, 865-566-0292;
 www.biopowerusa.com



Biofuels of Tennessee - Decaturville, TN (Decatur County)
 Capacity, plant size, feedstock = 10 MMgy, 7,000 ft², virgin soybean oil
 Production start date = 1/07
 BQ9000? = Intend to work on
 Contact = Denny Broadway, 731-549-6765

Energia Fuels, LLC - Greenfield, TN (Weakley County)
 Capacity, site size, feedstock = 50 MMgy, 28 acres, virgin soybean oil
 Production start date = To be determined
 BQ9000? = Will be certified
 Contact = Bill Perkins, 731-364-9858



FreedomBiofuels, Inc. - Madison, TN (Davidson County)
 Capacity, site size, feedstock = 12 MMgy, 3 acres, virgin soybean oil (future multi)
 Production start date = 12/1/06
 BQ9000? = Intend to work on
 Contact = Mark Faulkner, 615-865-0774; www.freedom-biofuels.com

GS Agrifuels Corp. - Memphis, TN (Shelby County)
 Capacity, site size, feedstock = 10 MMgy, 160,000 ft², animal fat
 Production start date = Q3/07
 BQ9000? = Intend to work on
 Contact = David Cantrell, 706-490-1986; www.gs-agrifuels.com



Memphis Biofuels - Memphis, TN (Shelby County)
 Capacity, site size, feedstock = 50 MMgy, 17 acres, multiple feedstocks
 Production start date = 11/06
 BQ9000? = Have applied for; will go through audit shortly
 Contact = Brandon Shelley, 901-452-2107; www.memphisbiofuels.com



Milagro Biofuels of Memphis - Memphis, TN (Shelby County)
 Capacity; plant size, feedstock = 5 MMgy; 28,000 ft², virgin soybean oil
 Production start date = 10/6/06
 BQ9000? = Under consideration
 Contact = Diane Miller Mulloy, 615-714-7794; www.milagrobiofuels.com



Northington Energy - Wartburg, TN (Morgan County)
 Capacity, plant size, feedstock = 1 MMgy, 12,000 ft², virgin soybean oil
 Production start date = 5/1/07
 BQ9000? = Intend to work on
 Contact = John Brichetto, 800-851-1288; www.northingtonenergy.com



NuOil, Inc. - Counce, TN (Hardin County)
 Capacity, plant size, feedstock = 6 MMgy, 30,000 ft², virgin soybean oil
 Production start date = 11/05
 BQ9000? = Are working toward
 Contact = Ricky Sowder, 731-689-0391



Tennessee Bioenergy, Inc. (Plant 1) - Summitville, TN (Coffee County)
 Capacity, plant size, feedstock = 2.5 MMgy, 6,000 ft², local yellow grease
 Production start date = 3/06
 BQ9000? = No
 Contact = Richard Onderka, 931-728-6580



Tennessee Bioenergy, Inc. (Plant 2) - Manchester, TN (Coffee County)
 Capacity, plant size, feedstock = 6 MMgy, 6,000 ft², virgin soybean oil
 Production start date = 2/07
 BQ9000? = Intend to work on
 Contact = Richard Onderka, 931-728-6580



Elise Miller Joins the ETCFC Staff

Through perserverance on the part of John Harris, program director for the Knoxville/Knox County CAC Americorps Program, the ETCFC now has more than one staff person!

Enter Elise Miller, Americorps member extraordinaire, who started working with Overly in August.



Now working for about 4 months, she has really started having an impact that is helping us improve monthly meetings' and biofuels workshops' attendance. She is also doing a great job helping us reach out to regional fleets to discuss the option of them using alternative fuels, and working on several of the education projects that the ETCFC is tackling.

"Finally," says Harris. "I've been trying to tell Jonathan that it would be an investment he would see a good return on. I think he's starting to believe me now."

Harris and Overly are already discussing expanding the ETCFC Americorps team to two members for 2007-2008. If they are able to do so, the positions will likely have more focus and take on specific facets of what the ETCFC does. Examples could include work on idle reduction, fuel economy, low bioblends, or perhaps focusing solely on education. There are many opportunities to move alternative fuels education forward in East Tennessee.



The state wildflower - The Passion Flower - growing wild in Blount County. Picture taken by J. G. Overly on 9/3/06.

Alt Fuels News & Notes

ETHANOL CAPITAL FUNDING - This company focuses solely on financing long-term debt for ethanol, biodiesel and bioenergy production facilities. They typically work with entrepreneurs who need small production (<50 million gals/yr) funding but can work with any size producer. They understand our position, and as such will provide a return to the ETCFC for any company that works through them to secure funding. Contact Overly for more info.

EAST TN REGIONAL MEETINGS - The regularly scheduled meetings held in Knoxville, Chattanooga and Kingsport are starting to make a bigger impact, and it works two ways. New connections elsewhere are bringing new folks to the meetings, and attendees to the meetings are connecting to other actors for change in the area. Forward progress

through networking is a key way the ETCFC serves East Tennessee.

SEAFF TENNESSEE-ONLY CALLS - The Southeast Alt Fuels Task Force has begun Tennessee-only calls where we have a chance to discuss alt fuels issues statewide. We'd like more of you to join us on the calls! If you'd like to join in the discussion, please let Overly know at jgoverly@utk.edu.



Attendees at a recent Knoxville meeting share a laugh.

Biodiesel Workshops Making Connections

Through November 2006, two of the ETCFC's three biodiesel workshops has taken place in Tazewell and Cleveland.

The Tazewell workshop saw about 15 attend while the Cleveland workshop reached roughly 40. The greater turnout at the Cleveland workshop can be directly connected to having Elise Miller on-board. Not only did she help by contacting several regional chambers of commerce, she also directly contacted businesses in the four county area that we were largely targeting for the effort: Bradley, Polk, McMinn and Hamilton. Advertisements in four regional papers also helped draw the larger crowd.

Attendees at the Cleveland workshop came from as far away as Lawrenceburg, Tennessee, which is about 150 miles west of Cleveland.

The topics cover everything from why use

biodiesel to many specifics including production, distribution and how its use can save fleets money.

The final workshop occurred on December 13 in Crossville at Cumberland Mountain State Park. About 40 attended this workshop as well.



Ricky King of Lodge Manufacturing relays his fleet's experience with (and determination to use) biodiesel.

Join the ETCFC

The ETCFC works hard to simultaneously reduce foreign oil dependence and improve East Tennessee's air quality by putting alternative fuels to use in the transportation sector.

This work is vital to our country as there will be a world oil peak in the coming one to two decades, and renewable-sourced hydrogen as oil's replacement is no where near ready for prime time. Additionally, this work is vital to East Tennessee, as our air quality problems are serious and we have to start creating more local action to make a difference.

If you'd like to get involved, come to one of our monthly meetings and hear straight from the users' themselves how local fleets and individuals are making the switch. Go to our Web site, www.ETCleanFuels.org to see when and where monthly meetings are held.

Also, consider supporting our effort by becoming a partner! Membership has many benefits, and includes receiving the ETCFC newsletter, *ET Clean Fuels Advisor*, free! You can join online, or download our membership form to mail in. You are a critical piece of our success!

PARTNERSHIP LEVELS (annual dues)

Founding Partner	-	\$4,000
Platinum Partner	-	\$2,000
Gold Partner	-	\$1,000
Silver Partner	-	\$500
Associate Partner	-	\$200
Supporting Partner	-	\$25

The Supporting Partnership level is reserved for nonprofits and individuals.

East Tennessee Clean Fuels Coalition
311 Conference Center Building
Knoxville, TN 37996-4134
865-974-3625 :: 865-974-1838 fax
jgoverly@utk.edu
www.ETCleanFuels.org

Nonprofit Organization
U S Postage
PAID
Permit #138
Knoxville TN



You can now join the ETCFC online!
Please join or renew your membership today.



Partners' Winter Update

GottaLook Media on Biodiesel - GottaLook contacted the ETCFC wanting a partner in biodiesel use and promotion. We were happy to oblige! They are refueling their fleet of vehicles with publicly available B20 and promoting it with small notes on each truck. In addition, the ETCFC is currently advertising on their front panel.

Bradley-Bledsoe Farmers Co-op - Darrell Clark has done it again: all the on-road diesel at the Bradley Co-op is now B5. Clark came from the Sevier Co-op where he instituted the same switch two years ago. Thanks in part to Clark's leadership, five East Tennessee co-ops now offer biodiesel and four more are working on it.

Kelsan - Kelsan of Knoxville has begun fueling their fleet of service vehicles with B20. That started in August with three vehicles and all feedback thus far is positive. They fill-up at one of the two Knoxville Regal Fuels B20 pumps.

First Phill for Tennessee in the Works - Don Jones of Knoxville has purchased a dedicated compressed natural gas van and is working on getting a Phill system installed in his home for refueling. The system is a small time-fill system that operates by using home-supplied natural gas and compresses it directly into the vehicle fuel tank. An overnight fill



can typically provide 100-150 miles of operation for the next day.

David Doane of the Inst. for Public Service at UTK - IPS had a booth at the Tennessee County Services Association's Fall Conf. & Trade Show held in Knoxville on October 25-27. Doane says, "Coalition and biodiesel information were provided to 22 county commissioners that were in attendance. Questions like 'do I have to change anything to run biodiesel' were answered."

Biodiesel Co-op Getting Started in Cleveland/Athens - About 6-7 biodiesel enthusiasts in south-east Tennessee have started meeting to figure out how they can get a biodiesel cooperative started. ETCFC members Don Bindrum, Mark Mauss and Bruce Parker are part of the group and are keeping us abreast of their work.

**ETCFC
2006
Partners**



Founding Partners
Oak Ridge National Laboratory
Eastman
Blount Chamber of Commerce
Sevier Transportation Board
University of Tenn., Knoxville

Platinum Partners
Knoxville Utilities Board
AAA of East Tennessee
Benton Oil Service

Gold Partners
Knoxville Area Transit
Jo-n-Bo Construction Co.
Harvey Abernethy
Bush Brothers & Co.

Take Action Today!
See p. 5 on how you can
become a partner in fighting
our nation's oil addiction.