

East Tennessee 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.

ALCOA Takes Big Step with 550 Vehicles on B20

The Aluminum Company of America (Alcoa) plant in Alcoa, Tennessee moved 550 vehicles and pieces of equipment to using B20 on November 1, 2004.

A five-member team reviewed biodiesel over a six-month period and made the decision to move ahead with the project. Craig West, a staff environmental engineer with Alcoa at this facility, the Rigid Packaging division of their Tennessee operations, notes "the first things that we had to review were the availability of the fuels and the potential to use the fuel in the vehicles we had, and also to determine whether or not there would be warranty issues."

After a fair amount of research and conferring with one another and others that use and supply biodiesel, Alcoa decided to move ahead with the project. "We decided early on that we were either going to do it in all our diesel vehicles or we just weren't going to do it," says Michael Infante, Director of Community Relations for the facility and one of the five member team working on the project. "Based on what we learned, it simply seems like the right thing to do from a community perspective and from a national energy dependence perspective," adds Infante.

McNutt Oil of Maryville won the fuel supply contract, which is for a three year period. Pete Gale, Vice President of McNutt says "Obviously were pleased to get the bid, but more importantly it helps us continue to expand our work in getting biodiesel in use in the community. Alcoa will be a good partner for us."

In concert with McNutt Oil and the ETCFC, Alcoa plans to do more work to let local citizens know what



A crucible carrier transports a load of molten aluminum to the ingot-forming area at the Alcoa South Plant. Alcoa has about fifteen different types of diesel vehicles running B20.

is going on, and that they too can get involved. "We are making steps to begin some advertising, and probably placing some signage around our facility to let folks know that we are stepping up our efforts to contribute to improving local air quality, and that they can do so too by visiting McNutt Oil's public B20 station," says Infante.

Alcoa's move is a significant step toward reducing air pollution in the Tennessee valley. Not only are they helping lead the way for broader use and acceptance of biodiesel, but using just a B20 blend produced a 10-20 percent reduction in almost all pollutants including ozone-forming emissions, particulates and sulfur compounds.

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Benton Oil Opens B20 Pump in Chattanooga

This last Fall, Benton Oil, a tri-state fuel provider located in Chattanooga, took an interest in biodiesel.

"We started hearing things about it through our fueling networks, and started researching it some," says Ross Benton, President of Benton Oil. "We got in-touch with U.S. Biofuels in Rome, GA, and spoke with Greg Hopkins. While learning some things from Greg, he said we needed to contact Jonathan (Overly) at the ETCFC if we planned to do much with biodiesel here."

Soon thereafter, Benton was talking with the ETCFC and attending regional meetings in Chattanooga. It only took Benton and some of his staff a couple of weeks to decide that this was something that they liked, that they could get started in the region.

"There seems to be quite a bit of activity regionally with biodiesel, and the Chattanooga market and area is ripe for such a fuel" notes Benton.

Benton Oil filled a 12,000 gallon tank with B100. Now they are providing B20 to the public through their Midnite Oil station (see caption) and are ready to deliver any biodiesel blend to regional fleets as well.



Benton Oil's "Midnite Oil" public station, where they offer B20, is located at 4831 Bonny Oaks Drive about three miles west of I-75 (take exit #7). Their main facility is next door.

Certainly last but not least, they are looking at putting B100 at their new terminal. Says Benton, "as we expand our operations, we're just adding biodiesel to our offerings for regional fuelers. We are happy thus far with what we see in opportunities with biodiesel."



Clean Fuels Checklist:

Be part of the solution, not the pollution.

Check out the ETCFC Website
www.etcfc.org



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





ETCFC '04-'05 Steering Committee

Our Steering Committee is made-up of nine members from a variety of organizations and areas in East Tennessee. Each member serves a 3-year term.

The 2004-2005 Steering Committee for the ETCFC is:

- Doug Bishop - City of Sevierville
- Teresa Cantrell - Great Smoky Mountains National Park
- Bob Colby - Advanced Transportation Technology Institute
- Barry Greenberg - Knoxville Area Transit
- Dejim Lowe - Tennessee Valley Authority
- Dan Pursglove - Interested Citizen
- John Trollinger - McNutt Oil
- Parks Wells - Tennessee Soybean Promotion Council
- Carla York - SAIC

Sevier Farmers Co-op Moves to B5

In a first for the state of Tennessee, the Sevier Farmers Co-op has made all their on-road diesel a B5 blend. All of the on-road diesel offered at their location (321 Main St., in downtown Sevierville) contains 5 percent biodiesel.

Darrell Clark, CEO of the Co-op, says he would have done it sooner if possible, but needed to find the right partner. Clark says, "The day Mike (Ellis) came through the door and said let's talk about biodiesel, I said 'Where have you been? I've been waiting for you!'"

Clark and Ellis, of Clinch River Valley Energy Group (CRV), have been trying to find the right way to start the Co-op's biodiesel program for about the past six months. In November the plan gelled with the news of CRV's forthcoming "AmeriDiesel," their biodiesel that is now produced in northern Georgia.

CRV's product is going into use in several locations and fleets immediately, including most of the fleets that Calloway Oil (their distributor) supplies.

The Grand Opening for the Co-op was held on January 4. County Mayor Larry Waters and other lo-



Darrell Clark and Mike Ellis stand in front of the Co-op's new B100 tank displaying the "AmeriDiesel" logo.

cal officials joined in the grand opening and congratulated Clark on his move.

The Co-op has roughly 2,000 members that fuel there, including fleets like the City of Sevierville and Sevier County Utility District.

KUB Works on Multiple Alt Fuel Projects

Knoxville Utilities Board (KUB) is making headway with several alt fuel projects.

Through their Clean Air Action Team (CAAT), KUB's interdepartmental effort to develop clean air initiatives within the company, their first pilot project is using biodiesel as B20 in select KUB vehicles. This project began in mid-December. Ten vehicles in all, five from KUB's Overhead Construction work group and five from its Underground Construction work group, will be utilized in the project.

During the pilot project, KUB will compare several facets of the B20 vehicles' operation to those of their diesel counterparts to determine the potential for using B20 in more of KUB's diesel vehicles and equipment.

Another potential project that was approved as a part of the CAAT program and is being considered is the use of ethanol for KUB's smaller fleet trucks. Since they already use CNG in many vehicles, that could put them at three alt fuels total! **Go KUB!!**



A KUB representative stands in front of one of their bi-fuel CNG trucks at the 2004 Odyssey.

Tri-Cities & Chattanooga Meetings Update

With the assistance of Eastman in Tri-Cities, and Benton Oil and ATTI in Chattanooga, we now have regularly scheduled meetings setup for our two regional "districts" for 2005.

There will be 6 meetings in each district in 2005, each meeting occurring every other month. The meetings will all occur on the first Friday of the month following this schedule: Chattanooga - Jan. 7, Mar. 4, May 6, July 1, Sept. 2, Nov. 4; Tri-Cities - Feb. 4, Apr. 1, June 3, Aug. 5, Oct. 7, Dec. 2. The locations have also been selected and are the Ming Garden Restaurant in Kingsport and the CARTA Conference Room in Chattanooga.

Eastman's renewed interest in biodiesel and interconnectedness to the northeast Tennessee community will be a big benefit to the collective ETCFC effort in 2005. We are very pleased to have them back at the alt fuel table!

Benton Oil, who really jumped in once they started learning about biodiesel and what was going on in the community, is helping us jump-start activities in the Chattanooga region. They've opened a public



Darren Curtis of Eastman addresses the crowd of 25 at the December 3 Tri-Cities District meeting in Kingsport.

B20 station (see page 1) and are ready to supply any biodiesel blend to customers in their service area, which covers three states!

For now in both places, the main topic will be spreading the use of biodiesel. Anyone in attendance can bring up other topics that they think the group should discuss.



For more information on the ETCFC and alternative fuels, and to see pictures of other regional projects, visit us online at www.ETCFC.org.



Jonathan Overly's

Coordinator's

Corner

2005 Run for Clean Air and Earth Fest Taking Shape

Through the hard work of Ted Buel, race director for the Run for Clean Air, preparation for the 2005 event is well underway.

The event will be held Saturday, April 9, 2005 at Cherokee Boulevard (same location as last year), and will start at 9am. Registration will begin onsite at 8am; we are working on online preregistration.



"We are looking for volunteers to help out that day, so anyone who wants to get involve with this great community event just needs to get in-touch with us," says Buel. Contact Buel at 865-584-8543 to get involved and help out. For more information, check out the Run for Clean Air Web site at <www.RunforCleanAir.org>.

Earth Fest 2005 will follow closely on the heels of the Run for Clean Air this year. The event is slated for Saturday, April 23, 2005, and again will be held at the World's Fair Park in downtown Knoxville.



The ETCFC will be on hand and will have a variety of alternative fuel vehicles on display to show community citizens how alt fuels are making a difference in and around East Tennessee.

Plan on attending, or come and volunteer that day! We'll be at World's Fair Park from approximately 9am - 6pm speaking with attendees about our work. Learn more about Earth Fest by visiting their Web site at <www.knox-earthfest.org>.

2005 Membership Drive

The ETCFC strives to diversify its funding sources, but is very dependent on local membership dues to survive. That is why we are asking local companies and individuals who care about regional air quality and national energy independence to consider becoming a partner.

We have six different membership levels (as shown on page 5) that are benefits based, so partners not only help us stay on the ground working for action, but also reap benefits from their partnership.

You can read more about membership on our Web site, www.etcfc.org (the membership form is on our "Join Us!" page), or call us to ask how your action can make a difference in your community.

Please consider joining the ETCFC so you can be a member of the team that is making change in East Tennessee on a daily basis!

Are You an Alternative Fuels' Champion?

It is interesting to look back over the last three years since I started the ETCFC and see the progress of some of our members and their actions. For most, it takes some time to grow in their knowledge and understanding of why alternative fuels support is needed in our community, before they themselves turn into actors.

A couple of examples that come to mind are McNutt Oil, the City of Sevierville and Big South Fork NRRRA. Each of these organizations began attending monthly meetings, asking questions and interacting more with others in attendance before they started their team's alt fuel actions. And each in their own way has become a champion of alt fuels for East Tennessee.

In addition, there are quite a few champions that didn't need the help... they became champions on their own. Examples include ORNL, Knoxville Area Transit, Great Smoky Mountains National Park and Knoxville Utilities Board.

So, what does it take to be an alt fuels' champion? First of all, a sense of awareness in our global, national and regional problems. Without this understanding, it's hard to see why their use is needed. Second, a desire to make change. Most of us want to help out but do not always see a clear path to doing so, or are worried about consequences along the way. Part of the latter is the fear that it could disrupt our businesses or lives too much. In most cases, continued pursuit of a solid education on the topic will most often provide enough clarity to allow us to remove our own worries as a barrier.

That's where the ETCFC steps in. Removing barriers has been a critical component of our work, and that starts with our monthly meetings. They offer a chance to educate and put folks with questions in the same room with folks with answers. Through these meetings, we as a region are on our way, building the critical mass of champions we need in this place we all call home.

So now we've got some alt fuels' champions in East Tennessee. Do we need more? The answer is undoubtedly yes, but over time I believe that as a team, we will show many Tennesseans that alternative fuels are important to our community and our country, and they will become champions. Rose-colored glasses? Maybe. Hard work? Definitely!

Take our biodiesel work as an example. Due to it's ease of use, we were able to create 5 public B20 stations in East Tennessee in 2004, and push B20 consumption to almost 400,000 gallons. That's not a huge number, but it's improvement, and along with that came the building of several biodiesel champions. These champions either opened a station, help provide fuel to a fleet, participated in an educational event, or attending meetings and learned how they could get involved.

The key to our collective success in East Tennessee is building alt fuels' champions across the region.

Are you an alt fuels' champion?





ETCFC Attains Official Designation with DOE

On October 12, 2004, the ETCFC achieved official designation with the U.S. Department of Energy's Clean Cities Program.

The designation ceremony took place on the front lawn of the headquarters of the Great Smoky Mountains National Park, with about 55 people attending. The ETCFC is the 92nd coalition to become designated since the program's inception in 1992, although only between 70 and 80 are active.

Began in early 2002, the ETCFC started with one meeting of about 50 people who decided to get involved in something new for East Tennessee that would support advancing alternative fuels. The obvious first reason was to have another way to work on air quality for the region, but the second--perhaps more important--reason was to begin doing more in East Tennessee for our ever-increasing national dependence on imported oil.

Having just held our 32nd meeting, networking



Marilyn Brown (left) and Mark Downing, both of ORNL, flank DOE designating official David Waldrop as he presents them a certificate for participating in the ETCFC. ORNL has been a Founding Partner in the ETCFC since its inception.

and collaboration are now hallmarks of our regional effort, and keys to our success.

Alcoa Vehicles Now Using B20

Top to bottom: an ingot carrier, a remote control underpot pusher (cleans under molten aluminum vats), the "Trackmobile," a Linde forklift and a CAT loader.



Alt Fuel News & Notes

SOUTHEAST ALT FUEL TASK FORCE UPDATE - We're making progress! Each of the working committees of the SEATFF has created its own work plan and the steering committee is now consolidating those into one overall plan. The Infrastructure Committee, that Jonathan Overly co-chairs, has 2006 and 2010 goals for increasing alt fuels infrastructure across the four states of GA, SC, NC and TN.

ETCFC SCORES BIG AT UT HOME GAMES - At six UT Volunteer home games, the ETCFC reached out and touched somebody... about 200 bodies. With the help of volunteer people (and AFVs), the ETCFC spoke with passersby at Volunteer Landing and showed them the benefits of biodiesel. The ETCFC partnered with B-97.5 and their loading of Volunteer Landing with pregame festivities.

BIODIESEL BRIGADE UPDATE - After really getting started in Fall '04, there are now 15 people

in the Brigade--and we're growing. Check out the Web site to see pictures and stories of those who are participating... and their vehicles!

BIODIESEL AND ETHANOL TAX LEGISLATION PASSES - On Oct. 22, 2004, the President signed tax legislation for both biodiesel and ethanol. The legislation in essence provides fuel cost reductions that make each fuel in its common blend (E85 and B20) cost equivalent to their petroleum counterpart.

ETCFC PARTICIPATES IN UTK'S "ENGINEERS DAY" - With three speakers and two biodiesel vehicles on-hand, the ETCFC joined others in showcasing opportunities for young engineers through the University of Tennessee at Knoxville's "Engineers Day." On the order of 100 students came by and learned about alternative fuels.

UT Knoxville Begins Using Biodiesel

The University of Tennessee at Knoxville has begun using biodiesel at the Steam Plant in the Facilities Services (FS) Department.

Through participating in multiple discussions about environmental action on campus, including but not limited to Committee on the Campus Environment meetings and meetings with the ETCFC, the department helped move the idea to fruition.

"There appears to be a fair amount of activity around biodiesel regionally, and we use diesel in a couple of different ways, so we are trying it ourselves. The University wants to explore conservation efforts where possible," says Terry Ledford with FS.

A loader that is used by Facilities Services at the Steam Plant started running on B20 as of late December 2004.

If satisfied with the performance, and if the price is right, they will look at the possibility of using B20 in other diesel equipment, including other diesel vehicles, of which UTK has around 15-20, and stationary diesel generators.

This comes at a good time for UTK as they are having an Environmental Semester Spring 2005 where they will celebrate the teaching, research, and outreach activities of the University in which concern with the environment, conservation, or sustainable development is a central or significant component.



The Dresser backhoe that is running B20 at UTK. The image in the bottom right is a blow-up of the sticker that is on each side of the vehicle.



Shop Earth Fare... Help ETCFC

Earth Fare is a healthy supermarket chain that serves Tennessee, Georgia and North and South Carolina. They currently have 10 stores, including one located in the Turkey Creek area (10903 Parkside Drive) of west Knoxville.

As a service to their community, they offer "Friends of Earth Fare." This service includes allowing a nonprofit to display information about their efforts through a store front display for one month, and to actually make some money through a renewable bag support program.

Any time a shopper uses renewable grocery bags when they checkout, Earth Fare donates a dime *per bag* to their "Friend" of the month. In January 2005, that friend is the ETCFC.

In addition, they have a community room that local groups can use to host meetings or organize



activities. Through developing a relationship with this Earth Fare, the ETCFC is beginning to partner with them in some ways, including hosting our monthly Knoxville area meetings there and being the "Friend" for January. The December and January 2005 meetings both took place there.

In addition, on two Saturdays in January (8th and 15th), the ETCFC was in attendance from noon until 4pm showcasing alternative fuel vehicles (AFVs) and speaking with shoppers about how alternative fuels' use is growing in East Tennessee.



Join the ETCFC

The ETCFC works hard to simultaneously reduce foreign oil dependence and improve regional 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 century, perhaps within the decade, and renewable-sourced hydrogen as oil's replacement is no where near ready for prime time. Additionally, this work is vital to Tennessee, as our air quality problems are serious and we have to start creating more local action to make a difference.

And we can.

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.etcfc.org to see when and where monthly meetings are held.

Also, consider supporting our effort by becoming a member! Membership has many benefits, and includes receiving the ETCFC newsletter, *Clean Fuels Advisor*, free! More membership information can be found on our Web site as well.

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.

Waste Management of Knoxville First in Company to Move to Biodiesel

Waste Management of Knoxville (WM), which serves about six counties locally, is the first regional division of the national company to move to a biodiesel blend. And it took a team to get there.

Rumblings started through Dan Pursglove, who's daughter, Sandra Tarwater, has worked in the Knoxville office for 10 years. Pursglove, who's been a proactive member of the ETCFC team for about a year now, started talking about biodiesel with Tarwater. Not long after, Pursglove spoke with Mitch Rowan, the District Manager, at a community event.

Then at an ETCFC meeting, Pursglove spoke with Mike Ellis, who represents Clinch River Valley Energy Group (CRV), and relayed that speaking to WM might help.

Ellis contacted Rowan, and from there, it is apparent that both Rowan and Ellis put in time to help the team at WM locally and at the national offices make the decision.

WM plans to begin with B5 in 5 refuse trucks in Knoxville and 5 trucks in Kingsport, then look to expand if no problems are encountered.

Rowan says, "WM is currently operating LNG collection vehicles on the West Coast in an effort to improve air quality in that area, and is even exploring utilizing methane gas from decomposing waste in WM landfills to fuel collection vehicles as well. However, this will be our company's first approved utilization of biodiesel. Considering our local operation consumes in excess of 40,000 gallons of fuel per month, we are excited about biodiesel's ability to make a positive impact on the air quality in the Knoxville and Tri-Cities areas."

Ellis adds "We are really pleased to help Waste Management in this step into using renewable energy in their fleet." The fuel will be supplied through CRV's distributor, Calloway Oil of Maryville.

Biodiesel Consumption in '04 is 90,000 gallons

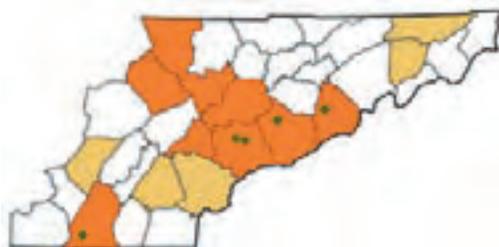
Before January 2004, there was only one person in East Tennessee that was using biodiesel and that was in one vehicle (Mark Downing in his 1984 Silver Volvo Wagon).

Thanks to the collective efforts of many ETCFC partners, that number has increased significantly.

McNutt Oil and Calloway Oil, the region's first two biodiesel suppliers, have sold about 86,000 gallons of B100 combined. Both supply directly to regional fleets and offer biodiesel at their public stations (McNutt at three stations and Calloway at their main office).

In December, Benton Oil joined in prepared to supply biodiesel blends to fleets in three states while opening a public station in Chattanooga. Three other fuel suppliers are currently looking into opening public stations in East Tennessee.

Roughly 10 percent of the consumption was



There are fleets using biodiesel in the dark orange counties; the light orange signifies that fleets in those counties are looking at biodiesel. The five green dots identify public biodiesel stations that opened in 2004.

through public stations, with the remaining 90 percent supplied directly to regional fleets.

Look for much greater increases in regional consumption for 2005!

East Tennessee Clean Fuels Coalition

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Be part of the solution, not the pollution.

Partners' Winter Update

Clinch River Valley Energy Group - CRV has recently completed work with a company in northern Georgia to begin producing their biodiesel product - Ameridiesel. CRV has just recently begun supplying their biodiesel to some regional customers through their distribution partner, Calloway Oil.

Regal Petroleum - Regal Petroleum, a Knoxville-based fuel provider that operates three cardlock stations, is looking to get into the biodiesel business. Working with the ETCFC and the Tennessee Soybean Promotion Board, they submitted two proposals to begin supplying 1) a biodiesel blend to the public and 2) pure biodiesel to tanker trucks at their Proctor Street location. With the main terminal for all fuels for East Tennessee being located approximately 1.5 miles away, this would make it fairly easy for any tanker truck to grab some biodiesel when they go to the main terminal. They hope to know about their proposals by mid-January.

Rogers Petroleum - After following ETCFC actions in the community over the past year, Rogers is getting closer to jumping into the biodiesel arena. They have recently priced biodiesel, with an eye toward possibly moving one of their main tanks

to the fuel. That would open them up to directly providing blends to customer fleets and potentially opening one or more public B20 pumps at their public stations.

2005 Memberships - We've already got several members for 2005 and we are very grateful for their decision to join! Founding Partners include ORNL, Sevier Transportation Board and the Energy, Environment and Resources Center at University of Tennessee Knoxville; Platinum Partners include Eastman and Knoxville Utilities Board; our Silver Partner is Hallsdale-Powell Utility District; and our Associate Partner is Advanced Catalyst Systems, LLC. Thank you one and all!

L'Espace Motorcoach - Having recently learned of the ETCFC effort, L'Espace Motorcoach of Maryville is getting involved. They plan to upgrade their fleet and purchase a full-sized passenger van that will run on biodiesel. They have already begun pushing some press to let folks know that they are getting involved with alt fuels. J. Nathan Higdon, Secretary and Treasurer for L'Espace says "We are pleased to start doing more to help make East Tennessee and the Smokies a cleaner place. This is our home!"



ETCFC 2005 Partners

Founding Partners
University of Tennessee,
Knoxville
Oak Ridge National Laboratory
Sevier Transportation Board

Platinum Partners
Knoxville Utilities Board
Eastman

*Membership information is on page 5.
Please consider joining!*