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# The Alternative Advantage

A Publication of the Centralina Clean Fuels Coalition  
Promoting Clean Fuel Transportation Technologies

## Fleet Managers Workshop A Success



The Plug-in Hybrid Coalition of the Carolinas brought a 100 mpg plug-in hybrid to the event

**Centralina Clean Fuels Coalition** partnered with **Mecklenburg County Air Quality** to host its annual fleet managers workshop on Friday, November 9th. The workshop was held at the **Town of Matthews' Public Works** facility.

Over 30 fleet managers, purchasing personnel and other interested persons attended the event to learn more about air quality and alternative fuels and vehicles. Attendees heard presentations on regional air quality, fuel efficiency, diesel retrofit technologies and biofuel use in fleets. Speakers included **Don Willard, Mecklenburg County Air Quality** and **Jim Poch—Plug-In Hybrid Coalition of the Carolinas**.

During the morning session vehicles, including a **plug-in hybrid, propane mowers and a hybrid-electric bucket truck**, were available for demonstration. The afternoon session featured a panel discussion of participants in a **biodiesel pilot program** spearheaded by Centralina Clean Fuels Coalition last year. During the panel discussion, representatives from Gaston County Landfill and the Town of Matthews fielded questions on their experiences, challenges and continued success with using biodiesel.

All presentations and materials presented at the workshop are available at [www.4cleanfuels.com/events.asp](http://www.4cleanfuels.com/events.asp)

## What's Next for the Centralina Clean Fuels Coalition?

Jason Wager and Sarah Niess  
Co-Coordinator

### What's next for the Centralina Clean Fuels Coalition?

The summer and fall has been a busy time for us coordinators. One way we educate people about clean fuels is through events which give us an opportunity to reach a broader audience. In August we hosted a **Biodiesel Quality Workshop** in partnership with the NC BioNetwork BioEd Center at Gaston College. We recently held our **Fleet Managers Workshop** and will be assisting GM and CleanFUEL Distribution with a workshop on ethanol in December. (See details on Page 4). In addition to keeping us busy these events are a very important part of our action planning to **reach our goal** of reducing petroleum use in our region. CCFC is

working to expand our region's alternative fuel community to include new users and technologies. These events **spark ideas and provide an opportunity to share information** with others facing similar obstacles and challenges.

Like our stakeholders, we benefit from interacting with other Clean Cities coalitions nationally. Jason's attendance at the Mammoth Caves National

Coordinator meeting has brought back a flood of ideas from other coalitions to our region. (See details on page 3).

We hope that our stakeholders take advantage of these opportunities and continue to benefit from our alternative fuel community.

*Please contact Jason Wager ([jwager@centralina.org](mailto:jwager@centralina.org)) or Sarah Niess ([snliess@centralina.org](mailto:snliess@centralina.org)) if you would like to learn more about these topics or get involved in the CCFC.*



Biodiesel Quality Workshop

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### ***Core Stakeholders***

Mike Keziah  
City of Monroe  
(Chair)

Mike Allison  
Duke Energy

Henry Bodie  
Blossman Gas

Jim Burke  
N.C. Cooperative  
Extension Service,  
Gaston County

Roger Cable  
City of Gastonia

Alan Giles  
Mecklenburg  
County

Laurence Howell  
UNCC

Terry Moore  
Hendrick Honda

Cynthia Moseley  
NC Energy Office

Laura Mundell  
Centralina Economic  
Development Comm.

Daniel Nuckolls  
City of Concord

Elizabeth Presutti  
CATS

Marcie Smith  
Gaston County Public  
Works Dept.

Ray Thomas  
Thomas Petroleum

Grady Truett  
Gaston County Schools

Rod Trump  
York Technical  
College

Johnny Wear  
Western Piedmont COG

## CCFC Meeting Gets a Segway Demonstration

The September CCFC Core Stakeholder Meeting was a little more than just business as usual. Jim Hollinsworth from the **Charlotte-Mecklenburg Police Department (CMPD)** gave the group a demonstration of a Segway that the department is now using for patrols in the uptown area, in parks and greenways and for special events.

Segways are **battery powered personal transporters** that can be recharged with an ordinary extension cord. Officer Hollinsworth explained that in addition to the environmental benefits, Segways provide police officers with improved crowd control and visibility at events, increased patrol area and improved community outreach. Like with bike patrols, CMPD gives officers a thorough training on how to use the Segways.

Segways allow an officer to move quietly at **2-3 times walking speed** and can quickly ramp up to 12 mph if needed. CMPD purchased 10 Segways and began using them in July. CMPD plans to purchase more Segways for its fleet.



Officer Hollingsworth discusses CMPD's use of Segways (above); Gaston County's Jim Burke takes a Segway for a test ride (left)

CMPD purchased the Segways from **Charlotte Energy Solutions**, a store dedicated to alternative transportation and alternative heating solutions. Charlotte Energy Solutions offers a variety of Segway models for sale. After the meeting several CCFC Core Stakeholders, including Chair Mike Keziah and Jim Burke (see photo), test drove the Segways with everyone getting the hang of it fairly easily.

**For more information on alternative fuel vehicles or if you would like to become more involved with the Coalition; please visit our web site at [www.4cleanfuels.com](http://www.4cleanfuels.com)**

## Regional News and Accomplishments

Around the region our stakeholders have had many successes with clean fuel technologies, here are a few of the highlights:

- ◆ Congratulations to recipients of the second round funding of the Clean Fuel Advanced Technology (CFAT) grants. The **City of Gastonia** (retrofit refuse trucks), **Town of Cornelius** (two NEVs), **Charlotte-Douglas International Airport** (two hybrid buses) and **Thomas Petroleum** (biofuel equipment) all received grant funds in our region
- ◆ **Gaston County Schools** (GCS) expanded its biodiesel production facility and has the capacity to produce up to 1,000 gallons of fuel/day. GCS plans to produce 100,000 gallons of biodiesel which will save the schools \$125,000 in fuel costs.
- ◆ **UNCC** recently installed an **E85 fueling tank** that can hold 12,000 gallons. As part of it continuing effort to reduce petroleum use UNCC plans to purchase 7 more E85 vehicles, including two Tiger trucks.

**Don't forget to regularly visit the CCFC's *Funding Opportunities and Incentives* page at: [www.4cleanfuels.com/funding.asp](http://www.4cleanfuels.com/funding.asp)**

## National Clean Cities Update

In September Coordinators from Clean Cities coalitions across the country met at **Mammoth Caves National Park** in Kentucky for their annual leadership meeting. Centralina Clean Fuels Coalition's Jason Wager, along with **Tobin Fried from Triangle Clean Cities** in Raleigh, attended the week long conference which included tours of the caves as well as a tour of GM's Corvette assembly plant.

The conference featured speakers from **the National Gas Vehicle Coalition, Propane Education & Research Council, Clean Vehicle Education Foundation, GM** and others. In addition to keynote speakers, each Clean Cities coalition had the opportunity to present an update on their activities and accomplishments. Local CCFC stakeholders

**Onyx Environmental Solutions** and **Fleet Biodiesel** were sponsors at the national event. For more information visit: [www.eere.energy.gov/cleancities/toolbox/leadership\\_retreat.html](http://www.eere.energy.gov/cleancities/toolbox/leadership_retreat.html)

At the conference the **Nation Clean Cities** program and the **Alternative Fuels and Advanced Vehicles Data Center** announced the redesign of their collective websites. The **new websites** provide more information and tools to assist fleets in making informed decisions about alternative fuels and vehicles. For more information visit: [www.eere.energy.gov/cleancities](http://www.eere.energy.gov/cleancities) and [www.eere.energy.gov/afdc](http://www.eere.energy.gov/afdc). Please let us know what you think!



Group picture from Mammoth Caves

## Diesel Retrofits—Technology Options for Fleets

The new on-road clean diesel engines significantly reduce emissions thanks to new standards and technologies. The problem is that many fleets will continue to use older diesel vehicles for years or even decades to come before replacing it with a cleaner vehicle. The average lifespan of a heavy duty diesel vehicle is 20-30 years.

### Overview—Technologies

Emission control technologies continue to evolve and improve. Currently, the most widely used emission control technologies include diesel oxidation catalysts (DOCs) and diesel particulate filters (DPFs). Both DOCs and DPFs remove particulate matter in the exhaust stream. DOCs are the least costly retrofit and reduce particulate matter (PM) by 20%. DPFs can reduce

PM by 60-90%, however, the technology is more costly and must be used with ultra low sulfur diesel. Both DOCs and DPFs can be combined with a closed crankcase ventilation system to reduce emissions from the engine crankcase. For more details on retrofit technologies visit [www.4cleanfuels.com/AQ/Diesel\\_Solutions.pdf](http://www.4cleanfuels.com/AQ/Diesel_Solutions.pdf)

### Costs and Funding

Installation of DOCs typically cost \$600-

\$2,000. DPFs cost \$5,000-\$10,000 installed with additional maintenance costs. Estimated costs of close crankcase ventilation systems are between \$400-\$600.



Emissions from older school buses can be reduced with retrofit technologies

### Grants

Retrofitting a fleet can be expensive so grants are an important funding source. In North Carolina diesel retrofits are eligible for both **NC Mobile Source Emissions Reduction and Clean Fuels Advanced Technology** grant funding. In applying for grants it is important to only request funds for EPA verified retrofit technologies. See EPA's list at [www.epa.gov/otaq/retrofit](http://www.epa.gov/otaq/retrofit).

For grant information visit: [www.4cleanfuels.com/funding.asp](http://www.4cleanfuels.com/funding.asp)

For more information on Tax Credits and Incentives visit [www.energy.gov/taxbreaks.htm](http://www.energy.gov/taxbreaks.htm)

## NOT A MEMBER OF THE CCFC?

Call [704.372.2416](tel:704.372.2416) and ask to speak with a CCFC Coordinator or visit our website: [www.4cleanfuels.com/stakeholder.asp](http://www.4cleanfuels.com/stakeholder.asp)

**Get involved.**

## Building a Business Case for Ethanol

CCFC, along with partners **GM, CleanFUEL Distribution and the Clean Fuel Advanced Technology (CFAT) project**, is hosting a workshop for fleets, fuel distributors and retailers called “Building a Business Case for Ethanol.”

The workshop will be held on **Thursday, December 6th at the DENR Regional Office in Mooresville from 12:00—3:00 pm**. The workshop is being held directly after the Department of Environment and Natural Resources (DENR) workshops on the new underground



storage tank regulations.

Attendees will learn about North Carolina ethanol infrastructure requirements, pricing and economics of ethanol distribution, vehicle availability, funding and partnership opportunities.

The workshop is part of a series of similar workshops being held across North Carolina December 4th (Winston-Salem), December 5th (Raleigh) and December 6th (Mooresville). Each workshop will coincide with an ethanol station promotional event.

Space is limited at all the workshops so please register by November 30. There is a \$20 registration fee that will cover lunch.

**For more information and to register please visit “Events” at [www.cleantransportation.org](http://www.cleantransportation.org)**



### Did you know...

The U.S. was responsible for 8% of the world's petroleum production, held 2% of the world's crude oil reserves, and consumed 24% of the world's petroleum in 2006. The Organization for Petroleum Exporting Countries (OPEC) held 70% of the world's crude oil reserves and produced 41% of world petroleum.

For more interesting fuel facts visit: [www.4cleanfuels.com/education.asp](http://www.4cleanfuels.com/education.asp)

### For your information ...

- **Biodiesel One Stop Alternative Transportation Solution**—CCFC recently added a “one-stop” biodiesel page to its website. Information about biodiesel quality, use and distribution as well as examples of other fleets using the fuel are included on the one-stop page. For Additional Information visit [www.4cleanfuels.com/one\\_stop.asp](http://www.4cleanfuels.com/one_stop.asp)

**NEW!**

- **Online Alternative Fuel Station Map**—CCFC has been working on an online interactive mapping tool for alternative fuel stations across North Carolina. Users can find stations by zip code, city and fuel type. Check it out at: [www.4cleanfuels.com/mapping.asp](http://www.4cleanfuels.com/mapping.asp)

### UPCOMING EVENTS:

**December 6, 2007—Building a Business Case for Ethanol**

12:00—3:00 pm

Mooresville, NC (See details above)

**February 3-6, 2008—National Biodiesel Conference & Expo**

Orlando, FL (*more information at [www.biodieselconference.org](http://www.biodieselconference.org)*)



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