

# **Stakeholder Meeting Notes**

May 28, 2015, 9:30-11:30 am

#### I. Welcome and Introductions

Marcy Bauer, eVgo and Triangle Clean Cities Coalition

Coalition Chairperson Marcy Bauer welcomed attendees and reviewed the mission of Triangle Clean Cities Coalition: to advance the Triangle Region's economic, environmental, and energy security by helping to reduce petroleum consumption in transportation. Lacey stated that the Coalition recently celebrated its 15 year-anniversary. Each year, Triangle Clean Cities provides data on petroleum reduction for the Department of Energy's annual petroleum reduction calculations. Last year, the Coalition displaced about 4 million gallons of gasoline, equivalent to 7,500 passenger vehicles or 471 tanker trucks removed from the road.

### Attendees:

Anne Galamb, NCDENR Division of Air Quality Antony Wambui, North Carolina State University Brennan Bouma, Orange County Brian Jones, NC State David Donahue, North Carolina Propane Gas Association Emily Barrett, Town of Cary Heather Hildebrant, Department of **Transportation** Jaz Tunnell, Piedmont Natural Gas Jeff Farlow, Pentair Aquatics Systems Jerry Gunter, City of Greensboro Jerry O'Keeffe, PSNC Energy Katie Drye, Advanced Energy Keith Dimont, Elon University Kristi Brodd, Advanced Energy

Lacey Jane Wolfe, Triangle Clean Cities Coalition Lyle Estill, Piedmont Biofuels Marcus Hackler, Lane Construction Marcy Bauer, eVgo Mark Stark, UNC Chapel Hill Matt Abele, NC Clean Energy Technology Center Matt Wetherell, Town of Cary Michael Boyd, City of Durham Sandy Skholochenko, Chatham County Sonya Gilliland, Chatham County Steve Rice, NC DENR, Division of Air Quality Ray Lowe, Guilford County Ray Pruitt, Elon University Tim Stevens, Stevens Sausage Company Timo K. Pakkala, Capital Ford Tobin Fried, City of Durham Tom Kuryla, Wake County

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Piedmont Natural Gas PSNC Energy Triangle Air Awareness Town of Carrboro Town of Cary Waste Industries Wake County





Tracy Goldberg, Ferrell Gas



#### I. Natural Gas Stakeholder Excellence Award

Presented by Lacey Jane Wolfe, Triangle Clean Cities Coalition

35% of our coalition's displacement from alternative fuels came from natural gas. And that's no surprise, seeing how North Carolina has more public CNG fueling stations than any state in the Southeast – 23! In fact, we have more stations than South Carolina (5), Tennessee (7), and Virginia (5) have combined.

PSNC Energy and Piedmont Natural Gas have been wonderful friends to Triangle Clean Cities Coalition. They often assist us with programmatic work as well as with their own fleet. We so appreciate their support.

#### **Piedmont Natural Gas**

With 84 compressed natural gas vehicles in their fleet in 2014, Piedmont Natural Gas has helped to displace 52,960 gallons of gasoline in the Triangle area alone. This fleet investment has helped to prevent 100 tons of greenhouse gas emissions.

### **PSNC Energy**

PSNC Energy has shown its dedication to alternative fuels through making significant investments in fueling infrastructure and alternative fueled vehicles within their fleet. As of 2014, PSNC had (2) CNG fueling stations and 54 light duty CNG powered pick up trucks, which combined have contributed to a displacement of 40,349 gallons of gasoline. This investment has led to a total reduction in green house gas emissions of 76 tons.

### II. Electric Vehicle Stakeholder Excellence Award

Presented by Timo Pakkala, Capital Ford and Triangle Clean Cities Coalition Vice Chair

Lacey asked each stakeholder to vote for one to receive extra recognition. Lacey invited each stakeholder to provide a quote about the Triangle Clean Cities Coalition for the program's Twitter feed: @trianglealtfuel

### **Advanced Energy**

Advanced Energy is a great advocate of electric vehicles. We enjoy working with them to promote and support electric vehicle charging at workplaces in the Triangle Region. We collaborated with Advanced Energy to film a great workplace video, coming soon. Through their outreach activities and consumer usage study, Advanced Energy displaced about 16,094 gallons of gasoline in 2014. This is an exciting time for electric vehicle deployment in North Carolina.

#### City of Durham

Through their use of alternative fuel vehicles, electric vehicles, fuel economic improvements, and idle reduction policy, City of Durham displaced about 43,615 gallons of gasoline. They are committed to anti-idling program. Their idling reduction policy has been effective since 2012 and we estimate that this program reduced about 19,116 gallons of gasoline last year.

# **Durham County**

Durham County has been dedicated to reducing emissions through the adoption of electric vehicles and idle reduction technologies within their fleet, and through their idle reduction policy. In 2014, we estimate that the county has reduced greenhouse gas emissions by over 1,400 tons along with offsetting 118,378 gasoline gallons equivalent of fuel.

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### **Elon University**

Elon University is a new stakeholder but a long-time supporter of alternative fuels. In 2014, Elon operated vehicles on both biodiesel and electricity. This investment has led to a total reduction of 17,271 gasoline gallon equivalents and prevented 129 tons of green house gas emissions.

### **Guilford County**

Guilford County was a partner in the Carolina Blue Skies Initiative years ago. They deployed five hybrid vehicles, which continue to travel many miles each year. In 2014, they traveled an average of about 20,000 miles – excellent utilization. Their total displacement for those vehicles was about 2,300 gallons of gasoline.

### **Orange County**

In 2014, Orange County operated their eight electric vehicle charging stations that were installed via the Carolina Blue Skies Initiative. The county also replaced vehicles with more fuel-efficient ones, realizing cost savings and reduced environmental impacts for the region. Through this deployment, the county has displaced 3,300 gallons of gasoline.

### **Pentair Aquatic Systems**

Pentair Aquatic Systems has been a partner of the Department of Energy's Workplace Charging Challenge Program since 2014. To reduce their energy consumption, Pentair has four plug-in electric vehicle (PEV) charging stations and five electric vehicles. By deploying electric vehicles, Pentair dispensed about 150 kilowatt hours last year.

### III. Biodiesel Stakeholder Excellence Award

Presented by Marcy Bauer, eVgo and Triangle Clean Cities Coalition Chair

### **Chatham County**

Chatham County purchased and installed a 1000-gallon biodiesel fueling station at the county's garage with support from Carolina Blue Skies and Green Jobs Initiative. Out of 46 grant partners, Chatham County was one of the first to complete their project and start displacing petroleum. By deploying biodiesel, Chatham County displaced about 406 gallons of gasoline last year.

# **North Carolina Department of Transportation**

The displacement of petroleum at NCDOT dates back to the Energy Policy Act (EPAct) of 1992 which required certain vehicle fleets to acquire alternative fuel vehicles (AFVs). NCDOT has done a great job in adopting alternative fuels. Currently, they have over 100 B20 fueling sites, 2,156 E85 vehicles and 34 propane vehicles. Through the outstanding use of alternative fuels, NCDOT displaced about 318,431 gallons of gasoline in the Triangle area and prevented nearly 2.9 thousand tons of greenhouse gas emissions in 2014.

### **North Carolina State University**

North Carolina State University uses B20 in about 52 of its vehicles. Not only that, but the university also installed five charging stations on their campus as part of the Carolina Blue Skies Initiative. In total, these stations dispensed 12,011 kwH of electricity, with vehicles charging at the stations for over 5,500 hours through September of 2014. This effort has also helped to displace 37,941 gallons of gasoline.

# **Piedmont Biofuels**

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A leader in biofuel distribution and promotion throughout the state, Piedmont Biofuels worked to increase biofuel adoption in 2014 through the production and distribution of biodiesel. They empowered 200 community members to drive on clean fuel. Piedmont displaced about 70,000 gallons of petroleum in 2014, and prevented 666 tons of green house gas emissions.

### **Town of Cary**

Town of Cary is an avid user of biodiesel. Last year, they ran about 130 light and heavy-duty vehicles on biodiesel. In addition, Town of Cary has recently invested in alternative fuel and advanced technology vehicles within their fleet to help reduce the environmental impact of their operations. These investments have helped to reduce green house gas emissions by 649 tons and have displaced almost 120,000 gallons of gasoline to date.

### IV. Idle Reduction Stakeholder Excellence Award

Presented by Brennan Bouma, Orange County

### **City of Greensboro**

City of Greensboro was also a recipient of the Carolina Blue Skies Initiative. Jerry Gunter worked very hard to deploy five hybrid vehicles and two hybrid bucket trucks in that initiative. Greensboro also operates two natural gas refuse vehicles. Through their use of these vehicles in 2014, City of Greensboro displaced about 10,554 gallons of gasoline.

#### **Lane Construction**

Lane Construction has implemented a 5-minute idling rule and has won an award from Charlotte Air Awareness for the outstanding work they do to promote awareness and reduce emissions among their employees. They also participated in our coalition's idle reduction video last year. This video has been posted to Clean Cities TV on YouTube. Through their idle reduction effort in 2014, Lane Construction displaced about 1641 gallons of gasoline.

### **NC DENR**

NCDENR is dedicated to reducing mobile source emission by the use of alternative fuel vehicles and idle reduction devices rebate program. In 2014, NCDENR displaced about 657,261 gallons of gasoline and prevented nearly 8.1 thousand tons of greenhouse gas emissions. At the local parks and zoo, NCDENR operates vehicles on B20, E85 and electricity. Additionally, they administer an idle reduction devices rebate program that helps to reduce heavy-duty vehicle idling.

### **Town of Chapel Hill**

Acting as a leader on emissions reduction efforts regionally, the City of Chapel Hill is working aggressively to reduce their environmental impact from fleet operations. Through instituting an idle reduction policy and investing in alternative fuels and technologies, the City of Chapel Hill has helped to displace 71,325 gallons of gasoline. Their fleet, which has (280) B-20, (76) E-85, (3) CNG and (12) hybrid powered vehicles, has helped to reduce greenhouse gas emissions by 439 tons.

# Wake County

The capital county of North Carolina recognizes the importance of investing in alternative fuels and advanced technology vehicles and is leading the way within the state through adopting progressive fleet policies. Notably, the county recently instituted onboard idle reduction technologies and fuel economy improvements to the fleet. These policy changes, along with (52) hybrid and electric powered fleet vehicles, has led to an overall displacement of 11,346 gallons of gasoline.

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# V. Propane Stakeholder Excellence Award

Presented by Mary Sell, Triangle Clean Cities Coalition

### Ferrellgas

Ferrellgas has worked across the State of North Carolina to help deploy propane for use within vehicle fleets. Currently, Ferrellgas is operating (8) vehicles in the North Carolina region with propane as a fuel source. To date, this effort has displaced over 22,800 gallons of gasoline.

### City of Raleigh

City of Raleigh is dedicated to greening its fleet and has a strong alternative fuels portfolio. They operate 49 police vehicles on propane, but they have another 544 vehicles that use other alternative fuels. In addition, City of Raleigh installed the Energy Xtreme Law Enforcement anti-idling system in 29 of the City's police fleet vehicles in order to save energy and reduce emissions. Through these petroleum reduction efforts, City of Raleigh displaced about 197,219 gallons of gasoline and prevented 1.6 thousand tons of greenhouse gas emissions in 2014.

### Stevens Sausage Co., Inc.

In partnership with Parker Gas and the Clean Cities program, Stevens Sausage converted their fleet of F-650's, Ford Transit Connects and other light duty trucks to propane in 2014. The investments made by Stevens Sausage have helped to realize significant environmental and economic impacts, including the displacement of 28,401 gallons of gasoline.

### VI. Announcements

Lacey Jane Wolfe introduced Mary Sell, the new Assistant Coordinator of Triangle Clean Cities Coalition

Triangle Clean Cities Coalition was awarded funding for a new grant program, which will provide opportunities for more vehicle demonstrations in North Carolina, South Carolina, and Tennessee.

#### VII. Stakeholder Updates

Each stakeholder provided a brief programmatic update

Capital Ford is doing well with Fusion Hybrids and Plugins. The Focus Electric is getting more affordable at \$30,000 with an additional \$7,200 tax credit.

Orange County is making progress on idle reduction: they have installed 7 battery backup systems on ambulances, some of which run 24 hours a day. The County also won a CFAT grant to do propane conversions across 3 departments. Also, there are new DC fast chargers.

The Town of Cary is doing a Strategic Energy Action Plan, which includes a fleet efficiency policy. They are continuing to right size their vehicle pool by having a single pool rather then vehicles assigned to different departments. Reservations will be linked to a wireless kiosk for key release; no additional staff are needed. Cary is also overhauling their transit fleet.

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NC State University won a CFAT grant for 2 EV charging stations in parking decks, which will be running by March. They are also developing an RFP for buses. Currently their buses use B20, but they want to see if they can go to a higher blend. NCSU also recently completed a solar array on an apartment building that covers about ¼ of the roof. A DC bus will connect multiple streets and provide research data. Also, their Park Scholars raised \$40,000 as a class gift to provide a solar tree that will be going up in June in the courtyard between the Hunt Library, Fulton, and Partners I buildings. The solar tree (a panel on a stem that is about 16 feet in air) will allow students to charge cell phones and laptops and will ultimately become part of their DC network. NCSU's is 10' x 12' and will provide shade, a charging area, and possibly power for courtyard lighting. One department recently purchased an ELF. Ten activity buses have received telemetrics and are being tested for idle reduction. They are also creating an administrative method to compile data on University vehicle purchases. (Currently, each college purchases and maintains its own vehicles independently.) This will provide better opportunities for future consolidation, assessments, and overall fleet management.

eVgo is installing EV fast chargers as well as Level 2 chargers.

Stevens Sausage has six F650s, an F150 (getting more than 20 miles per gallon), and a Transit getting 16 mpg on propane. They have received their first tax rebate check. They will surpass 65,000 gallons of propane soon.

The City of Durham FY16 budget is nearly complete, and it includes funding for new vehicles at end of July (more fuel-efficient vehicles in each class). The City won numerous awards along with Raleigh, Charlotte, and Cary. There is a new Brightfield DC fast charger (working but not officially open yet). Pedestrian and bicycle infrastructure and retrofits have been big in Durham; the draft budget includes funding to update and consolidate bicycle and pedestrian plans as well as funding for sidewalks. Their EMS department is getting ambulances with idle reduction technology built in; improvements to routing and scheduling will save fuel as well. There is potential for sharing of lessons learned in this area with Orange County's initiative.

Elon University has a 20-acre solar farm underway. Also, they were finding that their electric utility vehicles (for maintenance & mail delivery) needed more range, so solar panel chargers have been mounted on top of the vehicles.

The City of Greensboro reported that their police department has added 2 electric motorcycles. Two new Ford hybrids will bring the fleet to 14 hybrids. Five new CNG fuel posts brings their total to 7, and they now have 5 CNG trucks on the road. They went from 650 DGE to 2,700 with 5 trucks. They have a few more hybrids coming also.

Wake County received a grant to install telematics on 150 vehicles. They are currently testing different vendor products on various vehicles. This will include telematics on EMS driver behavior and idling.

DENR discussed several past and future events. The City of Durham received a grant from DAQ and was nominated for a fleet management award from the Southeast Diesel Collaborative. Parks and Recreation Division reported that their eRides for internal maintenance staff were pricey, but they get good service. They are investigating switching some of their zero-turn mowers to propane. DAQ has been telling coal plants about propane vehicles when they do plant inspections.

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Guilford County is trying to right size their fleet and has just started using an Agile Fleet Commander System for shared-pool cars. Their Department of Social Services has 12 cars, 9 of which are hybrids (5 purchased with a grant, and 4 more from the County coffers). Priuses and Impalas are now used 80-90% of day, and they are trying to boost this usage to 90-95% as well as to get rid of their inefficient cars (each vehicle is used 15,000-20,000 miles per year). They are getting their inspectors to use Ford EcoBoost F150s instead of less-efficient vehicles.

Piedmont Natural Gas reported on a policy initiative where PNG partnered with key stakeholders to introduce HB 750 in the state legislature, which would offer incentives for alt-fuel vehicles (not electric).

NCPGA reported on a fire service training at Western Piedmont Community College and new fueling station technology with a new connector (which UPS is also using). Currently, they are still offering the standard rebates for mowers. PGA recommended mowers by R&R for golf courses.

Advanced Energy reported that the NC PEV Task Force has a new website (NCPEVtaskforce.org) and that they are getting as much information as they can online. Advanced Energy also partnered with the NC CETC to host an event in Winston-Salem. Advanced Energy is raising funding to do an economic analysis on EVs in NC with advisory support from a working group. They are coordinating with electric co-op events in June: Energy United in June in Statesville, Brunswick PNC, and another PNC event with EV drivers talking about their experiences as well as ride-and-drives. The NCPEVtaskforce.org website has info on all events. National Drive Electric Week starts September 16 and will be observed here in Raleigh at North Hills with participation from 7 car dealerships. In response to a stakeholder question, Advanced Energy stated that the General Assembly bill that would have required municipalities to charge for electric vehicle charging will likely not move forward.

Lane Construction gave the Triangle Clean Cities Coalition a tour of their facility and presented their anti-idling programs for a recent video. They have a new green-vehicle incentive program for employees. On the fleet side, they are working to replace outdated vehicles, including some excavators being replaced due to decommissioning. Marcus covers NC, SC, and FL.

Pentair Aquatic Systems has their corporate headquarters in Sanford and has installed charging stations for employees there. They have so many employees commuting from Raleigh and Cary that they also opened up a Cary office to reduce commuting; this has worked out well despite the creation of a second worksite. Energy efficiency is a big focus of the company: they created the first energy-efficient pool pump, which has saved the US 5.8 billion kWH so far (more than Vermont uses in a year). They have a sub-brand specifically for energy conservation equipment. They have been an EPA Energy Star Partner of the Year for the past 2 years.

Ferrell Gas will announce vehicle and mower fleet conversions soon.

Chatham County is making big changes to their recycling program. Currently, recycling streams are separated and go to a lot of different markets. Soon, they will be transitioning to single-stream recycling with one destination. They also received grant funding from DENR to buy some compactors so that they can make hauling more efficient.

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Piedmont Biofuels has been experimenting with using ethanol instead of methanol to create biodiesel.

DOT announced a call for CMAQ projects (most of Triangle is in maintenance and is therefore eligible for CMAQ funding). They suggested working with MPOs to submit projects. Refuse trucks and transit vehicles are good project options.

PSNC announced that GAIN Clean Energy in Sanford opened up a very big CNG station with 8 dispensers and is now running all of their tractors on CNG. They have a freightliner tractor warehouse truck that traverses the entire state every week. According to PSNC, North Carolina has more public CNG stations that any other state in the Southeast! Our 9<sup>th</sup> and 10<sup>th</sup> CNG stations open in NC this Spring; one is in Durham near Treyburn and the other is in Hendersonville.

Dick Sloane attended a sustainability summit at Edgecombe Community College where there was a display of alternative-fuel vehicles. Dick works with the DENR Waste Reduction Partners program and will provide his assessment clients fact sheets about alternative fuels. GE Aviation assembles jet engines here in RTP; they have a huge solar farm that generates 90% of their electricity. United Therapeutics is also building a solar farm in RTP.

The NC CETC Coordinating Committee convened in subcommittees last week to discuss barriers to each alternative fuel. Now, they are synthesizing this information to develop an action plan for each fuel. The CETC also currently is doing a media campaign called Fuel What Matters (fuelwhatmatters.org); the website also has ways for commuters to map non-drive alone travel and an industry directory with lists of vendors. They are also doing a social media campaign (#fuelwhatmatters) with drawings for cash prizes. October 20<sup>th</sup> through 22<sup>nd</sup> in Raleigh, there will be an alt-fuel vehicle ride-and-drive and educational sessions, as well as a similar event in Winston-Salem also. The CETC is looking for folks to bring vehicles.

The Town of Morrisville is partnering with Solarize NC on an initiative in Western Wake to get people to use the solar energy credit before it expires. In their FY16 budget, Morrisville has included funds for streetlights and interior lighting. The Town recently considered changing recycling pickup from weekly to biweekly, but decided to maintain the weekly schedules to encourage recycling.

Our next stakeholder meeting will be Thursday, July 23, 2015, from 9:30 to 11:30 am at 4307 Emperor Boulevard, Suite 110, Durham 27703

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