## Stakeholder Meeting
**March 20, 2014, 9:30-11:30**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Tyler Bray</td>
<td>Advanced Energy</td>
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<tr>
<td>Michael Dehnert</td>
<td>Air Components &amp; Systems</td>
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<tr>
<td>Timo K. Pakkala</td>
<td>Capital Ford of Raleigh</td>
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<tr>
<td>Michael Boyd</td>
<td>City of Durham</td>
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<td>Jerry Dietzen</td>
<td>City of Fayetteville</td>
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<td>James Green</td>
<td>City of Wilson</td>
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<td>Donnie Page</td>
<td>City of Wilson</td>
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<td>Joe Gordon</td>
<td>e-Energy Alternatives</td>
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<td>Emily Darr</td>
<td>Freese and Nichols, Inc.</td>
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<td>Anne Galamb</td>
<td>NC DENR, Division of Air Quality</td>
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<td>Marcy Bauer</td>
<td>NC Solar Center</td>
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<td>John Jessup</td>
<td>North Carolina Propane Gas Association</td>
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<td>David Donahue</td>
<td>North Carolina Propane Gas Association</td>
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<td>Brian Jones</td>
<td>North Carolina State University</td>
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<td>David Wood</td>
<td>Nuovo Energy Solutions</td>
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<td>Norm Scott</td>
<td>Nuovo Energy Solutions</td>
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<td>Dick Sloane</td>
<td>Retired - Formerly NIEHS</td>
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<td>Tim Stevens</td>
<td>Stevens Sausage Co., Inc</td>
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<td>Emily Barrett</td>
<td>Town of Cary</td>
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<td>David Wisely</td>
<td>Town of Hillsborough</td>
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<td>Elaine Loyack</td>
<td>Triangle Air Awareness</td>
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<td>Brennan Bouma</td>
<td>Triangle Clean Cities Coalition</td>
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<td>Lacey Jane Wolfe</td>
<td>Triangle Clean Cities Coalition</td>
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<td>Kelsey Kusterer</td>
<td>Triangle Clean Cities Coalition</td>
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<td>Lynn Moore</td>
<td>Wilson Community College</td>
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<td>Richard Cregar</td>
<td>Wilson Community College</td>
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<td>Katy Horton</td>
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**Thanks to our members for making the TCCC possible:**
- Advanced Energy
- Air Components & Systems, LTD.
- BuildSense
- Capital Ford of Raleigh
- Duke Energy
- NIEHS
- NCDOT
- North Carolina Propane Gas Association
- Piedmont Natural Gas
- PSNC Energy
- Triangle Air Awareness
- Town of Carrboro
- Town of Cary
- Waste Industries
- Wake County

[Image]
I. Welcome and Introductions
Marcy Bauer, TCC Vice Chair

- Kelsey Kusterer, TCC - Awards given to those that carpooled to the meeting. Introduction to the Sharetheridenc.org carpool matching website. This is a free service of Triangle Triansit.
- After you register, you can sign up for a single ride or several rides per week based on your needs.

II. Carolina Blue Skies Initiative Update: NCSU’s EV charging Stations
Brian Jones, NCSU

- Centennial Campus is growing, and the number of EVs driven by staff are growing as well.
- Installed charging stations in order to stay on the cutting edge.
- The NCSU sustainability office won a Carolina Blue Skies Initiative grant and passed the project off to Brian who works with tenants.
- NCSU is now seeing a large increase in usage. There was little use at first, but it grew rapidly.
- NCSU involved Advanced Energy to study where the best locations for the stations would be on campus (impacts usage and cost), and to run the RFP process for EV station installers.
  - Key questions in location and equipment decisions:
    - Identifying the target users.
    - Will you charge for use of the stations?
    - How will you pay for the stations?
    - Do you have power and data connection nearby?
      - Need to have a hard-wired connection to the internet in order to use a credit card reader.
    - How to handle maintenance?
    - How do you keep up with changes in technology
      - The plugs are more or less universal
      - There are likely to be advances
    - How to get started - Prepare a rock-solid RFP (Gives you control)
      - Single or dual
      - Level I, II, or III – costs and complexity go up significantly for level III
      - Put in a price lock for 1 year in case you want to buy more
      - Declare that price must include shipping and transportation cost
      - Declare that the price will be fixed per unit if you buy one or multiple units
      - Include requirements for credit card security protocol
      - Get a maintenance agreement for 2 years with 1 year options
      - Get flexibility in how you charge if you decide to use the credit card system (length of time you use the space, day of the week, etc.)
      - Specify if you need a hard-wired or wireless data connection
      - They got nearly everything that was in the RFP by going with the third least expensive vendor.
      - Initial costs were layed out (see presentation)
    - Issues
      - The data modules go down periodically, but they’re easy to reset.
III. Moving Toward a World Class Sustainable Transportation Program: Major Initiatives at Wilson Community College
Rich Cregar and Lynn Moore, WCC

- A trades campus at Lee Motor Company site is a new development of Wison Community College, just down the road.
  - Lee Motor Company donated the property to WCC (11 acres) after 1 year sitting empty.
- There are potential environmental issues on the property since it had been a car dealership in the 1950s
  - The underground storage tanks had already been removed in the 70s, and since the cement capping the service won’t be dug up that won’t be a problem
  - $150,000 clean up of leaking oil change bays is being donated along with the property.
- The goal is for final ownership to transfer in the summer
- Advanced Transportation program will be placed in the large former showroom, and will be the first program to transfer over.
  - Associates degree program is focused on training high-level diagnostic technicians who will also be competent in hybrids and electric drive technologies
  - Diploma courses in light-duty diesel and biofuels technologies
  - First reponder courses delivered across the state and will be once again
- Tier III Emissions Standards have been released by the EPA
  - These standards will be very important in technician training
- 2nd Annual Down East Sustainability Summit is coming up on April 25th
- NCADIA Spring 2014 Professional Development Conference on April 24th to host John German from the International Council on Clean Transportation
  - Whole day of programming

IV. Natural Gas for Transportation Barrier Reduction Efforts
Lacey Jane Wolfe, TCC

- In June 2013, the TCCC hosted a charrette to give some focused attention to the barriers to natural gas vehicle implementation. Over 40 different barrier reduction activities identified and 2 of the priority ones selected through the AFIT project.
  - 1.) Natural Gas vehicles stay down longer if/when they break need service.
    - TCCC is putting together a database of the maintenance shops who have technicians qualified to work on CNG vehicles
    - This database will include information on training technicians in North Carolina.
  - 2.) Installing a natural gas fueling station is a complicated process.
    - TCCC is writing guidance with a list of things to ask for and consider in writing an RFP
    - The natural gas utilities and North Carolina fleets will review the document in the coming weeks
- Comments/Questions:
  - NC Solar Center has a list of selected fleets in NC that are already using alternative fuels across the state
    - [www.ncsc.ncsu.edu/index.php/clean-transportation](http://www.ncsc.ncsu.edu/index.php/clean-transportation)
    - There are many more than these out there, and more all the time.

V. Stakeholder Updates
Each stakeholder is invited to give a brief programmatic

- NIEHS – Dick Sloane
Thanks to our members for making the TCCC possible:

- Retired 7 weeks ago
- NIEHS is working to install an EV charging station on campus.
- Town of Morrisville
  - 2 charging stations installed recently
- Stevens Sausage
  - Long delay in getting started, but finally got their first bi-fuel propane Ford 650.
  - Propane prices went up this winter due to high demand
  - They are still expecting to save a lot of money
  - 2 Ford Transit Connects will be converted this month
- NCPGA
  - Propane buses are now included as an option on the state bidding process for the Dept of Public Inst.
    - It took a long time to get this done
  - City of Nashville is investing heavily in propane – nationally significant
- Triangle Air Awareness
  - Ozone Forecast Season Kickoff Lunch—April 17th at RTP HQ on Davis Drive
  - Teleworking toolkit for employers is in development in partnership with Citrix and GoTriangle/Triangle Transit
    - They are looking for employers to pilot test that toolkit.
  - Unifying messaging with other Air Awareness organizations
- NCDENR
  - Has been reorganized
  - They have electric charging stations in place in the parking deck along with several ones out front
    - All could be used more
  - NCDENR is hopeful to get a grant this fall
- Freise and Nichols
  - CNG Feasibility Study for the City of Wilson
- Town of Cary
  - Hybrid Trash Truck pilot is going well
  - Strategic Energy Action Plan includes fleets
    - Mandates that they reduce energy usage.
    - 5 year life cycle cost analysis
      - Excel Spreadsheet – initial costs, and maintenance costs
      - Tool that increases objectivity in decision making
      - Happy to share with others
  - Looking at converting a number of Police vehicles to propane
  - Cary is redoing their webpage, so send her your initiatives if they should be posted on their site.
  - Joule Bug software is included on the site that shows sustainability choices
- Capital Ford
  - Worked with Stevens Sausage to supply their new propane vehicles
  - They’ll be helping to support Advanced Energy at their Green Your Ride event this Saturday at North Hills Mall.
  - They’ll be having two events in April
- NC Solar Center
  - Just closed the 2nd round of CFAT Subaward grants for this year. They’ll be reviewing those applications and should have an update on who has won at the next meeting.
  - Alliance Autogas has just come on as the newest sponsor for the SE Alt Fuels Conference
City of Durham
  - In April, the City will host a half-day eco-driving training led by NC Solar Center for 15 drivers, including police officers, fleet services staff, water utilities staff, and staff from other departments. This training will help all of those drivers save fuel and money with the way they drive.
  - They’ve just bought a few new trash trucks. They were more than $10,000 less per truck and should use 20% less fuel. They expect this will translate to over 7000 gallons saved per truck over its lifetime.

City of Wilson
  - Looking into a natural gas filling station for the city

City of Fayetteville
  - Looking to change over garbage fleet to natural gas
  - Infeasible to do this as the vehicles cycle out, would need to convert several vehicles at once
  - Applied for a grant through electricity to get another 12 EV charging stations.

Town of Hillsborough
  - Getting an NEV for the Parks system – will talk to NCSC
  - Looking into battery backup technology for police cruisers – will talk to Cary

Piedmont Biofuels
  - Going through some restructuring
    - Had to reduce workforce by 50%
    - Exciting things to come!
      - Opening 3 new stations
        - Guilford college in Greensboro
        - Durham
        - Cary/Apex – looking for companies interested in housing a biodiesel refilling station
          - Need 1-2 parking spaces and internet access
        - August 14-17 Conference at Central Piedmont Community College for sustainability enthusiasts
          - Trying to keep ticket prices low
  - Comments: Several companies have just gotten Tier 4 certified without the need of a diesel particulate filter. This barrier might go away!

Advanced Energy
  - North Hills Green Your Drive Event – Saturday 10am-1pm
    - Celebration of EVs with a ride and drive
  - In Town of Apex they’ll be holding a workplace charging event and vehicle showcase
  - Lisa Poger has moved on to start her own consulting service
  - In May, Tyler and Jeff will be presenting at the MPO conference on EVs and automated vehicles

Nuovo Energy Solutions
  - City of Asheville – natural gas system installed, slow fill for garbage trucks
    - Purchased off the state contract
    - Others can take advantage
    - 10 year warranty on their products – unheard-of in the industry

Air Component Systems
  - Doing several projects
  - Slowed down by weather and increased price of natural gas
  - Seeing the knowledge base growing

e-Energy Alternatives
  - CNG conversion center

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Wake County
- Work with many of the major conversion systems – all EPA certified
  - Also beginning to do propane conversions over the last 2 weeks
  - Seeing a huge increase in interest
  - Putting together a mobile conversion system
    - Will be able to go to the customer to convert their vehicles

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Clean Cities
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North Carolina Solar Center