Mission

To ensure America’s security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions
Clean Cities Coalitions

• Nearly 100 coalitions throughout the United States

• 660,000 AFVs using alternative fuels

* Total includes more than 16,000 electric charging sites.
Clean Cities Portfolio of Technologies

**Alternative and Renewable Fuels**
- Biodiesel
- Electricity
- Ethanol (E85)
- Hydrogen
- Natural gas
- Propane

**Fuel Economy**
- Fuel efficient vehicles
- Driving habits
- Vehicle maintenance

**Idle Reduction**
- Technologies
- Behavioral changes

**Trip Elimination**
- Telecommuting
- Ridesharing
Clean Cities Strengthens Markets

- Connecting fleets with fuel providers and industry partners
- Training and information
- Technical assistance
- Funding
- Education and outreach to decision makers, fleets, and the public
Alternative Fuels Data Center

The Information Source for Alternative Fuels and Advanced Vehicles

The Alternative Fuels Data Center (AFDC) provides information, data, and tools to help fleets and other transportation decision makers find ways to reduce petroleum consumption through the use of alternative and renewable fuels, advanced vehicles, and other fuel-saving measures.

The AFDC is a resource of the U.S. Department of Energy's Clean Cities program.

Poll

Our fleet tries to increase:

- Requires driver to turn off engine (select a state)
- Providing recognition
- Providing onboard
- Using route optimization
- Reducing vehicle loads
- Other
- None

View Results  Vote

Petroleum Reduction Planning Tool

This planning tool helps your vehicle fleet reduce petroleum consumption and greenhouse gas (GHG) emissions. Create a comprehensive plan for your fleet by using several savings methods. If your fleet includes multiple vehicle types, add more vehicles to each method.

Savings Methods

<table>
<thead>
<tr>
<th>Description</th>
<th>Petroleum Reduction gal/yr</th>
<th>GHG Reduction tons CO2/yr</th>
<th>Fuel Cost Savings $/yr</th>
<th>Impact on Plan percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace Vehicles</td>
<td>3,205</td>
<td>40</td>
<td>$9,876</td>
<td>50%</td>
</tr>
<tr>
<td>Replace 10 minutes gas can with a microscopically low (HEV) using ES</td>
<td>3,205</td>
<td>40</td>
<td>$9,876</td>
<td>50%</td>
</tr>
<tr>
<td>Use Alternative Fuel in existing Vehicles</td>
<td>0.00</td>
<td>0.00</td>
<td>$0.00</td>
<td>0%</td>
</tr>
<tr>
<td>Replace Heavy Duty</td>
<td>0.00</td>
<td>0.00</td>
<td>$0.00</td>
<td>0%</td>
</tr>
<tr>
<td>Reduce Mileage</td>
<td>117</td>
<td>1</td>
<td>$388</td>
<td>5%</td>
</tr>
<tr>
<td>Reduce miles traveled in 1 million gas car from 11,919 miles to 9,900 miles</td>
<td>117</td>
<td>1</td>
<td>$388</td>
<td>5%</td>
</tr>
<tr>
<td>Drive Efficiently</td>
<td>0</td>
<td>0.00</td>
<td>$31</td>
<td>0%</td>
</tr>
<tr>
<td>Improve efficiency in 1 million gas car by 2%</td>
<td>0</td>
<td>0</td>
<td>$31</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total savings from plan per year: 3,291 gallons, 41 tons of CO2, $510,283, 100%
Current Stakeholders of Triangle Clean Cities Coalition

- Love’s Travel Stops
- North Carolina Department of Transportation
- North Carolina Propane Gas Association
- UNC Chapel Hill and NCSU
- Waste Industries
- Triangle Transit
- BuildSense

- Cities of Chapel Hill, Durham, Raleigh
- Counties of Chatham, Durham, Orange, and Wake
$12 million federal grant from ARRA, plus $19 million cost share

521 alt fuel vehicles deployed, 141 fueling stations operational

Propane, natural gas, biodiesel, ethanol, and electric

Chatham County Biodiesel Project
Piedmont Biofuels Stations

• Installed or upgraded stations in Saxapahaw, Wilmington, and Pittsboro

• In 2013, dispensed 22,000 gallons of B100

• 260 tons GHG reduced
"focused on reducing transportation related emissions in NC counties with air quality concerns"

Funded by the N.C. Department of Transportation with Congestion Mitigation Air Quality Funds.
Asthma.
The #1 reason children miss school.

Clear the air at CleanTransportation.org
Land-of Sky-Clean Vehicles Coalition

Coordinator Bill Eaker
Represents the Asheville region

- Allbright Sanitation
- AT&T
- Biltmore Estate
- Blue Ridge Biofuels
- Cities of Asheville, Hendersonville
- Counties of Buncombe, Hendersonville
- Mission Hospital
- Mountain Mobility
- NCDOT
- PSNC Energy
• Converted 5 shuttle buses to run on compressed natural gas

• In 2013, they used about 10,000 gallons and reduced about 18 tons of GHG

• CNG fleets enjoy a cost savings of about $1.50 per gallon of gasoline equivalent
Carolina Blue Skies Grant:
• Upgraded station
• Converted 25 vehicles to run on natural gas

In 2013, Asheville’s natural gas vehicles used about 16,000 gallons of gasoline equivalent, and reduced about 30 tons of GHG

City of Hendersonville also converted 5 heavy-duty vehicles

Henderson County upgraded their station, converted 3 vehicles
Biofuels in the Asheville Region

End users of biodiesel:
- Biltmore Estate
- Buncombe County
- City of Asheville
- City of Hendersonville
- Henderson County
- Metropolitan Sewerage District
- Mission Hospital
- North Carolina Department of Transportation

Asheville’s local producer is Blue Ridge Biofuels
Triangle Clean Cities Coalition
Emissions Reduced

2012 Greenhouse Gas Emissions Reduced
36,384 tons

- Vehicle Miles Traveled Reductions (54%)
- Idle Reduction (29%)
- Hybrid Vehicles (6%)
- Alternative Fuel Vehicles (10%)
- Electric & Plug-In Vehicles (0%)
- Off-Road Vehicles (0%)
Historical Greenhouse Gas Emissions Reduced

- Off-Road Vehicles
- Fuel Economy Improvements
- Vehicle Miles Traveled Reductions
- Idle Reduction
- Hybrid Vehicles
- Electric & Plug-In Vehicles
- Alternative Fuel Vehicles

Year
- 2009
- 2010
- 2011
- 2012

Emissions Reduced (tons)
- 9,388 tons
- 27,466 tons
- 36,384 tons
- 55,610 tons

Clean Cities
Triangle Clean Cities Coalition
Emissions Reduced
Lacey Jane Wolfe
Triangle Clean Cities Coalition
lacey@tjcog.org 919-558-2705

Bill Eaker
Land-of-Sky Clean Vehicles Coalition
lacey@tjcog.org 919-558-2705