In 2006 and 2009 the NC Solar Center / NC State University was awarded a total of $2.6M in federal Congestion Mitigation Air Quality funding from the NC Department of Transportation to reduce transportation related emissions in NC counties that do not meet national air quality standards. The NC Division of Air Quality and State Energy Office also contributed $200,000 each to support the Clean Fuel Advanced Technology (CFAT) Project. CFAT eligible counties include Cabarrus, Catawba, *Chatham, Davidson, Davie, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, *Haywood, *Iredell, Johnston, Lincoln, Mecklenburg, Nash, Orange, Person, Rowan, *Swain, Union, Wake (*Represents partial counties). The three million dollar project encompasses three broad areas: education and outreach, recognition of exemplary activities and direct project funding. **Over $2.19M has been distributed for emission reduction projects. In addition over $1.8M in local funding has been contributed by sub-award recipients, enabling the CFAT dollars to stretch further to reduce more transportation emissions.**

**Education and Outreach**

- The NC Solar Center contracted with the Triangle J Council of Governments and Centralina Council of Governments for educational outreach in the Triangle and Charlotte regions. Additional volunteer partnerships with Land of Sky Clean Vehicle Coalition, Piedmont Triad Regional Council, Triad Air Awareness, Upper Coastal Plain and Kerr-Tar Councils of Governments enhance outreach efforts and help leverage federal funding even further.

- Educational activities include annual conferences, technical workshops, presentations, regional meetings, and individual consultations that have garnered more than 8,400 participants.

- Over 15 technology specific fact sheets, dispenser and vehicle decals, conference display and web pages featured at [www.cleantransportation.org](http://www.cleantransportation.org) have been developed.

**Mobile CARE (Clean Air Renewable Energy)**

- An initiative to acknowledge leadership in reducing transportation related emissions
Exemplary fleets, technology providers, programs, policies, and individuals are nominated for annual awards evaluated by NC Dept of Transportation, State Energy Office and the Division of Air Quality.

Mobile CARE stakeholder meetings in the Triad and Upper Coastal Plain Kerr-Tar region bring together public and private stakeholders to share information about transportation technology solutions ranging from biofuels to diesel retrofits.

**CFAT Emission Reduction Sub-award Projects**

A total of 47 sub-award projects were funded...

**What was purchased?**

- **17** refueling stations (biodiesel (B99), ethanol (E85), natural gas, electric vehicle charging station)
- **28** (Light & Heavy Duty) **Hybrid Electric Vehicles**
- **64** Alternative Fuel Vehicles (natural gas, propane, segway, electric vehicle & neighborhood electric vehicles)
- **72** **Diesel Retrofits** (oxidation catalysts, particulate filters, multi stage filters)
- **24** Electrified truck stop parking

**Funds for**

- Transportation related emission reduction projects in areas that do not meet national air quality standards.
- Up to 80% of project costs for alternative fuel vehicles, refueling infrastructure, idle reduction technologies, hybrid electric vehicles and diesel retrofits.
- Forty seven public and private entities including a national park, local governments, school systems, and businesses such as fuel distributors, service station owners and a company providing electrified parking spaces to reduce idling in long haul trucks have been funded.

**Air Quality**

- More than 30% of North Carolinians live in counties that have unhealthy air.

**CFAT 2006-2012 Reductions, kg/yr**

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>VOC</th>
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<tr>
<td>2006</td>
<td>(318)</td>
<td>555</td>
<td>3,634</td>
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<td>2007</td>
<td>457</td>
<td>389</td>
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<td>309</td>
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<td>2008</td>
<td>3,143</td>
<td>(285)</td>
<td>25,900</td>
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<tr>
<td>2009</td>
<td>2</td>
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<td>2010</td>
<td>1,424</td>
<td>631</td>
<td>11,036</td>
<td>9</td>
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<tr>
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<td>4,708</td>
<td>1,293</td>
<td>55,921</td>
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</table>

*The CFAT project will continue at the NC Solar Center/NC State University from 2013-2015 with $6.2M in funding allocated by the NC Department of Transportation.*

This document is supported in part through the Clean Fuel Advanced Technology project with funding from the N.C. Department of Transportation.