The NC Mobile Clean Air Renewable Energy (CARE) awards have been created to recognize outstanding individuals and organizational efforts at reducing transportation related emissions. Organized by the NC Solar Center/NC State University and sponsored by the NC Dept of Transportation, the Mobile CARE initiative brings together three state agencies with overlapping interests in air quality and energy to recognize the achievements of those who are making a difference in North Carolina. For the 4th annual awards, communication leaders from The NC Department of Transportation, NC Department of Environment and Natural Resources Division of Air Quality and the NC Department of Commerce State Energy Office evaluated over two dozen nominations to recommend an impressive group of six.

This year candidates in four categories, Individual, Fleet, Fuel/ Tech Provider and Policy/Organization were sought. Some of the criterion the judges used to make their decision included:

- Expanding educational opportunities
- Conducting outreach
- Changing policies
- Length of involvement in fuel/vehicle activities
- Perceived risk related to involvement
- Diversity of strategies/technologies employed

**2010 Awardees**

**INDIVIDUAL: Dr. Jack Martin**

Dr. Jack Martin is a true pioneer in the alternative fuel arena. Dr Martin has taught Sustainable Transportation courses at Appalachian State University for the past 10 years. His students have made biofuels and built vehicles-solar electric bikes, recumbent, trikes, gocarts, and utility tractors. As a result, his students won “Most Innovative” in the Federal Transit Authority and Department of Transportation, *Bus Rapid Transit and the American Community*, International Competition.

Martin has volunteered many hours giving presentations on sustainable transportation technologies and serving as an official for and participant in many alternative powered races and road rallies. Achieving, 125 MPG, he was the 2008 winner the 21st Century Automotive Challenge Tour de Shore, a 147 hyper-miler road rally in New Jersey.

Martin first discovered alternative energy sources while working for the Peace Corps. He rode an ethanol-powered motorcycle and helped build windmills volunteering in Nepal.
FLEET: Facilities Services, UNC Chapel Hill

UNC Facilities Services has a demonstrated history of environmental stewardship, actively embracing the state fleet petroleum displacement requirement to reduce petroleum consumption by 20% over 5 years, among other initiatives. At the 2004-05 start, the fleet consisted of 601 gasoline or diesel fueled vehicles, and 27 E85 flex fuel. As of FY 2008-09 the fleet had 700 vehicles of which 560 are gasoline or diesel (7% increase) and 140 alternative fueled vehicles (422% increase). By incorporating neighborhood electric vehicles and installing E85 and biodiesel refueling, they now displace 133,000 gallons of petroleum annually through use of electricity, E10, E85 and B20. This represents an 18% reduction. Through a diversified set of approaches UNC- Facilities Services has set an example that others can learn from and adopt and one that they can continue to expand their efforts upon.

FLEET: Bland Landscaping

Bland Landscaping designs, installs and maintains exceptional outdoor landscape environments for a variety of commercial and residential customers. Part of their commitment to sustainability includes being good stewards of the Earth, by finding ways to be more environmentally friendly with the air we breathe. In 2005, Bland Landscaping began a series of initiatives to minimize and eliminate negative effects on the environment. One of those initiatives was to use more diesel trucks and machinery that were fueled with B20 Biodiesel. Their diesel fuel is locally purchased from Monson Oil, who in turn purchases from Triangle Biofuels in Wilson, NC. Derived primarily from locally-grown vegetable sources, this biodiesel helps to create more local jobs and uses less foreign petroleum. Bland’s fleet also performs regular maintenance checks; has purchased “best in class” fuel efficient, mini-cooper’s and installed GPS to identify inefficient routes and poor driving habits.

At Bland people think about the world they live in, how their actions affect that world and what they can do to make it better. They have assumed a leadership role among their peers in the hopes of shaping the landscape industry to produce positive change for the air that the Triangle breathes.

FUEL/ TECHNOLOGY PROVIDER: Piedmont Biofuels.

Piedmont Biofuels is a series of firsts. It was one of the first NC biodiesel producers and distributors, fueling several hundred Triangle families through a cooperative membership organization. Their industrial facility was the first small producer to achieve the biodiesel Industry’s quality assurance BQ-9000 accreditation in the United States, and the only BQ-9000 accredited producer in North Carolina. They are also leaders in education and outreach. Over the past eight years, Piedmont Biofuels has conducted numerous activities including reaching out to low-income and minority farmers about
biodiesel production and usage throughout the Southeast with a mobile biodiesel education trailer funded in part through a collaborative project with the USDA-Risk Management Association, and National Center for Appropriate Technology. With the Biofuels Center of NC support, Piedmont has also built North Carolina’s first biorefinery for the development of co-products from the biodiesel production process.

Started in late 2002, early 2003 by three individuals looking to reduce their personal petroleum consumption, Piedmont Biofuels has been transformative on many levels. It has attracted a wide array of smart and highly skilled talent who are demonstrating success by giving their all in the name of a passionate pursuit of "a different way of being."

**POLICY/ORGANIZATION : Central Carolina Community College**

Central Carolina Community College (CCCC) has successfully expanded its offerings to include programs in alternative fuels, renewable energy, green building, sustainable farming and natural chef training. No other community college in the state, and possibly the country, offers such a wide variety of programs concerning energy and the environment. In fall of 2010 two new LEED certified buildings will be completed on the Pittsboro campus of CCCC. One building will be used as a library for both CCCC and the town of Pittsboro, while the other building will house CCCC’s Sustainability Department. This classroom/lab building will house a biofuels production facility, renewable energy training laboratory, and a building science workshop along with a commercial kitchen used for the natural chef program.

CCCC offers its students a unique educational experience through a variety of training assets. CCCC began offering its Associate degree program in biofuels in fall of 2008. This job training program was established not only to provide the essential knowledge and skills needed in ethanol and biodiesel production, it also imbues the critical concepts of sustainability needed as we develop these vital renewable fuels industries. The program also facilitates replication since it has been approved by the entire North Carolina Community College System. Therefore as the industry grows North Carolina will have the ability to quickly provide adequate training for workers in this field. The biofuels program at CCCC is the only one of its kind on the East Coast. The program has been featured in national and international publications including Biodiesel Magazine, Ethanol Producer Magazine, and the national publication for community colleges.

Through a collaborative approach, CCCC’s sustainable programs has garnered almost $1,000,000 in grant and in-kind donation funds from organizations such as the NC BioNetwork, State Energy Office, NC General Assembly, Progress Energy, Biofuels Center of North Carolina, and many more. With this support, over the past decade more than 1000 individuals, from all backgrounds, have come to CCCC and learned how they fit into a more sustainable future.

**POLICY: Fort Bragg**

Fort Bragg's efforts in clean transportation and overall petroleum and emission reduction have been recognized throughout the Army and Department of Defense. As winner of the 2008 Army's Sustainability Award, and a 2010 Sustainability "In Process Review" gathering at Fort Bragg of Army posts worldwide, Fort Bragg has, and continues to, lead the way. In fact, Fort Bragg's Comprehensive Alternative Transportation Plan now stands as the Army's model for reducing roadway infrastructure cost, petroleum consumption and emissions.

After several years’ effort, Fort Bragg completed an E85 and B20 Green Biofuel Refueling Station in 2009 under the leadership of Tim Shea, Fort Bragg Chief of Transportation. Now fully operational, the station is expected to dispense 485,000 gallons of E85 and 275,000 gallons of B20 annually. Not only does the station provide cleaner burning fuels, it is the Army's first "green" refueling station. Solar powered lighting lights the perimeters, and the latest technology in oil/water separators are used. The Heat Island Effect was addressed through reflective roof material covering the canopy, and reflective concrete covers the station driveway surfaces. Storm water is contained on-site in a bio-retention cell. And finally, E85 and B20 is tank circulated during the refueling process to eliminate fuel stratification and assure homogeneous blends.