



NC CLEAN ENERGY TECHNOLOGY CENTER

GREENLEAF NURSERY

A North Carolina Success Story

Fleet Spotlight

Greenleaf Nursery, one of America's largest wholesale nursery growers, sells millions of container-grown plants to retailers, re-wholesalers, and landscapers across the U.S. and Canada annually. Greenleaf has operated out of Tarboro, North Carolina since 1997 and this location represents a major part of the company's business in the region.

With grant funding support from the North Carolina Clean Energy Technology Center's (NCCETC) Clean Fuel Advanced Technology Program (CFAT), Greenleaf is making strides to reduce its carbon footprint and tailpipe emissions by converting 11 of its vehicles to a bi-fuel propane system.

Project Details

Fleet Name	Greenleaf Nursery
Locations	Tarboro, NC
Alt. fuel Technology	Bi-fuel Propane Gas
Emissions Reduction	18.6 Tons CO ₂ /year
No. of Vehicles Funded	11



A promotional graphic for Greenleaf Nursery in Tarboro, NC.

For this project, Greenleaf identified 11 Ford F-150 trucks to be converted to an EPA certified bi-fuel system. The conversion was implemented in two phases. In the first phase, Greenleaf converted six vehicles using a Gen 3 VSI System. In the second phase, Greenleaf converted five vehicles using an ICOM LPG conversion system.

In order to complete the conversions, Greenleaf's crew partnered with a local installation team. Working together on the project ensured that Greenleaf's mechanics would be able to maintain the units after conversions were completed. Based on their present and planned operations, Greenleaf expected to utilize propane 95% of time.

Outlook

Greenleaf's operations in North Carolina continue to be supported by bi-fuel propane, running on propane about 95% of the time. As expected, the conversions have saved the company significant fuel expenditures.

For example, the six Ford F-150s initially converted have saved the company \$10,000 annually in fuel costs. Based on propane's lower cost, tax credits, and the availability of grant funds that help in offsetting the initial procurement and installation costs Greenleaf sees propane as a viable long-term fuel for its fleet.

Moreover, Greenleaf appreciates other benefits for using their bi-fuel vehicles. Converted vehicles are quieter and have plenty of power. Both customers and operators appreciate these characteristics.



"We owe it our neighbors in Edgecombe County to promote clean air in our operations."

***~Stanley Foster
General Manager, Greenleaf***

Clean Fuels Advanced Technology Project 2013-2015

The Greenleaf project was one of over 50 supported by the 2013-15 Clean Fuel Advanced Technology (CFAT) projects funded by the N.C. Department of Transportation with \$6.2 million in federal Congestion Mitigation Air Quality (CMAQ) funding.

CFAT is focused on reducing transportation related emissions in the 24 North Carolina counties that have air quality concerns and are listed as non-attainment or maintenance status for national air quality standards. The 2013 to 2015 project covers three broad areas: education and outreach, emission reduction technology sub award grants, and recognition of exemplary activities

The N.C. Clean Energy Technology Center teamed up with the Centralina Clean Fuels Coalition, the Triangle Clean Cities Coalition, Piedmont Triad Regional Council, Upper Coastal Plain Council of Governments and Kerr-Tar Council of Governments on education and outreach activities throughout the state. These partners are available to speak about clean transportation technologies and practices at local events.

Contact

For more information about this project, please contact
Upper Coastal Plain Council of Governments, 252 -234-5965

NC Clean Energy Technology Center
Clean Transportation Program
cleantransportation@ncsu.edu

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