



Overview

Ferrying inmates to and from work-release jobs had become increasingly costly for the Alabama Department of Corrections. The 15-passenger vans average almost 5,000 miles of travel a month, and gasoline for the fleet of 77 vans totaled about \$1.3 million a year.

Program Participation

In 2011, Andy Farquhar, Director of the Department's Industries Division and Departmental Energy Officer, began researching options. He attended a number of alternative-fuel workshops, including two Propane Road Shows organized by the Alabama Clean Fuels Coalition.

"After running the numbers, it appeared that propane was an excellent fit for our high-mileage vans," Farquhar said. The process was begun to gain approval of a pilot project to evaluate the feasibility and economics of using propane fueled vans. ADOC requested approval from the Alabama Finance Department to undertake the project and allow the purchase of ten E350 Ford vans for the Loxley Work Release program location. The process included securing bids (through the RFP process) for the conversion of vehicles, the installation and maintenance of fueling infrastructure and training for the vehicle drivers. The propane is purchased through the Alabama State Alternative Fuel contract.

Working With Vendor Partners

In 2012, ADOC received approval to buy ten E350 Ford 15-passenger vans and a refueling station for use at the Loxley Work Release Center. Vendors for the pilot project were selected through a bid process. Stivers Ford got the bid for the vans; Precision Sales & Service installed the propane ICOM liquid injection conversion kits; and Estes Equipment installed the dispensing stations at Loxley. Alliance Autogas will provide propane under the state's alternative fuel contract. Precision Sales & Service, Estes Equipment and Alliance Autogas are members of the Alabama Clean Fuel Coalition. The department began using the vans in January 2014 and has experienced significant fuel savings.

Fleet Facts

Organization:

Alabama Department of Corrections (ADOC)

Director of Department's Industries Division and Departmental Energy Officer:

Andy Farquhar

Industry Type:

Government

Conversions Began:

August 2013

Propane Vehicles Converted:

10 E350 Ford passenger vans

Estimated Annual Propane Usage:

80,840 gallons

Estimated Annual Fuel Cost Savings Approximately:

\$142,000

Propane Fueling Infrastructure:

Two 1,000-gallon tanks



Results

Purchase cost for the 10 vans (including conversion) was \$355,000, and the dispensing station cost roughly \$51,000. But with the low cost of propane (\$1.63 per gallon in mid-December), the department stands to recoup the conversion and infrastructure costs in less than one year. Fuel savings just for 2014 are estimated at \$142,000. Farquhar said if expectations are met, propane could be adopted throughout the work release program.

“We’re happy to be exploring alternative fuels and looking for ways to save taxpayer money,” ADOC Commissioner Kim Thomas said. “Considering the distance traveled by our vehicles, this is a huge opportunity.”

Mark Bentley, executive director of the Alabama Clean Fuels Coalition, said the advantages go beyond cost. By using propane in 10 vehicles, ADOC will also considerably reduce greenhouse gas emissions each year, Bentley said.

And since propane is primarily produced in the United States, its increasing popularity in transportation supports economic development at home.

“These benefits explain why more businesses, municipalities, colleges and schools are turning to propane,” Bentley said. “We’re so pleased to see the Alabama Department of Corrections add its name to the list.”



Two new (2013) low interest loan programs are now available in Alabama. (**AlabamaSaves** – offering 1% loans to business to both convert fleet vehicles to CNG, LNG, & Propane and to add infrastructure to support the vehicles and the **Local Government Energy Loan Program** offering Zero % loan programs to municipalities, K-12 and college/universities to convert fleet vehicles to CNG, LNG and Propane)



For more information on this and other alternative fuel and advanced technology vehicle programs contact Mark Bentley, Executive Director of the Alabama Clean Fuels Coalition, by phone: 205.402.2755 or via email at mark@alabamacleanfuels.org. The Alabama Clean Fuels Coalition is a designated Clean Cities Coalition by the U.S. Department of Energy.

For specific information regarding the Alabama Department of Corrections Propane project contact: Andy Farquhar, Director, Phone: (334)-261-3636 or via email at andy.farquhar@doc.alabama.gov