

# Alternative Fuel Considerations for Fleet Applications

---

CCNGTF Guideline Document #6

## This document is not a substitute for legal advice.

It serves as a listing of considerations to evaluate the conversion of fleet vehicles from traditional fuel use to Compressed Natural Gas (CNG) or a dual fuel option.

The list is not all inclusive.

## Key Points --

The **U.S. Energy Information Agency** reports that natural gas, on average, costs 42% less than diesel fuel on an energy equivalent basis and is expected to cost 50% less by 2035. (Data retrieved January 2012)

Vehicle emissions are reduced on natural gas vehicles (NGVs); and dependence on foreign oil is reduced. ***“It’s not about how much CNG you’re burning, it’s about how much diesel and gasoline you are NOT burning,”*** stated Jim O’Donnell of Alternative Fuel Solutions of PA at a recent meeting in Centre County, PA.

**Gasoline gallon equivalent (GGE)** is the amount of alternative fuel it takes to equal the energy content of one liquid gallon of gasoline. At the current projected rates (March 2012), CNG is about \$0.57 versus the GGE of #2 diesel fuel at \$4.099 (February 7, 2012).

**Centre Area Transportation Authority (CATA)**, State College, PA is a local and premier example of the use of CNG for public transportation vehicles.

- Centre Area Transportation Authority <http://www.catabus.com/>

This website provides contact information and resource information for their **CATABUS** Community and Campus Service bus systems. Community Service consists of 18 different community bus routes. The Penn State University / Campus Service consists of four integrated routes that provide fare-free campus/downtown circulator and cross-campus shuttle service. **CATABUS CNG Program Video** <http://catabus.com/AboutCATA/CNGProgram/index.html>

**Penn State University**, University Park, PA reports that 28% or 72 of the 266 Office of Physical Plant vans are either compressed natural gas (CNG) or bi-fueled. For more information:

<http://green.psu.edu/psuDoing/transportation.asp>

## Alternative Fuel Considerations –

Converting fleet vehicles differ depending upon many variables. For this reason, selecting the right technologies for your fleet can be challenging.

There are several web-based sources that can provide assistance. A few are listed below.

- Alternative Fuels and Advanced Vehicle Data Center  
[http://www.afdc.energy.gov/afdc/fleets/fleet\\_applications.html#airports](http://www.afdc.energy.gov/afdc/fleets/fleet_applications.html#airports)

This website hosted by the U.S. Department of Energy provides links to publications, cost benefit modeling tools, case studies and fleet experiences. Data exists for the following fleet types: airports, delivery services, parks, long-haul trucks, police / traffic enforcement, refuse haulers, school buses, shuttle busses, transit buses, and taxis.

- Natural Gas Vehicles for America <http://www.ngvc.org/forfleets/index.html>

Natural Gas Vehicles for America (NGVAmerica) is a national organization dedicated to the development of a growing, sustainable and profitable market for vehicles powered by natural gas or hydrogen. Information by fleet type, fueling options, and incentives is provided.

- American Gas Association <http://www.aga.org/our-issues/natural-gas-vehicles/Pages/default.aspx>

The American Gas Association (AGA) founded in 1918 is a membership organization of local energy companies promoting the cost effective delivery of natural gas. This website provides a listing of NGV funding opportunities, current news, and resources and publications.

- Natural Gas Vehicle Institute <http://www.ngvi.com/index.html>

North America's leading provider of training and consulting on natural gas as a transportation fuel. This website provides technical information on a full range of natural gas fueling and vehicle issues.

- Clean Vehicle Education Foundation <http://www.cleanvehicle.org/>

This non-profit national organization assesses and guides alternative fuels and builds awareness for - and fosters deployment of alternative fuel systems including natural gas and other clean fuel-powered vehicles in the public and private sector.

### **Fueling Locations –**

- Alternative Fueling Stations and Mapping Resources  
<http://www.afdc.energy.gov/afdc/fuels/stations.html>

Stations are located throughout the United States and their availability continues to grow. This site allows you to locate stations near you or on a route of travel.

At the present time, February 2012, Centre County has one public CNG fueling location located at the UniMart, 2091 West Whitehall Road, State College, PA 16801



### **Getting Started –**

To begin exploring whether natural gas makes sense for your fleet, read [Business Case for Compressed Natural Gas in Municipal Fleets](#). Use the accompanying [Clean Cities Vehicle and Infrastructure Cash-Flow Evaluation \(VICE\) Model](#) to evaluate the return on investment and payback period for natural gas vehicles and fueling infrastructure. This information was retrieved directly from [http://www.afdc.energy.gov/afdc/fuels/natural\\_gas\\_infrastructure.html](http://www.afdc.energy.gov/afdc/fuels/natural_gas_infrastructure.html)

### **Local Natural Gas Distributors --**

- **Columbia Gas of PA**  
<http://www.columbiagaspa.com>

Local Contact: Matthew J. Blymire  
New Business Development Manager  
Columbia Gas of Pennsylvania, Inc.  
2550 Carolean Industrial Dr., State College, PA 16801  
Phone: 717-849-0121 Email: [mjblymire@nisource.com](mailto:mjblymire@nisource.com)

Centre County communities served by Columbia of PA:

- Bellefonte Borough
- Benner Township
- Boggs Township
- Burnside Township
- College Township
- Ferguson Township
- Harris Township
- Patton Township
- Snow Shoe Township
- Spring Township / Pleasant Gap
- State College Borough

- **UGI – Central Penn Gas** <http://www.ugi.com>

Local Contact: Lou Stubbs  
New Business Representative  
Phone: (610) 736-5931 Email: [lstubbs@ugi.com](mailto:lstubbs@ugi.com)

Centre County communities served by UGI:

- Philipsburg Borough
- Rush Township