

Alternative fuel sources for automobiles



**ASSIGN
BUSTER**

One type of alternative fuel vehicle that holds a lot of promise is the Compressed Natural Gas (CNG) vehicle. There are many encouraging things about these vehicles. Natural gas is an abundant resource in the United States. It is sometimes found dissolved in crude oil, but many times this gas is found in reservoirs alone. The increased use of CNG vehicles would make the United States less dependent on foreign sources of oil. The current supply of natural gas will last for generations and new drilling techniques are reaching natural gas locked in shale deposits. The process of fracturing the shale using high-pressure liquids is referred to as fracking. This new technique promises to provide cheap natural gas for well over a hundred years (Efstathiou and Chipman, 2011). Aside from the political benefits, CNG cars have very low emissions (Alternative, 2011). The greenhouse gas spewing combustion of current gasoline powered vehicles would be a thing of the past. While it is true that natural gas is a fossil fuel, and it is not a renewable fuel, burning it in vehicles will go a long way towards reducing our nation's carbon footprint. Some vehicles that use CNG are Dedicated CNG vehicles, meaning they can only burn compressed natural gas. Other vehicles are Bi-Fuel vehicles, meaning they have small tanks that use gasoline as well as CNG tanks. The Bi-Fuel cars are popular because they have a greater range than Dedicated vehicles (Natural, 2011). There are drawbacks to CNG cars. They cost anywhere from \$5, 000-\$10, 000 more than gasoline powered cars. You also give up some comfort because the CNG tanks are heavy and take up a lot of space. There isn't much room for luggage or storage in these vehicles. Finding a place to refuel can be tricky too. There are established networks of CNG refueling stations all over the nation, but finding them takes some planning. This is an inconvenience. I

would consider buying one of these vehicles. The real selling point at this time the fact that compressed natural gas for vehicles is sold in units called Gasoline Gallon Equivalent (GGE). Currently, one GGE of compressed natural gas sells for about \$1.25 while a gallon of gasoline is selling at about \$3.80 (AAA, 2011). This price difference is likely to hold or become even larger as crude oil prices are increasingly dependent on world events and speculation while natural gas prices are more stable. CNG vehicles are better for the environment and the fact that I could buy a car that uses no gasoline is very attractive. I currently drive about 12,000 miles each year. My current car gets about 30 miles per gallon. Buying a CNG car would save me from consuming 400 gallons of gasoline each year. My fuel cost savings would be approximately \$1,000 each year. I think that the biggest thing that will keep people from buying more CNG vehicles is the fact that the large tanks limit comfort, storage and design. This, coupled with the fact that it is less convenient to fuel CNG vehicles than gasoline vehicles will keep many people from switching to this more environmentally friendly form of transportation.

Works Cited "AAA Fuel Gauge Report." Daily Fuel Gauge Report--national, State and Local Average Prices for Gasoline, Diesel and E-85. American Automobile Association, 26 May 2011. Web. 26 May 2011. . "

Alternative Fuels and Advanced Vehicles Data Center: Natural Gas Emissions." EERE: Alternative Fuels and Advanced Vehicles Data Center Program Home Page. U. S. Department of Energy. Web. 26 May 2011. .

Efstathiou, Jim, and Kim Chipman. "Fracking: The Great Shale Gas Rush - BusinessWeek." Businessweek - Business News, Stock Market & Financial Advice. Bloomsburg Businessweek, 7 Mar. 2011. Web. 26 May 2011. . "

Natural Gas Vehicles." Natural Gas Vehicles FAQ Sheet. Metropolitan Utilities District, Jan. 2011. Web. May 2011. .