



Using Natural Gas Engines Instead of Diesel. The World Is Finally Driving Forward



Author: Carey Robards

Sarasota, FL - A topic that seems to be truly moving forward in popularity and application: Natural Gas as a replacement for diesel fuel in truck fleets, buses, commercial vehicles, and cars. This of course is not a new idea, since CNG vehicles were introduced in the late 70's due to the oil crisis and reconsidered again in the 90's after the clean air act amendment mandating new gas formulations and stricter omissions allowances.

The on-going question has been whether it will ever “catch on” and push through the barriers that have held it from being successful. Some of the main barriers over the years have been slow public interest, manufacturers bringing products to markets, availability of CNG filling stations, and cost of new CNG engines or conversions.

Today, with over 250,000 CNG vehicles in use within the US, and over 5 Million worldwide, interest is clearly rising at an incredible pace. Manufacturers are now rising to the occasion, with companies large and small purchasing these fleets while seeing their initial transitional costs are being recovered due to the average 40 – 50% in fuel savings. Some service companies and transportation fleets have begun to already enjoy the benefits such as front runners like [UPS](#), [Frito-Lay](#), Waste Management, Proctor & Gamble, [Lowe's](#), AT&T and trucking companies like Ryder Systems, Inc. who have invested millions in replacing diesel fleets with CNG vehicles. [AT&T alone reported to have spent \\$350 million by the end of last year for a fleet of more than 8,200 natural gas vehicles.](#) Cities, municipalities and government branches are also rapidly transitioning over and offering their support to local companies who join them in an effort to reduce costs, both economic and environmental.



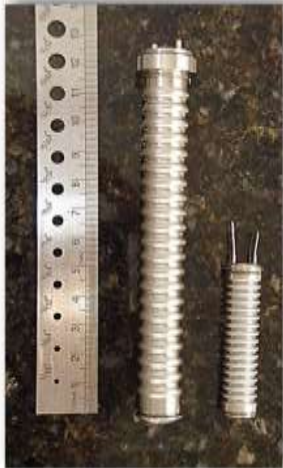


“As gasoline prices continue to rise, American interest in CNG is rising, and with good reason – CNG costs about 50% less than gasoline or diesel, emits up to 90% fewer emissions than gasoline and there’s an abundant supply right here in America. ” - [CNG Now](#)

A Majority of the larger companies have their own filling stations, while companies like Clean Energy Fuels Corp., Trillium CNG, are opening public filling stations nationwide, along with several other smaller companies and Cities. According to the US Department of Energy at the time of this article, there are 724 CNG stations available to the general public. More and more local city groups are offering benefits in support of local companies making the transition.

Is it Possible to Convert Your Current Diesel Vehicles to CNG or LNG?

Absolutely. Companies like [Omnitek](#), who provide complete conversion kits for diesel engines with or without turbochargers, offer these kits for a nominal cost. More than 5,000 conversion kits have been installed and are in use today. [CNG United](#), another conversion kit company with options for both 6 cylinder and 8 cylinder engines have training available for the do-it-yourself types.

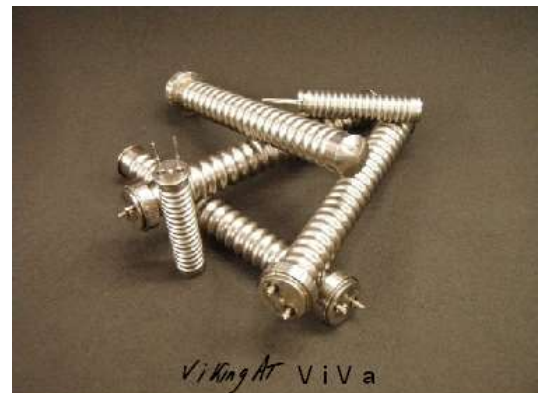


[Viking AT](#) has a patented piezoelectric fuel injector actuator/driver called [SIAC](#) for CNG and LNG that is hermetically sealed and electronically controlled for exceptional results and reliability. We were determined to provide a strong and reliable piezo actuator that would allow for environmental threats, making them obsolete in their effect on the actuator itself. Conditions such as active gases, areas with high humidity or wet areas won’t affect this SIAC injector.

Recently, we have now taken our [SIAC](#) to new heights (literally) providing several different options and pre-load levels with complete environmental protection.

Key Benefits:

- Maximize the amount of work from stack
- No side loading
- Hermetically sealed
- Protection from humidity
- Pre-load to maximize work and ensure survivability of stack.



We are excited about where this greener alternative to gas is heading, the lower costs of fuel and potential savings passed down to consumers by the companies that benefit from this incredible alternative.

For inquiries about integrating our piezoelectric actuator into your product line, please contact our office at 941-924-0900 or email us at crobards@vikingat.com Viking AT has partnered with a major manufacturer and can supply small companies to major car manufacturers who are interested in providing CNG powered vehicles options to their lineup.