# **Reasons to Use Qualified System Retofitters and Certified Systems**



The Environmental Protection Agency (EPA) has rules concerning the manufacture, sale and installation of alternative fuel engine conversion systems. Only EPA and/or CARB-certified conversion systems are permitted to be installed on vehicles. While a variety of non-certified systems are sold on the Internet and/or offered by some automotive shops, EPA has taken the position that installation of these systems is "tampering with a federally approved emission control system," a federal violation punishable by a substantial financial penalty (more than \$5000/day). Tulsa Gas Technologies takes this position of the EPA very seriously and only installs the EPA approved systems manufactured by Impco. Additionally, the EPA requires appropriate documentation and training to installers of these systems.

Tulsa Gas Technologies installers are Qualified System Retrofitters. To see a list of qualifying vehicles visit: http://www.impcoautomotive.com





# **Reasons for Converting To Compressed Natural Gas**

Compressed Natural Gas COSTS LESS. Natural gas costs significantly less than either diesel or gasoline. In fact, CNG is available at a third of the price of gasoline in most cases. Also, the prices of natural gas are more stable compared to oil prices. Less volatility makes long term cost planning easier. Reduced engine wear and tear due to clean burning natural gas also helps NGV owners save on tune-ups, parts, oil changes and parts replacements.

#### **Compressed Natural Gas is SAFER than gasoline.**

CNG is stored in cylindrical or spherical tanks that are much stronger than gasoline fuel tanks. In case of accident, CNG will dissipate into the atmosphere unlike gasoline, which pools in the ground and becomes a dangerous fire hazard. CNG also has less flammability, which means that natural gas will not burn in concentrations in air that is below 5% and above 15%. In addition, natural gas is non-toxic and non-corrosive. And because any leaks dissipate into the atmosphere instead of the ground, CNG does not contaminate ground water.

Compressed Natural Gas is EFFICIENT - Since natural gas is 90% methane, it has a substantially higher octane rating than gasoline. This allows for higher compression ratios that make the engines running on CNG much more efficient. Also, because CNG is clean-burning, it causes less wear and tear on the engine. This results in longer engine life and more savings from maintenance costs such as tune-ups, oil and spark plug changes.

Compressed Natural Gas is ABUNDANT and READILY AVAILABLE The United States has an abundant supply of natural gas. There is also an extensive, well-established network of gas pipelines distributing natural gas to several areas in the country. Also, there are now more than 1,300 CNG fuelling stations across the US with more being built everyday. This makes CNG use convenient as NGV owners have easy access to natural gas fueling stations.

Compressed natural gas is ECO-FRIENDLY. Engines running on CNG produce less hydrocarbon exhaust emissions than gasoline-fueled engines.

# Tulsa Gas Technologies, Inc. CNG Industry Proven Leader In Manufacturing, CNG Conversions and Service





Authorized Dealer for





### **Impco - CNG Solutions for Your Automotive Needs**

IMPCO Automotive designs. manufacturers and supplies alternative fuel systems to Original Equipment Manufacturers (OEMs) and aftermarket installers which



allow fleet and vehicle owners to enjoy the many benefits of clean burning Compressed Natural Gas (CNG). This "Green" fuel provides significant fuel savings, produce fewer emissions and are an integral part of reducing our dependance on foreign oil.

## Tulsa Gas Technologies - A Great **Choice for CNG Conversion**

#### TGT Uses Only Environment Protection Agency **Certified Systems**

Tulsa Gas Technologies is an Authorized Dealer for Impco. a manufacturer of EPA Certified Conversion Systems. The Environmental Protection Agency (EPA) has rules concerning the manufacture, sale and installation of alternative fuel engine conversion systems. Tulsa Gas Techologies only uses Impco EPA Certified systems which will prevent the EPA \$5,000 per day penalty users of non-certified kits are subject to.

#### **TGT Conversion Installers Are Qualified System Retrofitters**

EPA requires that manufacturers of retrofit systems provide appropriate documentation and training to installers of their systems, commonly referred to as "qualified system retrofitters" (QSR). Installation by a non-qualified installer could damage the retrofit equipment or the engine (or both), compromise vehicle performance, or render the vehicle unsafe to operate. No EPA certified engine conversion systems are sold to untrained/unapproved installers. This is not a "kit" you buy and install in your own garage or have installed by the local untrained mechanic. Tulsa Gas Technologies has been converting vehicles to CNG since 1989. Over the last 24 years Tulsa Gas Technologies has become one of the most respected and reliable CNG manufacturing and service companies in the United States.

### Where to Fill Your CNG Vehicles

According to the U.S. Department of Energy there are 161 Compressed Natural Gas Fueling Stations in Oklahoma, excluding private stations. To find these or other U.S. stations, visit this link:

http://www.afdc.energy.gov/locator/stations/

As an alternative to using existing stations, TGT sells and services a spectrum of solutions for fueling vehicles from small self-contained units that can slow-fill a vehicle in a matter of hours to full-sized fast-fill stations that can fuel several vehicles in minutes. For more information about the right size station for your fueling needs, call 918-665-2641. Station purchases may qualify for tax breaks.



New Solutions Fleet Station built by Tulsa Gas Technologies







Greenline's Smaller CNG Slow Fill Compressor sold and serviced by Tulsa Gas Technologies.



Blue Energy Fuels (TGT subsidiary) **CNG Station** in Owasso, Oklahoma

TGT CNG Dispenser

### **How Conversion Costs Are Determined**

The Retrofit System. EPA- or CARB-approved laboratory for certification is a time-consuming and expensive process that may cost as much as \$200,000 or more per engine family. System manufacturers recoup this R&D investment by amortizing the cost across the expected sales volume, adding it to the price they charge for the various components (computer control module, regulator, injectors, high-pressure hoses and fittings, etc.)



Fuel Tanks. The amount of fuel capacity requested by the customer (and thus the number, type, dimensions and configuration of the fuel tanks) significantly impacts cost since CNG cylinders are expensive.

#### Tubing/brackets -

Fuel system, tank and engine connections

#### Installation -

Business expense and man hours

For most people, an important consideration is whether the net costs associated with converting a vehicle to run on natural gas (after all costs, grants and/or tax credits are taken into account) will be recouped in fuel savings over the remaining life of the vehicle. Conversion of new vehicles provides the greatest opportunity to save fuel cost and, thereby, pay back the conversion cost and generate life-cycle savings.

Price varies by model. Call 918-665-2641 for pricing on specific models. Cost of conversion may be greatly reduced by available tax incentives. To learn more about tax incentives, visit Tulsa Gas Technologies website at this link: http://www.tulsagastech.com/conversion.html