

Natural Gas Vehicles: A Solution to Our Problems?

Mi Biz / August 31, 2009 / Julie Cridler

A new bill recently introduced in the Senate seeks to boost the status and sales of natural gas vehicles in the U.S. The purpose of the New Alternative Transportation to Give Americans Solutions Act (also known by the clever acronym NAT GAS) is to reduce U.S. dependence on foreign oil by encouraging vehicles powered by natural gas, which is relatively plentiful domestically. NAT GAS provides, among other things, tax credits for consumers who purchase the vehicles, grants for related R&D activity, and hefty tax incentives for companies that establish natural gas vehicle (NGV) manufacturing facilities.

There are several reasons why the idea of these vehicles is attractive. NGVs are said to be one of the cleanest burning options available when considering the spectrum of existing alternative vehicle technologies. According to the International Association for Natural Gas Vehicles, studies frequently indicate that NGVs produce lower emissions when compared to other clean fuel technologies, including gas electric hybrids. Also, because of the fact that natural gas burns so cleanly, there is less wear on the engine, so owners of NGVs ultimately have to pay fewer visits to the dealer (or repair shop) for service and maintenance. Safety is another aspect that consumers may find advantageous about NGVs. The fuel tanks on NGVs have to be stronger and thicker than traditional gasoline or diesel fuel tanks, so some would argue that this makes the vehicles safer in the event of a crash.

Deposits of natural gas are plentiful in the U.S., and some energy companies, like ExxonMobil and Southwestern Energy, have recently been successful in unlocking significant new deposits here in the states. In general, natural gas prices are lower per gallon than gasoline. Natural gas has also exhibited greater price stability in comparison to oil prices, so long-term operating costs of NGVs are easier to calculate and are likely to remain steady.

One additional and very positive element for the auto industry is that the vehicles operate on much the same principle as a gasoline engine. Thus, it is possible for existing vehicles to be designed in NGV format with only some necessary modifications to existing componentry. The Honda Civic GX, the only production NGV currently available directly to consumers in the U.S. is a good example.

All of these great qualities do not come cheap, however. The MSRP for the Honda Civic GX starts at \$9,685 more than the starting MSRP of the base model Civic Sedan. It is even \$1,540 higher than the starting MSRP for the Civic Hybrid Sedan.

Other sticking points exist. The issue of refueling is a question mark. There is existing infrastructure, but it may not be prevalent enough yet to lure buyers into this type of vehicle. Furthermore, with current technology, the range of NGVs between refueling is less than gasoline powered cars. Given the fact that natural gas refueling stations are less prevalent than regular gas stations, this could prove to be problematic. And finally, there is that minor detail

that natural gas is actually a still a fossil fuel, so growth in the NGV segment does little to advance the current push toward renewable energy sources.

The NAT GAS legislation is still in the beginning phases – as of this writing, it's been referred to the Senate Finance Committee for review – so it is yet unclear whether or not it will be passed into law. It will be interesting to see what happens, though. Will the bill, if it lives, have enough horsepower to propel natural gas vehicles into the mainstream? Or, will they be destined to remain a smaller sub-set of the vehicle population, similar to the status hybrids currently enjoy? One thing is for sure, though: as the race heats up to develop alternative, clean-burning engine technologies, NGVs definitely have the potential to be a serious contender.