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Fiat Turns to Natural Gas for U.S. as Toyota, GM Go Electric 2010-12-01 23:01:22.0 GMT

By Tommaso Ebhardt and Tim Higgins

Dec. 2 (Bloomberg) -- As Sergio Marchionne brings back Fiat SpA to the U.S. after nearly three decades, he may add another Italian speciality: the natural gas engine.

Marchionne, who is chief executive officer of Fiat and Chrysler Group LLC, says natural gas engines offer a better way to cut emissions because they're cheaper than competing technologies. He also argues electric cars, which General Motors Co. and Toyota Motor Corp. are betting on, present "too many obstacles" such as the recharge time for batteries.

"Natural gas is very suitable for the U.S.," Constantinos Vafidis, who oversees transmission and hybrid development at Fiat's research center in Turin, Italy, said in an interview.

"Especially for public services and goods transportation, where vehicles are refueled from a central base."

Fiat is the market leader in Europe in natural-gas engines, with an 80 percent share of methane-powered cars and 55 percent of light commercial vehicles. Bolstering Marchionne's view, the U.S. has the natural-gas supply for the engines after becoming the world's largest producer last year.

"Fiat will use its technological leadership in natural gas, in a region discovered to have huge reserves," said Giuliano Noci, a professor at the MIP management school of Milan's Polytechnic university. "It's almost a mandatory strategy. Fiat should lead the natural-gas car market as it's far behind in the electric vehicle sector."

## Cost Difference

Natural gas is a "more affordable solution" as it's less expensive to produce, transport and distribute compared with other fuel sources, Alfredo Altavilla, who heads Fiat's Iveco truck unit, said in September. The additional cost for an engine using natural gas is \$3,000, compared with \$3,300 for diesel and \$8,000 for an electric hybrid, he said.

Fiat sold 127,000 methane-powered cars in Europe last year, including versions of the Panda compact and Ducato van, helped by government incentives. The U.S. last year overtook Russia as the world's largest producer of natural gas, as output of gas trapped in shale rock rose to 10 percent of total U.S. supplies from 2 percent in 1990.

"We've had contact with the U.S. and Canadian governments," said Lucio Bernard, director of Fiat Powertrain. The two countries have become more interested "after the recent discoveries of shale-gas reserves in the region." While Italy's natural-gas vehicle market is one of the most robust in the world, with more than 800 fueling stations across the country, the market is still in its infancy in the U.S. GM just began selling vehicles with natural-gas engines in the country this year for fleet buyers.

Fiat and Chrysler, which is joining the natural-gas vehicles association in Washington, are currently studying whether to sell natural-gas vehicles in the U.S., the two carmakers said. Fiat will reenter the U.S. next year, and targets sales of 50,000 of the 500 compact in the market.

"We're always looking at alternative propulsion systems and how to reduce our dependency on foreign oil, so this is one thing we are looking at," Chrysler spokesman Vince Muniga said.

GM and Toyota are focusing on hybrid electric vehicles as their alternative to conventional gasoline engines. Detroit- based GM started production of the \$41,000 gasoline-electric Chevrolet Volt Nov. 30 and forecasts sales of 10,000 of the cars next year and 45,000 in 2012.

## Refueling Stations

Toyota is the maker of the world's first mass-produced hybrid car, the Prius, which went on sale more than a decade ago. Chrysler is also developing an electric version of the Fiat 500 to begin selling in the U.S. in 2012 for city driving.

While recharging stations for electric-car batteries present an infrastructure challenge, locations for refueling natural gas vehicles are also limited. There are 1,300 stations in the U.S. for the 110,000 vehicles using natural gas, the International Association for Natural Gas Vehicles said. That compares with 160,000 gasoline stations, the Petroleum Marketers Association of America said.

The lack of methane fueling stations in the U.S. has limited these vehicles primarily to government and corporate fleets that can return to a central location to refill.

"That is where the industry is primarily putting its emphasis right now," said Richard Kolodziej, president of Natural Gas Vehicles for America. Natural gas is about \$1 less on average than a gallon of gasoline, he said.

## Targeting Trucks

Marchionne, who plans to raise his Chrysler stake to 35 percent by the end of 2011 from 20 percent, last year separated the Ram and Dodge brands to create a standalone truck unit. His five-year plan for Chrysler includes bringing large- and small- commercial vans to the U.S. in 2012 under the Ram brand based on Fiat's trucks platforms.

"That gives them the freedom to introduce Iveco products into the Chrysler lineup," said Phil Gott, an IHS Automotive analyst in Lexington, Massachusetts. "The target customer would be the heavy duty fleets, they could cut their fuel costs in about half," he said of natural gas engines.

The U.S. currently ranks 14th in the world in sales of natural gas vehicles, while Italy is sixth, according to the International Association for Natural Gas Vehicles. Pakistan ranks No. 1 with 2.3 million vehicles and 3,068 fueling stations. Marchionne hopes to boost the U.S. figure.

"Fiat's technological leadership in compressed natural gas in Europe is a key asset for the U.S. natural gas-vehicle market," the CEO said this week.

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