

## LOGAN LPG EXPECTED IN RUSSIA

BY KIRILL LEBEDEV, IFS SENIOR ANALYST, JUNE 22, 2009

France's Renault is launching a liquefied natural gas powered car model, Logan LPG. There are all chances for the new model to be a success in Russia, as well as reasons for AutoVAZ to master the French LPG-powered engine technology.

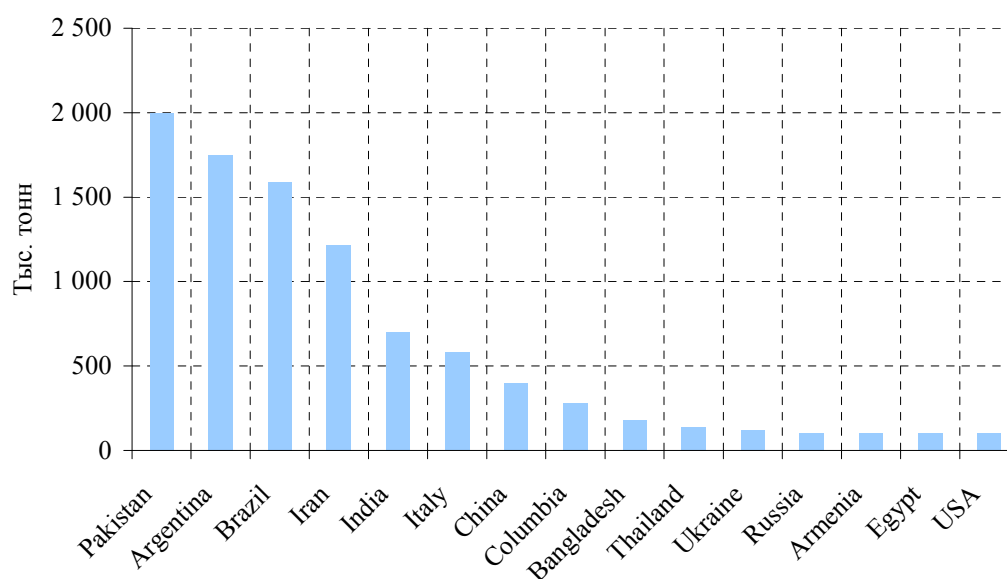
Compared to the gasoline variant of Logan, the LPG-powered vehicle emits 20% less carbon dioxide, and its exhaust fumes do not contain sulfur, lead and benzol.

Economic characteristics of the new model are also very attractive. Eco-Logan is sold at 6.7 thousand euros in France. The price is low owing to eco-bonus, and we can assume that in Russia the LPG version will not be expensive either. For another thing, the car's cruising range is 1,200 km with just 50 liters of gasoline and 42 liters of LPG. Vehicle power characteristics are quite good: 75 hp and a maximum speed of 175 km/h.

As the license package is worth hundreds of million euros, Russia should decide whether it needs this technology.

LPG-powered vehicles are not uncommon in Russia which occupies the 12<sup>th</sup> place globally by the number of such vehicles.

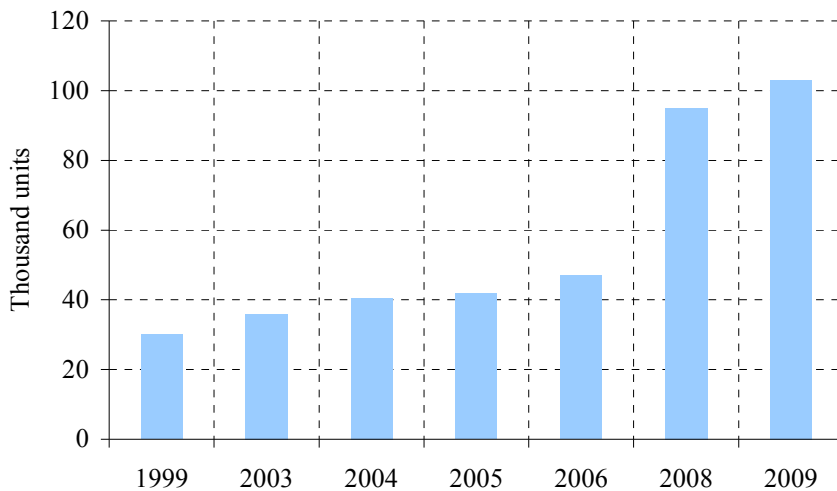
Figure 1. Largest LPG-powered car fleets, May 2009



Source: The National Gas Engine Association

The number of LPG-powered cars grew more than tripled over the past decade and exceeds that in the US (103,000 versus 100,000 LPG-powered vehicles).

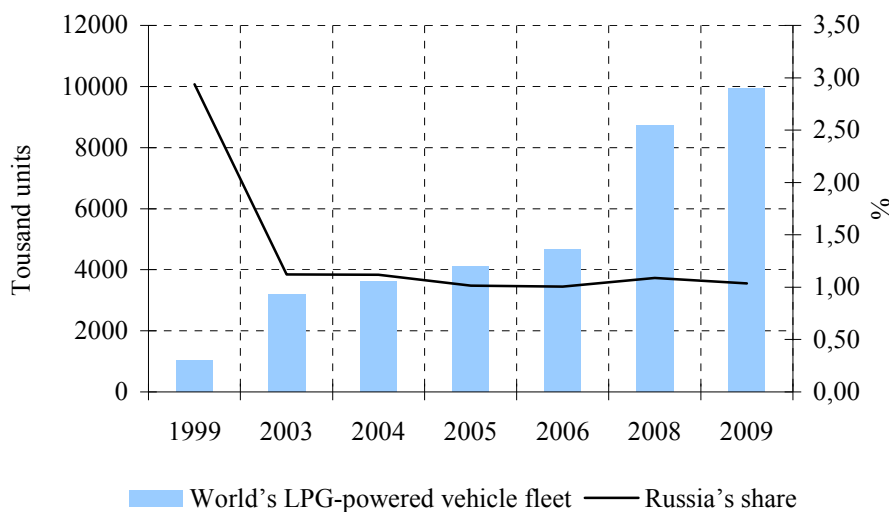
Figure 2. LPG-powered car fleet in Russia



Source: The National Gas Engine Association

Although absolute parameters are rising, Russia's share in the world's LPG-powered vehicle fleet is falling.

Figure 3. World's LPG-powered vehicle fleet and Russia's share in it



Source: The National Gas Engine Association

LPG-powered vehicles might see high demand in Russia owing to lower LNG and compressed natural gas prices are compared to gasoline and diesel fuel. For instance, the compressed natural

gas/gasoline ratio averages 0.5, and the compressed natural gas/diesel fuel ratio stands at 0.55. The demand for LPG grows 20 to 25% annually in Russia, in a large part owing to the low price.

High popularity of gasoline-powered Logan cars will boost the Logan LPG success in the Russian market.

Yet, there are some hurdles on the way of LPG-powered vehicle market development.

There are few gas filling stations in Russia, and even in Moscow such stations can be only found around the Moscow ring road. Argentina, Brazil and Iran top the list of countries by the gas station/100 km ratio – having ratios of 0.8, 0.8 and 0.4 respectively. Russia's quotient is just 0.03.

The launch of Logan LPG is important in the light of strategic cooperation between Renault and AutoVAZ. AutoVAZ needs Renault technologies for making gas engines (particularly, for enhancement of the Priora CNG line). In 2008, AutoVAZ rolled out pilot versions of Lada Priora CNG. Fueled by compressed methane, the engine churns out a capacity of 88 hp, but its cruising range at 80 liters of methane and 15 liters of gasoline is half the Logan LPG's cruising range.

#### AUTOVAZ AND RENAULT AGREEMENT STARTS WORKING

AutoVAZ might soon acquire rights to produce and sell vehicles based on the Logan platform featuring 1.4 to 1.6 liters engines. The plant hopes to put out 90,000 estate cars and minivans per year by 2013. The first Logan-based vehicle is expected to go on sale in 2010.

The deal is worth 8.6 billion rubles. With AutoVAZ's 80 billion rubles investment plan for 2013, this value is absolutely not critical.

The investment plan will be financed through Sberbank, VTB and Gazprombank loans. France's Societe Generale will give the first loan worth 7.5 billion rubles for purchasing a license. Societe Generale might remain one of the AutoVAZ's main creditors in future.