

## Russian gas-engine fuel market needs private investments

According to the transport strategy of the Russian Federation, the share of the Russian vehicle fleet operating on alternative fuels (primarily gas-engine fuels) should increase to 24% by 2030. At the same time, the government is stimulating the development of gas fuels through additional programs. CREON Group interviewed market experts to evaluate the effect of these programs and the prospects of gas-engine industry in Russia.

*Maria Dymenko, Alexandra Zaikina*

The government has been actively encouraging the transfer of part of the fleet to the gas turbine. So, in March 2020, Mikhail Mishustin, Russian prime minister approved a decree of the government on amendments to the state program “Development of the energy sector”, supplemented by the sub-program “Development of the gas-engine fuel market”. The objectives of the sub-program are to increase the consumption of natural gas as a motor fuel, develop gas filling infrastructure, and increase the fleet of natural gas vehicles. To implement these goals, the Russian budget will allocate 19.29 bln rubles (\$276 mln) from January 1, 2020 to December 31, 2024.

By the end of 2024, the fleet of natural gas vehicles is expected to increase by 40,000 units. The volume of natural gas consumption for motor fuel will increase to 2.7 bln cubic meters. Currently the total capacity of the Gazprom gas fueling network is about 2.3 bln cubic meters per year. Simultaneously, the number of stationary gas refueling stations should grow two and a half times to 1273 units. At the moment there are 484 stations in Russia, 329 of them belong to Gazprom.

### Subsidies for investors in gas-engine fuel

Since 2019, entrepreneurs who implement investment projects for the construction of compressed gas (ACGFS) and cryogenic filling stations, can exercise a state support program for reimbursable subsidies in the amount of 25-40% of construction costs, but not more than 40 mln rubles (\$0,6 mln), which reduces the payback period of projects.

According to the plans of Ministry of Energy this year, 110 new methane gas stations will be launched in 27 regions on a list adopted by the Ministry’s department for the development of gas engine fuel market<sup>[1]</sup>. “All regions are located along key federal highways, they already have basic gas filling infrastructure. This approach will efficiently cover European part of Russia with gas stations network and create corridors for gas-engine vehicles”, said Timur Soin, general director of Gazprom Gas-Engine Fuel.

In particular, in 2019, 160 mln rubles (\$2,3 mln) were allocated from the federal budget to the Voronezh region for building 20 new methane gas stations by 2024. ACGFS will be built both in cities and along highways as the program involves the use of methane not only for municipal vehicles and public transport, but also in freight transportation.

Market players believe that the subsidies allocated are insufficient for the construction of gas stations: “You can build petrol stations for 40 million rubles, but this amount is not enough to launch ACGFS or LNG stations. In addition, in order to receive these subsidies, you have to collect a bunch of documents, waste your time and there is no guarantee that your application will be approved”, comments a regional developer. “We tried to get 40 million rubles subsidies for the construction of a stationary filling station. This amount does not cover the entire costs, but it is approximately 40% of the total amount, which is also very decent”, says another expert.

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<sup>[1]</sup>The list of priority regions: Moscow city, St. Petersburg, Belgorod, Vladimir, Volgograd, Voronezh, Kursk, Leningrad, Lipetsk, Moscow, Nizhny Novgorod, Novgorod, Oryol, Rostov, Saratov, Tver, Tula, Ulyanovsk, Chelyabinsk regions, Krasnodar, Perm, Stavropol Territories, the Republics of Adygea, Bashkortostan, Tatarstan, Udmurtia, Chuvashia.

CREON's survey showed that the main obstacle market participants face is not getting subsidies for construction or getting funding, but subsequent commissioning of station. In fact, it takes 4 to 5 months to build a new station, more than year to get all permits. "Queues for 3 to 4 hours appear at popular gas-fueling stations, and there are ten new gas stations nearby that are not operating due to bureaucratic obstacles. Unfortunately, the program adopted by the Ministry of Energy does not take such difficulties into account", regional operator commented.

### **Incentives for automobile manufacturers**

According to official data, at the moment barely 2% of the entire Russian car fleet is working on gas turbine engines (excluding converted cars). Also, the share of sales of new double-fuel and gas engine vehicles is insignificant: according to RAAR (Russian Automotive Market Research), it is about 0.4% for cars, 3.6% for trucks, 11% for LCV (light commercial vehicles) and 14.4% for buses. In order to stimulate the growth of these indicators, in May the Ministry of Industry and Trade approved the rules of federal subsidies for those manufacturers of equipment who use compressed and liquefied natural gas as an engine fuel.

Automakers have been granted subsidies in equivalent of discount on gas engine equipment with some conditions for the buyers. In particular, the vehicle must be produced in Russia no earlier than a year preceding the subsidy year, and also comply with the environmental class standards Euro 5 and above. The total allocation will be 3.3 bln rubles, supporting sales of about 6,000 units.

"The subsidies are significant incentive for automotive market participants operating on compressed and liquefied natural gas. Since 2014, about 18,000 vehicles originally designed at the factory with methane engine have been sold. Currently, more than 200 models of such vehicles are available to consumers," said Timur Soin.

### **Where does the market go**

The producer of gas-cylinder equipment from Ural region believes that the crisis following the pandemic will spur the transition of commercial vehicles to gas turbine engines. "Household income is declining, so logistics companies and retailers will also adapt by reducing their production costs, including fuel. After all, gas is twice or even three times more profitable than traditional fuels".

The manufacturer of commercial vehicles believes that "the shift is likely to occur in the after-sales service sector of commercial vehicles aiming to prolong operational use of vehicle and reduce costs. However, it is unlikely that large retailers will do so." And the largest Russian truck manufacturer confirms the increased interest in commercial vehicles using gas-engine fuel due to financial benefit: "Now, surely demand has dipped a bit because of the pandemic, but the market is reviving: new customers and requests are coming".

Not all automakers surveyed by CREON believe in the growth of market share of gas-engine fuel in the nearest future. A representative of the top-5 global automotive giant believes that the current situation "is unlikely to become a driver for a rapid breakthrough in the Russian gas-engine fuel market". He is supported by another world trucks manufacturer's representative: "We do not plan to decrease the production of gas engine equipment in 2020, but we will not increase it either. In Russia, the issue of gas-engine fuel is just evolving, and we don't believe that the situation in the traditional fuel market will create incentive for development of gas turbine engines".

Nevertheless, all the experts surveyed agree that Russia has good chances for successful implementation of the gas engine fuel market development program. This is supported by the vast reserves of natural gas, its low cost, and a developed network of gas pipelines. But this requires substantial private investments. Russian market of gas-turbine engine could not do without additional infusion of money, for which the attractiveness of investment will depend on pricing policy for natural gas.

"The Russian government supports the UN's climate goals, and more and more Russian companies are paying attention to their environmental footprint, which can be significantly improved through development of gas turbine engines", said **Florian Willershausen**, BD Director at CREON Energy Fund. "Vehicles on gasoline engines emit 10–

25% less CO<sub>2</sub>, even without use of biofuels. However, along with economic incentives, practical actions are also needed, such as expanding infrastructure. Environmentally sound technologies can't make a breakthrough if the investment costs for technology users are high", - said the expert.

*Gas-engine fuel market will be discussed in detail at the Gas-Engine Fuel 2021 Conference in Moscow ([Program and registration](#)).*