Refining

Gazprom Neft has implemented Captain, a digital logistics management system for projects in the Arctic. This system enables uninterrupted oil shipments from Prirazlomnoye and Novoportovskoye fields. Gazprom Neft produces aluminium oxide catalysts for deep conversion, and develops efficient catalytic-cracking, hydrotreatment and hydrocracking catalysts as part of a national project. A state-of-the art catalyst plant is under construction in Omsk.

Gazprom Neft's strategic priority is to develop refining processes that deliver unmatched efficiency. These include the Aroforming technology that allows low-grade feedstock (straight-run gasoline) processing into high-octane motor gasoline component. The testing was successfully completed in 2019, and the company is developing plans for this technology commercialising.

Another priority for the downstream segment is new products manufacturing technologies development, such as needle coke and unleaded aviation gasoline. The first pilot batch of premium-grade needle coke was produced at the Omsk Refinery in 2019. The technology used in its production is an R&D result patented by the company. This product is used to manufacture ultra-reliable graphitised petroleum coke cathodes, which are used in the metals industry. The company also develops processes to convertheavy feedstock, such as tar, asphalt or pyrolysis resin, into high-quality bunker fuel that comply MARPOL 2020 standards, or into raw materials for hydrocracking and catalytic cracking facilities.

IMPORT SUBSTITUTION

One of Gazprom Neft priorities is to increase the share of Russian products in procurement structure. The company implements solutions available on the market and supports the development of new products to achieve this goal. Substantial part of import substitution projects are implemented by partnering companies.

Seismic surveys at the Ayashsky licence block in the Sea of Okhotsk is an example of import substitution in practice. During these surveys, Gazprom Neft has become the first oil company in Russia to use the domestically produced standalone "CRAB" seabed station for seismic surveys. Previously, these surveys were largely conducted using the foreign equipment.

The seabed stations development is an example of successful partnership between Gazprom Neft, the government, domestic technology developer and equipment manufacturer, and a Russian service company. Its outcomes prove that Russian companies are able to take on complex technological challenges and produce solutions promptly. The company also implements a number of other joint projects to create domestic technologies for offshore exploration and production.