PIPELINES

Despite the sanctions

Nic Newman **looks at some of the issues facing Transneft, operator of Russia's largest oil and gas pipeline network, which carries over 85% of the oil produced in Russia.**

Transneft operates some 70,000 km of oil pipeline in a network linking oil fields and refineries across the European continent and Russia, as well as to markets in Central Asia and China. The company transports more than 85% of Russia's extracted oil – mostly for export, with the remainder destined for the domestic market of 40 Russian refineries or petrochemical plants. Oil is transported directly by pipeline to foreign customers in Eastern Europe and China, and to the oil ports for access to world markets. It also operates several fuel products pipelines in Russia, including one serving the Moscow region.

Revenues in 2016 grew by 4%, to reach $13.68bn, while EBITDA (earnings before interest, tax, depreciation and amortisation) increased by 10% to reach a record $16.59bn. Legally a joint stock company, Transneft's main shareholders are the Russian state; the sovereign wealth funds of Russia and China; and the UCP Investment Group, an independent asset management company with a primary focus on the Russian market.

Sanctions challenge

Over the past year, the US and European Union (EU) have tightened economic and technological sanctions on Russia's economy, put in place following Putin's dealings with Crimea in 2014 and with Ukraine. Both have banned the export of goods, services and technology to Russia's top five oil producers and restricted issuance of long-term debt (over 90 days maturity) in the west by Russia's leading oil and gas companies, including Transneft and the country's largest bank, Sberbank.

How effective these sanctions will be in practice is open to question. In respect to the US ban on technology, impact on the pipeline sector could well be limited. Joseph Murphy, an expert on Russian energy and Editor, *Energo – CEE/FSU Power*, notes: 'Pipeline building is less technology-intensive than other areas of the industry, such as Arctic drilling or unconventional production, and the Russians have plenty of experience building pipelines through long tracts of difficult terrain. Transneft recently said it produced 94% of its equipment domestically, which seems believable to me.'

Although sanctions could make it more difficult and costly for Transneft to acquire foreign capital, Stanislav Mitrakhovich, Senior Expert at Russia's National Energy Security Fund, points out: 'US sanctions are having some impact, but Transneft has become innovative in raising capital from both domestic and foreign sources of capital. In addition, the government is a good source of extra capital for investment.'

Indeed, despite sanctions, Transneft is improving capacity across its existing crude trunk pipeline corridors and working on a number of new projects. In Central Asian, Siberia and Far East parts of Russia, it is engaged in six technically and logistically difficult projects to expand transportation capacity from various Arctic oil

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Transneft is improving capacity across its existing crude trunk pipeline corridors and working on a number of new projects aimed at improving links to China

Photos: Transneft

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fields to China, a key market for Russia. Indeed, as noted on p30, Russia overtook Saudi Arabia and Angola to become China's largest supplier of crude oil in 2017. Helping drive Russia to pole position, was completion of the Moher–Daqing pipeline expansion project in January 2018, which doubled capacity to 600,000 b/d.

Alongside this, the capacity of the existing direct connection to China via the East Siberia–Pacific Ocean (ESPO) pipeline, which delivers Russian crude to the Pacific port of Kozmino, for onward shipment to Chinese ports, is being expanded. 'Moscow seems confident of increased deliveries to Asia overall, with plans to expand the capacity of ESPO-1 from 1.16mn b/d to 1.6mn b/d by 2020, and ESPO-2 by 740,000 b/d to 1mn b/d,' notes Murphy.

Supply and demand

Oil and gas is a key component of Russia's economy, with sector activities – including exports – making up 36% of the country's federal budget revenues. Russia consumes only about 30% of its crude oil and petroleum products output, leaving the lion's share for export. The bulk of Russia's exports of more than 5.2 mn b/d of crude oil and condensate, and more than 2.4mn b/d of petroleum products in 2016 were destined for Europe, according market analyst CEIC. Indeed, Russia currently provides more than a third of Europe's total crude oil imports.

Even though about 80% of Russia's crude oil and condensate exports are seaborne Transneft's dominance is unchallenged, since its pipes are used to transport the crude to the ports ready for shipment. In addition, some crude oil is moved by ship, barge or rail between independently-owned terminals.

Petroleum product exports have grown significantly over the past few years and are expected to keep on growing as Russian refineries add capacity to produce more high-quality products. According to Eastern Bloc Energy, in 2016 Russia exported about 1.3mn b/d of fuel oil, 990,000 b/d of diesel and 120,000 b/d of gasoline, and additionally, according to Clipper Data, some 75,000 b/d of LPG.

Russia produced an estimated 11.24mn b/d of petroleum and other liquids in 2016 and consumed about 3.6mn b/d. Russian Energy Minister Alexander Novak says that 2018 oil production is expected to stay flat, if the cuts agreed with OPEC are maintained to year-end. Most of this production has come from the declining fields in West Siberia and the Urals-Volga regions. However, oil production in East Siberia and Russia's Far East (Krasnoyarsk, Irkutsk, Yakutia and Sakhalin) regions now account for more than 12% of total Russian oil output. Plans to develop these regions with Chinese and Russian investment are perhaps vulnerable to US sanctions, whilst plans to increase Sakhalin-1 project output, from the current quota of 200,000 b/d, are likely to be put on hold due to the current OPEC agreement on production between its members and Russia.

But it is the prospect of opening up vast shale/tight oil reserves where Russia's future lies. The development of the Bazhenov Suite – covering a territory of more than 1mn sq km and assumed to contain at least 20bn tonnes of oil – is still in its infant phase, yet it might easily surpass its rivals. Meanwhile, the potential of the Abalak Suite underlying the Bazhenov, as well as the Domanik Suite stretching asymmetrically across the Volga-Urals region from Perm to Orenburg, in addition to others, has yet to be assessed. However, virtually all are promisingly located in traditional oil-producing regions with a fully-established oil infrastructure.

Strategic government agency

According to Russia's National Energy Security Fund's Mitrakhovich, Transneft 'should be regarded as a strategic government agency rather than as a modern efficient and cost-effective well-managed company'. It transports about 85% of the country's crude oil, leaving the remainder to two other pipeline companies.

The first, the Caspian Pipeline Consortium (CPC) – in which Transneft represents the Russian government's 24% share – connects the Tengiz field in Kazakhstan to the Russian Black Sea port of Novorossiysk. Other major shareholders are KazMunaiGaz (19%; the state-owned oil and natural gas company of Kazakhstan) and Chevron (15%).

The second – the Trans Sakhalin pipeline – is owned by the Sakhalin-2 consortium, in which state-owned Gazprom has a 50%-plus-one-share stake.

Continued growth

In sum, despite US-led sanctions, Transneft seems well placed to develop in line with market trends as well as progressing plans to ensure that new oil fields in the eastern part of the country have access to requisite transportation infrastructure in the future. This will allow the company to meet anticipated growing demand from both Europe and China, while helping to sustain Russian government revenue. ●