TRENDS IN RUSSIA'S OIL AND GAS SECTOR DEVELOPMENT Y.Bobylev

In 2014, Russia continues to display upward trends in the oil extraction sector and petroleum product exports. In recent months, world prices of oil have been on the decline. Over the period of August–September 2014, the USA, the European Union and some other countries introduced economic sanctions against Russia's oil and gas sector, which may potentially result in serious constraints on its future development. However, the actual negative effect of these sanctions will strongly depend on the length of the period of their realization. Should that period turn out to be short, the resulting negative effect will be rather limited; otherwise, oil output in this country may drop, thus bringing down government revenue.

Oil production in Russia in 2014 continued to be on the rise (Table 1). At the same time, its rate of growth remains rather low - a phenomenon that can be explained first of all by the deterioration, for objective reasons, of the conditions for oil extraction. Many of the currently exploited oil fields have entered the phase of declining output, while the new oil fields in a majority of cases have less beneficial mining, geological and geographical parameters, and so their development will be associated with higher capital, production and transport costs. By now, Russia's oil extraction industry has nearly exhausted its production growth potential. In order to level down the negative effect of declining oil extraction in the currently exploited oil fields, it is necessary to put in operation other oil fields situated in regions where the local infrastructure is underdeveloped or is altogether absent, including continental shelf deposits, as well as to begin the extraction of available lower-quality oil reserves in the already developed regions, including the less easily recoverable oil reserves. From 2014 onwards, new legislative acts¹ were adopted in order to create appropriate tax

conditions for developing the less easily recoverable oil reserves and continental shelf oil deposits.

At the same time, the growth rate displayed by the oil processing industry still stays above than that of oil extraction, being sustained at that higher level in the main by the rising exports of petroleum products; this phenomenon is an upshot of the introduction of relatively lower export duties, which in fact represent a subsidy to support the procession of Russian oil and exports of petroleum products from Russia. At the same time, the depth of oil refining still remains at a low level: over the first 8 months of 2014, this index amounted to 71.9% (vs. 71.8% in the corresponding period of last year). The goal of upgrading the technologies applied in the oil processing industry remains one of the top priorities of Russia's oil sector, if it is to be further developed as part of the national economy.

The upward trend in the exports of petroleum products is still visible alongside the shrinking exports of crude oil (*Table 2*).

Over the greater part of 2014, world oil prices have remained at a high level. On the average over the first 9 months of 2014, price for Urals amounted to \$ 105.1 per barrel. In recent months, however, world prices of

Table 1

PRODUCTION OF OIL, PETROLEUM PRODUCTS AND NATURAL GAS IN 2010–2014, AS A PERCENTAGE OF THE CORRESPONDING PERIOD OF THE PREVIOUS YEAR

	2010	2011	2012	2013	2014 8 months
Oil, including natural gas condensate	102.1	100.8	101.3	100.9	101.2
Primary crude oil distillation	105.5	103.3	104.9	102.7	105.3
Motor gasoline	100.5	102.0	104.3	101.3	97.9
Diesel fuel	104.2	100.3	98.7	103.1	107.6
Furnace fuel oil	108.5	104.6	101.6	103.3	104.7
Natural gas	111.4	102.9	97.7	102.1	97.3

Source: RF Federal State Statistics Service, RF Ministry of Energy.

¹ Federal Law of 23 July 2013, No 213-FZ 'On the Introduction of Alterations into Chapters 25 and 26 of Part Two of the Tax Code of the Russian Federation and Article 3.1 of the Law of the Russian Federation "On the Customs Tariff" and Federal Law of 30 September 2013, No 263-FZ 'On the Introduction of Alterations

into Chapter 26 of Part Two of the Tax Code of the Russian Federation and Article 3.1 of the Law of the Russian Federation "On the Customs Tariff".

Table 2

EXPORT OF OIL, PETROLEUM PRODUCTS AND NATURAL GAS IN 2010–2014, AS A PERCENTAGE OF THE PREVIOUS YEAR

	2010	2011	2012	2013	2014 1st half-year
Oil, total	101.2	97.6	98.2	98.6	94.8
including:exports to non-CIS countries	106.1	95.7	98.7	98.3	96.7
Petroleum products, total	106.2	98.5	104.4	109.6	105.3
including: exports to non-CIS countries	109.6	94.6	100.8	116.4	104.3
Gas, total	105.6	104.0	96.6	109.9	107.0

Source: RF Federal State Statistics Service.

INTERNATIONAL PRICES OF OIL AND NATURAL GAS IN 2010-2014, USD/BARREL

Table 3

	2010	2011	2012	2013	2014				
					Q1	Q2	July	August	September
Price of Brent (UK), USD/barrel	79.6	111.0	112.0	108.8	107.9	109.8	107.0	101.9	97.7
Price of Urals (Russia), USD/barrel	78.3	109.1	110.3	107.7	106.5	107.7	105.7	101.5	96.5
Price of Russian gas on the European market, USD/1,000 m ³	296.0	381.5	431.3	402.0	390.2	382.7			

Source: IMF, OECD/IEA, Rosstat.

oil have been displaying a downward trend (*Table 3, Fig. 1*). In the second half of September 2014, prices for Russian oil in the European market dropped to \$ 93–95 per barrel. The factors that have been pushing down the level of world oil prices have been the mounting oil production volumes outside of the OPEC zone and the rising oil supplies from Libya. The declining oil prices and the lower level of natural gas spot prices in the European market in comparison with the prices for long-term contracts with *Gazprom* pushed down the export prices of Russian natural gas.

As the prices of crude oil and petroleum products in Russia's domestic market are set as netback prices, equal to the international price of a product less the amount of export customs duty and export freight costs, the behavior of producer prices for crude oil and petroleum products reflects the behavior of their international prices (*Fig. 2, 3*). At the same time, the existence of an export duty helps sustain the domestic prices of oil and petroleum products at a level significantly lower than that of world oil prices (*Table 4*). Thus, over the first 7 months of 2014, the domestic



Source: OECD/IEA, Rosstat. Fig. 1. Prices of Urals in 2008–2014, USD/barrel

price of oil (producer price) amounted on the average to only 43.3% of the world oil price (price for Urals in Europe).

Over the period of August–September 2014, the USA, the European Union and some other countries (Norway, Canada, Australia) introduced economic sanctions against Russia's oil and gas sector, which re-

Table 4

DOMESTIC PRICES OF OIL, PETROLEUM PRODUCTS AND NATURAL GAS EXPRESSED IN USD IN 2010–2014 (AVERAGE PRODUCER PRICES, USD/TON)

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	2010	2011	2012	2013	2014	2014
	December	December	December	December	June	July
Oil	248.2	303.3	341.1	346.1	364.6	345.6
Motor gasoline	547.9	576.9	628.7	614.4	692.7	692.5
Diesel fuel	536.1	644.9	774.2	698.0	677.2	621.7
Furnace fuel oil	246.3	274.6	275.3	235.8	280.6	265.3
Natural gas, USD/1,000 m ³	20.5	21.3	40.3	39.8	42.4	44.8

Source: calculations based on data released by the RF Federal State Statistics Service.

presented their response to the recent development in the southeast of Ukraine. The sanctions involve restrictions on the access of Russia's leading oil and gas sector companies to the financial markets in these countries, as well as restrictions on supplies of certain types of equipment and technologies to Russia and on services relating to research and exploration of deep sea and Arctic oil fields, and shale oil extraction. US sanctions are targeted practically against Russia's all biggest oil and gas companies (*Rosneft, Gazprom*, *Gazprom-Neft, LUKOil, Surgutneftegas, NOVATEK, Transneft*); EU sanctions, due to Europe's strong dependence on Russia's gas imports, are directed in the main against Russia's oil sector.

The introduction of economic sanctions may potentially result in serious constraints on the future development of Russia's oil and gas sector. At the same time, the resulting negative effect on the oil and gas sector's prospects will be determined by the actual length of the period of their realization. Should that period turn out to be short - for example, up to one year - the negative effect will be rather limited, and it will mainly take the form of postponement, until a later date, of the launch of those new projects that will involve the use of foreign equipment and technologies. The denied access to foreign loans may largely be compensated by funding from other sources - for example, targeted allocations from the National Welfare Fund (in fact, Rosneft and NOVATEK have already applied for funding from the NWF).

However, if sanctions are introduced for a long period – for example, 5 or more years – their negative impact on the development of Russia's oil and gas sector may be quite serious. In the long run, while the currently exploited oil fields are being exhausted, the projects aimed at developing unconventional oil reserves will gain in importance – among them those involving the development of continental shelf oil fields and less easily recoverable oil reserves, including shale oil analogues. Foreign technologies are vital for the successful implementation of such projects, and sanctions are designed to disrupt the flow of such products into Russia. And the creation of Russia's own technological base for these projects will take a very long time.



Source: calculations based on data released by the RF Federal State Statistics Service.

Fig. 2. Average Producer Prices for Oil and Natural Gas Expressed in USD in 2000–2014: Oil – USD/ton, Left-hand Side Scale; gas – USD/1,000 m³, Right-hand Side Scale



Source: calculations based on data released by the RF Federal State Statistics Service.

Fig. 3. Average Producer Prices for Motor Gasoline and Furnace Fuel Oil Expressed in USD in 2000–2014, USD/ton

As a result, the declining oil extraction rate in the currently exploited oil fields caused by the effect of natural factors will not be compensated by new oil fields being put in operation, and so the overall oil extraction volume in this country will plummet, thus bringing down government revenue.