

## DEVELOPMENT TRENDS IN RUSSIA'S OIL &amp; GAS SECTOR

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*In 2013, oil production in Russia reached its highest level since 1990 while exports of crude oil and refined products reached its highest-ever level in response to high prices of crude oil in global markets. However, a trend towards slower growth rates and worsening of oil and gas production conditions was observed. The recently adopted laws and regulations concerning tax incentives for the development of new oil and gas fields and hard-to-recover reserves, liberalization of export of liquefied natural gas, as well as a long-term gas contract with China, create conditions for further development of the Russian oil and gas sector.*

Global market prices of crude oil and natural gas have been steadily high over the last few years. In 2013 and Q1 2014, the price of Russia's Urals crude oil in the European market averaged \$107.7 and \$106.5 per barrel respectively (*Table 1*). High prices have been determined by certain key factors, such as higher demand for crude oil driven by economic growth globally, first of all in China and other Asian economies, OPEC's conservative policy towards oil production growth in the OPEC member countries, as well as geopolitical risks. In 2013, the global demand for crude oil increased 1.4% while the demand for crude oil in the North America went up 1.6%, 3.0% in China. On the supply side there has been marked increase in oil production in non-OPEC countries (by 2.5% in 2013) driven primarily by higher volumes of oil production in the United States and Canada as a result of the development of nontraditional oil reserves. At the same time, oil development in the OPEC countries has recently been staying at the level close to the total quota (30 million barrels daily) they set in late 2011. Therefore, the global oil market remains balanced.

Since global prices of natural gas supplied under long-term contracts are determined on the basis of prices of refined products (gas oil, diesel fuel, and fuel

oil) alternative to gas, these prices follow with a certain lag the global prices of crude oil. However, changes in the European gas market, namely increased supply of gas from other gas producing countries and decreased level of spot prices of gas versus prices of Gazprom long-term contracts have had a downtrend effect on prices of Russia's natural gas over the last few years.

Oil production in Russia reached 523.3 million tons in 2013 amid high global prices, the highest level since 1990 (*Table 2*). The recent putting under production of a few large new oil fields on situated in the Eastern Siberia (Vankorskoye, Talakanskoye, Verkhnechonskoye, Tas-Yuryakhsloye oil fields) and in the north of the European Russia (Uzhno-Khilchuisckoye oil field, Trebs and Titov oil fields), as well as taxation amendments have had a positive effect on the dynamics of oil production. The Prirazlomnoye oil field in the Pechora Sea was put under production in late 2013, the first ever producing oil field in Russia's Arctic continental shelf.

At the same time, growth rates in oil production have been markedly slowing down over the last few years (*Table 3*), which can be explained first of all by objective worsening of oil production conditions. A major part of the producing oil fields have entered the brown-field stage, whereas new oil fields are in most

Table 1

## GLOBAL PRICES OF CRUDE OIL AND NATURAL GAS IN 2005–2014, \$/BARREL

	2005	2006	2007	2008	2009
Brent oil price, Great Britain	54.4	65.2	72.5	97.7	61.9
Urals oil price, Russia	50.8	61.2	69.4	94.5	61.0
Price of Russia's natural gas in the European market, \$/thousand cubic meters	212.9	295.7	293.1	473.0	318.8
	2010	2011	2012	2013	Q1 2014
Brent oil price, Great Britain	79.6	111.0	112.0	108.8	107.9
Urals oil price, Russia	78.3	109.1	110.3	107.7	106.5
Price of Russia's natural gas in the European market, \$/thousand cubic meters	296.0	381.5	431.3	402.0	390.2

Source: IMF, OECD/IEA, Federal State Statistics Service.

Table 2

**CRUDE OIL PRODUCTION AND REFINING IN THE RUSSIAN FEDERATION IN 2005–2013**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Q1 2014
Oil production, including gas condensate, million tons	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0	523.3	129.6
Crude oil distillation, million tons	208.0	220.0	229.0	236.3	236.0	249.3	258.0	270.0	278.0	71.6
The share of oil refining in oil production, %	44.3	45.8	46.6	48.4	47.8	49.4	50.4	52.1	53.1	55.2
Depth of feedstock refining, %	71.6	71.9	71.7	72.0	71.9	71.1	70.8	71.5	71.4	70.4

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

Table 3

**PRODUCTION OF CRUDE OIL, REFINED PRODUCTS AND NATURAL GAS IN 2005–2014, % Y-O-Y**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Q1 2014
Crude oil, including gas condensate	102.2	102.1	102.1	99.3	101.2	102.1	100.8	101.3	100.9	102.2
Crude oil distillation	106.2	105.7	103.8	103.2	99.6	105.5	103.3	104.9	102.7	105.1
Motor gasoline	104.8	107.4	102.1	101.8	100.5	100.5	102.0	104.3	101.3	99.3
Disel fuel	108.5	107.0	103.4	104.1	97.7	104.2	100.3	98.7	103.1	108.4
Furnace oil	105.8	104.5	105.2	101.9	100.8	108.5	104.6	101.6	103.3	106.3
Natural gas	100.5	102.4	99.2	101.7	87.9	111.4	102.9	97.7	102.1	98.6

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

cases characterized by worse geologic and production conditions and geographic parameters, and their development requires extra capital, operation and transportation costs.

To date, the Russian oil production sector has approached its maximum production capability. To compensate for declined oil production on the producing oil fields, it is important to develop both new oil fields in the regions with poor or no infrastructure and inferior quality reserves on the mature oil fields not yet involved in the development.

At the same time, growth in oil refining has been progressing at a higher rate than that in oil production basically due to faster growth in exports of refined products encouraged by lower export duties on such products versus the export duty on crude oil. As a result of higher growth rates in crude oil distillation the share of oil refining in oil production increased from 42.5% in 2004 to 53.1% in 2013. However, depth of oil refining saw no actual increase during that period and amounted to only 71.4% in 2013, being equal to the level of 2005. The indicator of depth of oil refining is actually remaining close to the pre-reform level (depth of oil refining in Russia stood at 67% in 1990) and still lagging a way behind the level observed in developed countries where depth of oil refining reaches 90–95%. Therefore, the objective of increasing the technological level in the oil refining industry still remains a priority for the development of the oil sector in the Russian economy.

Such companies as Rosneft, LUKOIL, Surgutneftegaz, and Gazprom produce the biggest volumes of oil. In 2013, oil production in these four companies accounted for 74.4% of total oil production in the country (Table 4). Furthermore, after the acquisition of TNK-BP oil company in 2013 state-run Rosneft strengthened considerably its position in the Russian oil sector to become one of the largest oil companies in the world. In 2013, Rosneft's oil production, inclusive of its shares in oil production of other entities, amounted to 202.4 million tons, or 38.7% of all Russia's oil production. Overall, the share of state-run companies in all Russia's oil production, including their shares in oil production of other entities in 2013 reached 50.6%.

Gazprom keeps dominating in natural gas production in Russia. At the same time, its share in all Russia's natural gas production has shrunk visibly from 83.2% in 2008 to 71.5% in 2013 over the last few years. Moreover, other producers' share in gas production has increased too: oil companies, NOVATEK, PSA operators, and other producers. Overall, the share of independent gas producers in 2013 reached 28.5%, including NOVATEK as largest independent producer of natural gas (7.7%). In 2013, state-run companies accounted for 80.8% of all Russia's natural gas production.

Steady growth in crude oil exports is observed at the backdrop of growth in oil production (Table 5). In 2013, net export of crude oil and refined products reached 385.8 million tons, reaching its highest ever

## OIL PRODUCTION STRUCTURE IN 2008–2013

	Oil production, in 2008, million tons	As percentage of total production, %	Oil production, in 2010, million tons	As percentage of total production, %	Oil production, in 2012, million tons	As percentage of total production, %	Oil production, in 2013, million tons	As percentage of total production, %
Russia, total	488.5	100.0	505.1	100.0	518.0	100.0	523.3	100.0
Rosneft	113.8	23.3	112.4	22.3	117.5	22.7	192.6	36.8
LUKOIL	90.2	18.5	90.1	17.8	84.6	16.3	86.7	16.6
TNK-BP	68.8	14.1	71.7	14.2	72.5	14.0	-	-
Surgutneftegaz	61.7	12.6	59.5	11.8	61.4	11.9	61.5	11.8
Gazprom, including Gazprom Neft	43.4	8.9	43.3	8.6	46.1	8.9	48.5	9.3
including:								
Gazprom	12.7	2.6	13.5	2.7	14.5	2.8	16.3	3.1
Gazprom Neft	30.7	6.3	29.8	5.9	31.6	6.1	32.2	6.2
Tatneft	26.1	5.3	26.1	5.2	26.3	5.1	26.4	5.0
Slavneft	19.6	4.0	18.4	3.6	17.9	3.5	16.8	3.2
Bashneft	11.7	2.4	14.1	2.8	15.4	3.0	16.1	3.1
RussNeft	14.2	2.9	13.0	2.6	13.9	2.7	8.8	1.7
NOVATEK	2.7	0.6	3.8	0.8	4.2	0.8	4.3	0.8
PSA operators	12.0	2.5	14.4	2.9	14.1	2.7	14.0	2.7
Other producers	24.1	4.9	38.2	7.6	44.1	8.5	47.6	9.1

Source: Ministry of Energy of Russia, the author's estimates.

level. The share of net export of crude oil and refined products in oil production stood at 73.7%. Furthermore, crude oil exports have increased over the last few years in response to growth in export of refined products, whereas export of crude oil has declined. The share of net export of crude oil in oil production shrank to 45.1% in 2013. At the same time, the share of exports in the production of fuel oil in 2013 stood at more than 90%, diesel fuel at 58.9%. The share of export of motor gasoline in its production increased in 2013 to 11.2% (to compare: the share of exports in the production of motor gasoline stood at 8.2% in 2010, 10.6% in 2011, 8.4% in 2012).

Over the last few years, the decline in export of gas has been driven primarily by a decline in gas supplies to the European market where the share of gas supplies from other gas producing countries has increased visibly. As a result, in 2012 – unlike 2006 when Russia's natural gas supplies to Europe reached the maximum volume – export of Russia's natural gas to non-CIS countries declined by 30.4% while the share of net exports in gas production declined from 31.4% in 2005 to 25.6% in 2012. In 2013, export of Russia's natural gas increased markedly, approaching the level of 2006, as a result of declined gas production in Europe and gas supplies from the North Africa, while the share of Russia's natural gas in the European market, including Turkey, increased from 26% in 2012 to 30.1% in 2013, according to the Gazprom's estimates.

For the purpose of expanding far-reaching export prospects for Russia's natural gas in 2013, a provision was made under the Federal Law of 30.11.2013 №318-FZ 'On the Amendments to Articles 13 and 14 of the Federal Law 'On the Principles of State Regulation of External Trade Activity' and Articles 1 and 3 of the Federal Law 'On Gas Exports' to liberalize export of liquefied natural gas (LNG) whereby not only Gazprom but also other Russian producers will be able to export LNG. NOVATEK (the Yamal LNG Project) and Rosneft have plans to construct LNG production facilities. There is a provision for increasing considerably Russia's LNG production and export to global markets in the long run perspective.

A large-scale long-term gas supply contract with China was signed in May 2014. The contract is critical in the context of enhancing the capacity to expand export of Russia's natural gas. The contract covers the development of large natural gas fields in the Eastern Siberia and 30-year gas supplies to China via a pipeline, thereby increasing considerably gas exports, as well as diversifying gas supplies by enhancing exports eastwards.

Analysis of the long dynamics of Russia's oil exports in the long run shows a substantial strengthening of exports in the oil sector, compared to the pre-reform period. The share of net export of crude oil and refined products in oil production increased from 47.7% in 1990 to 73.7% in 2013. However, it should be remem-

Table 5

## THE RATIO OF PRODUCTION, CONSUMPTION AND EXPORT OF CRUDE OIL AND NATURAL GAS IN 2005–2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Crude oil, million tons									
Production	470.0	480.5	491.3	488.5	494.2	505.1	511.4	518.0	523.3
Exports, total	252.5	248.4	258.4	243.1	247.4	250.4	244.6	239.9	236.6
Exports to non-CIS countries	214.4	211.2	221.3	204.9	210.9	223.9	214.4	211.6	208.0
Exports to CIS countries	38.0	37.3	37.1	38.2	36.5	26.5	30.2	28.4	28.7
Net exports	250.1	246.1	255.7	240.6	245.6	249.3	243.5	239.1	235.8
Domestic consumption	123.1	131.2	124.1	130.4	125.3	125.9	140.7	142.1	137.5
Net exports as % of production	53.2	51.2	52.0	49.3	49.7	49.4	47.6	46.2	45.1
Refined products, million tons									
Exports, total	97.0	103.5	111.8	117.9	124.4	132.2	130.6	138.1	151.4
Exports to non-CIS countries	93.1	97.7	105.1	107.6	115.4	126.6	120.0	121.2	141.1
Exports to CIS countries	3.9	5.8	6.7	10.3	9.0	5.6	10.6	16.9	10.3
Net exports	96.8	103.2	111.5	117.5	123.3	129.9	127.2	136.8	150.0
Crude oil and refined products, million tons									
Net exports of crude oil and refined products	346.9	349.3	367.2	358.1	368.9	379.2	370.7	375.9	385.8
Net exports of crude oil and refined products as % of oil production	73.8	72.7	74.7	73.3	74.6	75.1	72.5	72.6	73.7
Natural gas, billion cub. meters									
Production	636.0	656.2	654.1	664.9	596.4	665.5	687.5	671.5	684.0
Exports, total	207.3	202.8	191.9	195.4	168.4	177.8	184.9	178.7	196.4
Exports to non-CIS countries	159.8	161.8	154.4	158.4	120.5	107.4	117.0	112.6	138.0
Exports to CIS countries	47.5	41.0	37.5	37.0	47.9	70.4	67.9	66.0	58.4
Net exports	199.6	195.3	184.5	187.5	160.1	173.5	179.2	171.6	189.3
Domestic consumption	436.4	460.9	469.6	477.4	436.3	492.0	508.3	499.9	494.7
Net exports as % of production	31.4	29.8	28.2	28.2	26.8	26.1	26.1	25.6	27.7

Source: Federal State Statistics Service, Ministry of Energy of Russia, Federal Customs Service, the author's estimates.

bered that this is associated not only with increasing absolute volumes of exports, but also reducing considerably domestic consumption of crude oil because of the market transformation of the Russian economy and substitution of furnace oil with natural gas. Furthermore, it is worth noting that increase in crude oil exports. An increase in the share of refined products in oil exports can be noted, an increase from 18.2% to 38.9% in 2013. However, it should be borne in mind that because of low depth of oil refining most of Russia's export of refined products accounts for fuel oil which in Europe is used as feedstock for further refining to produce light refined products.

In response to growth in export of refined products and natural gas the share of fuel and energy commodities in Russia's export reached 70.6% in 2013 while the share of crude oil was 33.0%, natural gas was 12.8%.

Amendments to the tax regulation which ease the tax burden and enhance taxation flexibility have played an important role in the development of the Russian oil sector over the last few years, of which the following key policies are worth mentioning: the introduction of a tax holiday mechanism for the mineral extraction tax

(MET) in undeveloped regions which lack the respective infrastructure; the application of a decreasing coefficient to the MET rate for oil fields with high degree of reserve depletion; the application of a decreasing coefficient to the MET rate for minor oil fields; and the application of the reduced export duty rate on crude oil for oil fields in new development areas.

A few new federal laws took effect in 2014. The laws are intended to create the conditions required for the development of the oil and gas sector. The Federal Law of 23.07.2013 №213-FZ 'On the Amendments to Chapters 25 and 26, Part 2 of the Tax Code of the Russian Federation and Article 3.1 of the Russian Federation Law 'On the Customs Tariff' introduced measures aimed at stimulating the development of hard-to-recover oil reserves. The law establishes the MET rate is to differ according to reservoir permeability, the size of oil-filled formation and the degree of field depletion. The law introduces the application of a special decreasing coefficient to the MET rate which is characterized by the degree of oil production complexity.

A provision is made in 2014–2016 for increasing the MET rate in oil production with simultaneous reduc-

tion of the export duty rate on crude oil. The Federal Law of 30.09.2013 No. 263-FZ 'On the Amendments to Chapter 26, Part 2 of the Tax Code of the Russian Federation and Article 3.1 of the Russian Federation Law 'On the Customs Tariff' provides for increasing the MET baseline rate in oil production from Rb 470 per ton in 2013 to Rb 559 per ton in 2016, with decreasing the coefficient in the formula designed to calculate a rate of the export customs duty on oil from 0.60 to 0.55 (*Table 6*).

Table 6

## TAX RATES IN OIL SECTOR IN 2013–2016

	2013	2014	2015	2016
MET in oil production:				
Baseline rate, Rub./ton	470	493	530	559
Export duties:				
Crude oil*	0.60	0.59	0.57	0.55
Commercial gasoline, straight-run gasoline**	0.90	0.90	0.90	0.90
Diesel fuel**	0.66	0.65	0.63	0.61
Light distillates, medium distillates**	0.66	0.66	0.66	0.66
Fuel oil, lubricants, bitumen**	0.66	0.66	1	1

\* Coefficient in the formula designed to calculate an export duty rate on crude oil.

\*\* Coefficient to the rate of the export duty on crude oil.

Source: Federal Law of 30.09.2013 No. 263-FZ, Regulations of the Russian Government of 26.08.2011 No. 716, 29.03.2013 No. 276, 03.01.2014 No. 2.

For the purpose of promoting modernization of the Russian oil production industry and enhancing the depth of oil refining, the Russian Government has made a few decisions over the last few years on gradual lifting of the export duty rate on fuel oil from 39% (the average in the period of 2006–2010) to 66% of the export duty rate on crude oil. However, such an increase in the export duty rate on fuel oil has had no real effect on the situation. At the same time, the announced by the Government increase from 2015 of the export duty rate on fuel oil up to the level of export duty rate on crude oil has motivated oil compa-

nies to launch modernization of their oil refining capacities. They are currently implementing approved by the federal government bodies special programs of modernization of their oil refinery plants, which are intended to significantly increase the technological level of the oil refining sector and depth of oil refining.

The Federal Law of 30.09.2013 No. 263-FZ 'On the Amendments to Chapter 26, Part 2 of the Tax Code of the Russian Federation and Article 3.1 of the Russian Federation Law 'On the Customs Tariff' made material amendments to the system of taxation in the gas sector. This law established a new procedure for defining MET rates for natural gas production on the basis of applying special formulae and coefficients considering various factors that have an effect on gas production yield and gas sales. The new procedure for determining a MET rate on natural gas will increase substantially the effectiveness of the system of taxation in the gas sector, ensure the required differentiation of the tax burden depending on specific field development conditions.

Moreover, the adoption of the Federal Law of 30.09.2013 No. 268-FZ 'On the Amendments to Parts 1 and 2 of the Tax Code of the Russian Federation and Certain Legal Acts the Russian Federation' is very important as regards to undertaking policies of tax and customs-tariff stimulation of production of hydrocarbons on the Continental Shelf of the Russian Federation. This law established a special preferential tax treatment for the development of new offshore fields which is based on the reduced MET add-value rate differentiated by shelf zones, and the standard profit tax; but neither export duty nor property tax will be levied as part of shelf (offshore) projects.

The recently adopted laws and regulations concerning tax incentives for the development of new oil and gas fields and hard-to-recover reserves, liberalization of export of liquefied natural gas, as well as a long-term gas contract with China, create conditions for further development of the Russian oil and gas sector. ●