

Russian Oil and Gas Sector: Trends and Perspectives

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In 2005, the world oil prices were extremely high, which led to drastic rise in the export earnings and revenues to the state budget and the Stabilization Fund. As well, the growth rates of oil production suffered drastic downfall. The situation on the world oil market allows to count on maintenance, in the short term, of the high level of world oil prices, favorable external conditions for the formation of the revenue side of the state budget, replenishment of the Stabilization Fund and the development of the oil and gas sector.

In 2005, the dominant influence on the situation in the oil and gas sector of the Russian economy was exerted by price situation on the world oil market. The world oil prices were in 2005 at a high level that exceeded USD 50 a barrel. In the second half of 2005, the oil prices reached their historic maximum in nominal terms. The price of oil Brent in 2005 by 87,5% exceeded the average level of previous five years. The main reasons for such a situation were high growth rates of the world economy, in particular, the economy of the U.S. and China, and the low level of idle production facilities for production of oil, which did not allow to quickly raise the production for satisfying the growing demand for oil. OPEC actually refused to support the world oil prices within the range of the earlier set (by this organization) target price band USD 22-28 a barrel and conducted the policy of moderate increase of oil production within the disposable production capacities. It was announced at March (2005) OPEC conference on increase of oil production by the OPEC member countries by 500 thou. barrels per day, since July 1, 2005, the amount of the quota of OPEC member countries had been in-creased by another 500 thou. barrels per day, to 28.0 mln barrels per day. However, such measures did not have a clear effect on the dynamics of oil prices. It had been announced at the September (2005) conference of OPEC by its member countries that they intended to employ the idle capacities on oil production in the amount of 2 mln barrels a day, if the necessity arises within three months, starting since October 1, 2005. In practice, however, only Saudi Arabia had any considerable idle production facilities, while the limited demand for heavy sulfur

crude oil to a certain extent hampered an increase of oil production by OPEC countries.

Considerable influence on the dynamics of oil production beyond OPEC countries was exerted by decline in the oil production growth rates in Russia and drop in the production in the Gulf of Mexico, as a result of the passed hurricanes. An intensity retained in the sectors of processing and cargo carriage, that was determined by limitation of the available capacities, which supported the high cost of transportation and oil processing. Geopolitical risks, such as instability in Iraq and possible problems in Nigeria and Venezuela, kept high the level of uncertainty on the world oil market.

As a result, in 2005 Brent crude reached on average USD 54.4 a barrel, while Russian Urals – USD 50.5. The average price of OPEC oil basket throughout the whole year considerably exceeded the targeted pricing marginal rate, set by the organization, and in 2005, amounted on average USD 50.6 a barrel. The average price of Russian oil Urals on the world (European) market was in 2005 by 46,5% higher than the level of previous year (Table 1).

Table 1. **World Oil Prices in 2000-2005, \$/barrel**

	2000	2001	2002	2003	2004
Brent oil price, Great Britain	28.50	24.44	25.02	28.83	38.21
Urals oil price, Russia	26.63	22.97	23.73	27.04	34.45
Price of OPEC oil basket	27.60	23.12	24.34	28.13	36.05
	2005 I qu.	2005 II qu.	2005 III qu.	2005 IV qu.	2005
Brent oil price, Great Britain	47.50	51.59	61.54	56.90	54.38
Urals oil price, Russia	43.10	48.44	57.34	53.68	50.47
Price of OPEC oil basket	43.66	49.54	56.28	52.86	50.64

Source: OECD International Energy Agency, OPEC.

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The development of the oil and gas sector of the economy of Russia was characterized in 2005 by maintenance of a trend towards the growth of production of oil, oil products and natural gas, that existed in 2000-2004. In 2005, the oil production, including gas condensate, reached 470 mln tons. In parallel with this, the oil production growth rates fell dramatically. In 2005, as compared to the prior year, the volume of oil production, including gas condensate, made only 2,2%, while in 2002-2004 the increment of oil production reached 8,9-11%

Table 2. Production of Oil, Oil Products and Natural Gas in 2000-2005, in % to the Respective Period of the Prior Year

	2000	2001	2002	2003	2004	2005
Oil, including gas condensate	106,0	107,7	109,0	111,0	108,9	102,2
Primary oil refining	102,7	103,2	103,3	102,7	102,6	106,2
Automobile fuel	103,6	100,6	104,9	101,2	103,8	104,8
Diesel fuel	104,9	102,0	104,7	102,0	102,7	108,5
Fuel oil	98,3	104,2	107,1	100,3	97,8	105,8
Natural gas, billion cub. m.	98,5	99,2	101,9	103,4	101,6	100,5

Source: Federal State Statistics Service.

Table 3. The Structure of Oil and Gas Production in 2005* (9 months)

	Oil Production, mln tons	Share in Total %	Gas Production, meters	Share in Total %
Russia, in all	349,5	100,0	468,9	100,0
LUKOIL	65,9	18,9	4,1	0,9
TNK-BP Holding	55,8	16,0	6,3	1,3
including: Tyumen NK (refining plant)	39,8	11,4	4,7	1,0
SIDANKO	16,0	4,6	1,6	0,3
Rosneft	54,8	15,7	9,4	2,0
Surgutneftegaz	47,5	13,6	10,6	2,3
Gazprom+Sibneft	34,3	9,8	402,0	85,7
including: Gazprom	9,5	2,7	400,6	85,4
Sibneft	24,8	7,1	1,4	0,3
Tatneft	19,1	5,5	0,6	0,1
Yukos	18,3	5,2	1,4	0,3
Slavneft	17,9	5,1	0,7	0,1
RussNeft	10,3	2,9	0,8	0,2
Bashneft	8,9	2,5	0,3	0,1
Other producers	16,7	4,8	32,7	7,0

For reference only:

State-owned companies, in all:

Rosneft + Gazprom + + Sibneft	89,1	25,5	411,4	87,7
including: Yuganskneftegaz	37,7	10,8	1,0	0,2

* According to organizational structure of the sector as of 31.12.2005.

Source: Minpromenergo Russia, author's calculations.

per year. In consideration of the dynamics of oil production in Russia during the longer period of time one may see that the level of oil production in 2005 was by 17,5% lower than the pre-crisis maximum achieved in 1987, when oil production amounted 569.4 mln tons, and by 56% higher than the minimal level of 1996, when the production fell up to 301.3 mln tons. The volume of primary oil processing in 2005 increased by 6,2%, while the refining intensity rate was 71,5% (in 2004 – 71,4%). One could see continuation of growth of natural gas production, which started in 2002 and amounted 0,5% in 2005 (Table 2).

In 2005, the greatest volumes of oil were produced by oil companies LUKOIL, TNK-BP, Rosneft and Surgutneftegaz. The basic part of Rosneft production was provided by Yuganskneftegaz, joined to this company in late 2004. The oil production by Yukos continued to decline. According to the data of January-September 2005, its share on the Russian oil market fell up to 5,2%. In parallel with this, the share of Gazprom sharply increased in 2005, as a result of acquiring by the latter of Sibneft oil company. Its proportional weight in the All-Russia oil production raised since 2,6% in 2004 to 9,8% in 2005. As a consequence, the share of the state-owned companies (Rosneft and Gazprom, including Sibneft) increased in 2005 on the Russian oil market up to 25,5% (Table 3). In the gas production Gazprom traditionally took the leading positions, which share in the All-Russia production made in January-September 2005 85,4%.

The 2005 saw considerable growth of prices for oil and oil products on the domestic market. The producers' prices for oil, automobile fuel, diesel fuel and fuel oil reached in 2005 maximum values over the whole period of reforms. In October 2005, the average domestic price of oil (producers' price) in US dollars reached USD 201 per ton, while an average price for automobile fuel – USD 386.6 per ton, which is the maximum level of oil and automobile fuel prices over the whole period of reforms. The prices for gas in 2005 noticeably exceeded the level existed prior to the devaluation and reached in October USD 13.1 for 1 thou. cub. m (Table 4).

The high level of world oil prices determined considerable growth of incomes from export. By contrast, the oil export in natural terms declined in January-September 2005 by 1,5%, in comparison with the respective period of previous year while the oil products – increased by 15,5% (Table 5).

The share of export in the commodity resources of the fuel oil made up 68,9%, diesel fuel – 57,3%, auto-mobile fuel – 19,5% (for comparison: in 1999, the share of export in the production of automobile fuel was only 7,2%). In contrast to the previous several years, that were characterized by noticeable growth of oil products import, in 2005 one could observe its contraction. In January-September 2005, the import of oil products lowered by 68%, as compared to the respective period of the prior year. In parallel with this, the import of automobile fuel in January-September 2005 declined by 98%, in comparison with the previous year, while the share of import in the resources of the automobile fuel made up only 0,03% (for comparison: in the first half of 1998, i.e. before the ruble devaluation, the proportional weight of import in the resources of automobile fuel was 8,7%).

In comparison with the prior year, the growth rates of gas export, somewhat decreased, which was determined by lowering of its deliveries to the CIS-countries (the deliveries of gas to those countries in January-September 2005 declined by 11,2%).

As an analysis of the data on production and export of oil and oil products shows, practically all the additionally produced (in 2005,) oil was exported in the form of oil products obtained from it. As a result, the share of net export of oil and oil products in oil production reached, according to our preliminary estimate, 73,7%, while the net oil export amounted 53,5% of its production. In 2005, the share of net gas export amounted, according to the preliminary estimate, 31,5%. Major part of the energy resources (84% oil, 96% oil products and 77% gas) was exported outside the CIS.

The total income of the export of oil and the main types of oil products (automobile fuel, diesel fuel, fuel oil) reached in January-October 2005 USD 90.4 bn, which is the record level over the whole period of reforms (Table 6). It may be noted, for comparison, that the minimal level of incomes from oil export is observed in conditions of fall of the world oil prices in 1998, when the export earnings made only USD 14 bn. The proportional weight of crude oil in the Russian export in January-November 2005 made up 34,8% (in 2004 – 32,5%).

The past year was characterized by considerable raising of tax burden on the oil sector. According to our calculations, conducted with the use of the developed (in IET) model of financing the flows of oil sector, the tax payments of oil-producing

Table 4. Domestic prices for Oil, Oil Products and Natural Gas (Average Prices of Producers, USD/t)

	2000	2001	2002	2003	2004
Oil	54.9	49.9	60.7	70.1	123.5
Automobile fuel	199.3	151.5	168.8	236.9	333.1
Diesel fuel	185.0	158.5	153.8	214.3	364.3
widctIparFuel oil	79.7	47.1	66.1	66.0	69.4
Gas, USD/thou.cub.m	3.1	4.8	5.9	4.4	10.5
	2005 March	2005 June	2005 September	2005 October	2005 November
Oil	120.7	150.4	194.9	201.0	190.4
Automobile fuel	287.2	316.4	379.1	386.6	362.2
Diesel fuel	347.5	347.4	439.9	455.6	437.2
Fuel oil	75.4	117.8	168.5	178.1	161.3
Gas, USD/thou.cub.m	12.1	11.9	12.3	13.1	11.4

Source: calculated according to the data of the Federal Service of State Statistics.

Table 5. Export of Oil, Oil Products and Natural Gas from Russia, in % to the Previous Year

	2002	2003	2004	2005
Oil, total	113,9	117,8	115,0	98,5
including:				
– not CIS members	109,9	118,9	116,3	98,6
to CIS countries	137,3	112,4	108,3	98,1
Oil products, total	118,5	103,6	105,5	115,5
including:				
– not CIS members	119,1	102,6	104,9	116,9
to CIS countries	102,8	132,3	117,9	88,8
Gas, total	102,4	102,0	105,5	103,6

Source: Federal Service of State Statistics.

Table 6. Revenues form the Export of Oil and Oil Products in 2000-2005, bn dollars

	2000	2001	2002	2003	2004	2005 (10 month.)
Earnings from the export of oil and basic types of oil products	34,9	33,4	38,7	51,1	74,6	90,4

Source: calculated according to the data of the State Federal Service of Statistics.

and oil-refining branches increased since USD 48.8 bn in 2004 to (according to preliminary estimate) USD 88.4 bn in 2005. Such growth of tax payments was determined by both raising of taxes themselves and considerable growth of the world oil prices, as well as increase of the volume of production and an export of oil and oil products. As a result, according to our calculations, the

share of taxes in earnings of the oil sector increased since 45,4% in 2004 to 59,5% in 2005. The share of taxes in after-tax earnings, equaling to gross earnings, after the deduction of capital and operational expenditures, raised since 81%, in 2004, to 91%, in 2005. Accordingly, the share of enterprises in net profit reduced since 19% to 9% (Table 7).

As analysis of the situation on the world oil market shows that a number of factors will contribute to retaining the high level of world oil prices in the near future. First, as forecasted, the growth of the world economy and oil demand will be rather high. Second, according to estimates, an increase of oil production in the countries – non OPEC-members – will not allow to satisfy

the world demand. Lowering of growth rates of the oil production in Russia will exert considerable influence on the dynamics of oil production outside OPEC. Third, as expected, idle production facilities on oil production, which lately noticeably contracted, will remain at a low level. Fourth, according to expectations, intensity will remain in the sectors of cargo carriage and processing, determined by the limited number of facilities. Fifth, geopolitical risks, such as instability in Iraq, will keep the high level of uncertainty on the world oil market.

As a result, according to the base version of the latest (January 2006) forecast of the US Energy Department, the leading organization in the field of analysis and forecasting the development of the world oil market, the world oil price, determined as average price of oil, imported to the U.S. in 2006, will be at an exceedingly high level and will make, on average, USD 56.2 a barrel. Considering the actually existed correlation between the price of oil Brent and average price of oil imported into the U.S., the price of oil Brent will make in 2006, in such a case, roughly USD 62 a barrel (Table 8). According to the IET forecast, the price of oil Brent will make on average around USD 56 a barrel in the following three months (February-April 2006). Most of other organizations forecast that the level of world oil prices will remain exceedingly high in the short run.

Thus, according to the latest forecasts, the world price of oil Brent may make in the near future USD 55-62 a barrel, which will roughly correspond to the price of Russian oil Urals USD 51-58 a barrel. This will allow to expect remaining in the near future favorable external conditions for the formation of revenue side of the state budget, replenishments of the Stabilization fund and the development of oil and gas sector of the Russian economy. □

Table 7. Indicators of Tax Burden on the Oil Sector in 2000-2005

	2000	2003	2004	2005*
Taxes, \$ bn	15.0	29.1	48.8	88.4
Taxes per 1 ton of produced oil, \$/t	46.5	69.0	106.4	188.5
Taxes, % to earnings	28.3	37.4	45.4	59.5
Taxes, % to after-tax earnings	57	80	81	91
After-tax earnings remained at command of enterprises, % to after-tax earnings	43	20	19	9

* Estimate.

Table 8. Forecast of the World Oil Price in 2006, \$/barrel

	2002	2003	2004	2005	2006 (forecast)
Price of oil imported into the U.S.*, \$/barrel	23.7	27.7	36.0	49.3	56.2
Price of oil Brent	25.0	28.8	38.2	54.4	62.0

* Producer's prices in deals with oil refineries.

Source: U.S. Department of Energy/Energy Information Administration, author's estimates.