Russian Oil–A Long Term View

By Leonard L. Coburn*

Russian oil production is hitting historic highs today; however, the long-term question is the ability of the Russian oil sector to maintain these high levels. In March this year, Russian oil production hit 10.12 million barrels per day, a post-Soviet high. Russia's latest energy strategy issued in the autumn of 2009, calls for Russian oil production in 2030 to be 11 million barrels per day, about 10 percent greater than today's production. Can Russia achieve this increase?

Despite an increase of only 10 percent in Russian oil production by 2030 from today's levels, it represents a significant challenge to the Russian oil sector. Most of today's oil production comes from West Siberian oil fields, fields that have been producing oil for decades. Many of these fields have been rehabilitated during the past ten years and are largely responsible for the enormous 50 percent increase in Russian oil production during the last decade. But many of these fields have been substantially depleted and are nearing the end of their useful lives. To reach the goal of 11 million barrels per day, the Russian oil industry will have to find large amounts of investments to keep Western Siberian fields producing while developing new production in East Siberia, Sakhalin, Caspian and extreme Northern fields.

Attracting investment in Russia's oil industry has been a challenge. In 2009, only 60 percent of planned investments were realized in the energy sector as a whole (both oil and gas). While the oil sector has experienced significant investments, they have not been sufficient to stem the high depletion rates of old West Siberian fields, which are about 80 percent depreciated. To meet the goals of the 2030 strategy, four questions must be answered: How much money is needed? Where will this money come from? How much oil does Russia have to meet its future goals? Where is the oil located?

According to the Russian energy strategy, $600 billion must be invested in the oil industry through 2030 (in 2007 dollars). To break down this enormous number, the strategy assumes for the exploration and production (E&P) sector $110 billion will be needed from today to 2016, an additional $110 billion will be necessary from 2016 to 2022, and finally another $275 billion from 2022 to 2030. The remaining $105 billion will be needed in refining, transportation and marketing. According to the strategy, most of the E&P investment (approximately 70 percent) will have to be made in East Siberia and Sakhalin due to the very high cost development in those regions. To compare this government estimate with a private sector forecast, Lukoil estimated that $1 trillion would be needed over the next twenty years just to maintain Russian production at the 10 million barrels per day level.

Before answering the question of where the money will come from, the answer to the third question—is there is enough oil to reach the 2030 goal—appears to be yes, there is plenty of oil still to be developed. The strategy indicates that to reach its goal, 77 billion barrels of oil, a cumulative total, will have to be produced by 2030 if Russia increases its production to 11 million barrels per day by 2030. Today, Russia has a productive capacity of about 30 billion barrels. According to the strategy, if $600 billion in investments are made, this new investment will lead to an additional 91.5 billion barrels productive capacity through 2030. This new capacity will be implemented in stages with most of the new productive capacity in West Siberia (45.4 billion barrels), East Siberia (18.8), European North (4.6), and other areas that include Sakhalin, Volga/Urals, and Caspian (22.7 billion barrels). If all investments are made according to the Russian energy strategy, Russian oil productive capacity will total over 120 billion barrels (new plus existing capacity). This is more than enough to meet the goal of 77 billion barrels (11 million barrels per day by 2030), with over 40 billion barrels remaining that can be produced in the post 2030 period.

But this analysis assumes sufficient reserves and sufficient investment. Are there reserves to meet these goals? BP's yearly analysis of world wide reserves indicates that Russian proved oil reserves amount to 79 billion barrels. There are large areas of undeveloped reserves that are not included in this total. Other analysts say that with enough investment in higher cost regions, Russia could meet its future needs.

This brings us back to the most important question, where will the money come from to meet the investment needs of Russia's long term strategy? In resolving this question, Russia's fiscal and tax policies play an important role. Since 2004, Russia has put in place an extremely high tax regime to meet its budgetary needs. For exported oil, Russia takes 90 percent of revenues in total taxes on the marginal barrel produced and exported. For all oil on an average basis, Russia's taxes take about 60 percent or more of revenues. To provide some numbers to this analysis, one recent analyst indicated that for the last eight years, Russia's gross oil revenues were about $1 trillion. Of this, about $700 billion went directly to taxes and only

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about $150 billion could be considered net income. Out of the $150 billion, only $50-70 billion was reinvested in the domestic oil industry. Many of the large Russian oil companies moved their investments offshore rather than put their money back into Russia. The state controlled companies—Gazprom and Rosneft—are not putting sufficient amounts of their profits back into the domestic industry to meet future goals. Foreign investment in the Russian oil sector has been declining sharply due to Russia's policies of renationalizing oil assets, limiting where investments can be made by declaring most important oil fields strategic (a designation of strategic severely limits foreign participation in the deposit), and undermining the investment environment through a variety of hardball tactics, high levels of corruption and weak rule of law. The level of risk is much too high for large foreign investments in Russia today. While Russia has provided some tax incentives for new fields in East Siberia, these investments have been viewed as inadequate to draw the kind of investments from both Russian and foreign companies necessary to sustain long-term production. Thus, it is questionable whether Russia will be able to attract the level of investment necessary to meet its long-term goals. If this is true, then Russia's long-term energy strategy is in doubt.

The last question is where is the oil located that will be developed? Today, the attention in the Russian oil industry is on East Siberia. Tax incentives, pipeline infrastructure, and investments have been focused making East Siberia the future for Russian oil production. But some analysts do not think that is where Russia's future lies. These analysts think that West Siberia, Timan Pechora (northern provinces of Russia) and the North Caspian are the regions with the most oil. These analysts estimate that East Siberia only has about five billion barrels of oil reserves, far less than estimated in the Russian energy strategy.

The future for the Russian oil industry rests on answering the four questions in a way that supports its strategy to 2030. The strategy estimated that $600 billion is needed, while one private Russian company estimated that $1 trillion is necessary. In either case, the level of investment necessary is enormous. The strategy indicated that in addition to the current productive capacity of 30 billion barrels, another 77 billion barrels will be needed to increase overall oil production to 11 million barrels per day. Most analysts conclude that Russia has more than enough oil resources (proved reserves and yet to be developed oil) to meet its expectations. While today's focus of development is on East Siberia, a region that must be developed to meet future needs, some think that more should be going into the traditional regions of Russia and especially West Siberia. Of the four questions raised in this article, the big question mark is where the money will come from to meet Russia's future goals. Today, both domestic and foreign investments are inadequate. Russia will have to change its investment environment to provide the incentives and stability necessary to attract the level of investment necessary to meet its future goals. Without changes, achieving the oil production goals of Russia's energy strategy to 2030 is in doubt.

Energy, Economy, Environment: The Global View

Proceedings of the 32nd IAEE International Conference, San Francisco CA, June 21 to 24, 2009

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