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# LUKOIL RODUCTION

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## OIL AND GAS PRODUCTION BY OAO LUKOIL

The company views expansion and consolidation of its raw materials base which underpins its oil and gas production as a top priority. LUKOIL makes substantial investments into exploration of the country's new and prospective regions. The company is consciously and purposefully taking considerable geological risks trying to meet its largest challenges, i.e. ensure sustainable growth of its raw materials base and compensate for increasing production output through reserves increment.

The Company is operating in four federal districts of Russia:

- NORTHWESTERN FEDERAL DISTRICT (Nenets Autonomous Okrug, Komi Republic, Kaliningrad and Arkhangelsk Oblasts)
- VOLGA FEDERAL DISTRICT (Perm Territory, Republic of Tatarstan)
- URALS FEDERAL DISTRICT (Khanty-Mansi Autonomous Okrug, Yamal-Nenets Autonomous Okrug)
- SOUTHERN FEDERAL DISTRICT (Volgograd and Astrakhan Oblasts, Kalmyk Republic, Azov and Caspian Seas).

In 2007 LUKOIL Group companies were involved in fifteen exploration projects outside Russia, i.e. in Azerbaijan, Columbia, Iran, Kazakhstan, Saudi Arabia, Uzbekistan, Venezuela, Ivory Coast.

LUKOIL's gas production program is designed to accelerate gas production rate both in Russia and abroad, so that the share of the gas output of the Company could reach one third of its aggregate hydrocarbon production. The key objective of this strategy is to commercialize gas reserves and make the company less dependent on intense price volatility existing in the global oil market.

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#### **OIL AND GAS PRODUCTION**

A considerable part of the Company's oil and gas production operations is held in Russia. As of the end of 2007 LUKOIL Group's companies had acquired 413 subsoil use licenses including 373 licenses which entitle the company to produce minerals and 40 licenses that make it possible for them to conduct geological research including discovery and evaluation of fields.

According to the international SPE classification as of January 1, 2008 LUKOIL Group's proven hydrocarbon reserves totaled

20.396 bln b.o.e, of which oil reserves made 15.715 bln barrels and gas reserves totaled 27.921 trillion cu.ft. The major part of proven reserves is in Western Siberia (Khanty-Mansi Autonomous Okrug and Yamal-Nenets Autonomous Okrug). LUKOIL has been continuously expanding its resource base through efficient operations in new prospective oil and gas bearing regions, i.e. Yamal-Nenets and Nenents Autonomous Okrugs and in the Caspian Sea Region.



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#### **EXPLORATION**

LUKOIL IS RANKING HIGH AMONG THE LEADING RUSSIAN AND FOREIGN OIL COMPANIES IN TERMS OF ITS EXPLORA-TION INVESTMENT. THE COMPANY HAS BEEN CONSISTENTLY IMPROVING ITS KEY PERFORMANCE INDICATORS FOR EX-PLORATION WHICH ARE CONDUCTED AT ITS OWN COST.

Since the Company's establishment, exploration operations have resulted in discovery of 124 fields with C1+C2 hydrocarbon reserves of over 1.1 bln TOE. Moreover, increment of ABC1 hydrocarbons reserves exceeded 1 bln TOE which made it possible to compensate for oil production by 120%. Exploration of new promising regions which are a likely alternative to existing oil production areas is of particular importance to OAO LUKOIL. Thus as a result of increased investment into exploration in the Caspian Sea, Timan-Pechora oil and gas bearing province and Bolshekhetskaya depression (Yamal-Nenets Autonomous Okrug), the Company has managed within a relatively short period of time to establish a raw materials base to produce oil and gas in the foregoing regions.

All of LUKOIL's explorations are based on science-based plans. They provide for optimization of exploration operations and employment of a more detailed approach to selecting areas of such operations, as well implementation of cuttingedge technologies for better information content and cost reduction.

Up-to-date technologies enable one to obtain geological data of better quality both at the prospecting and exploration stages. This makes exploratory drilling more profitable: the efficiency of such drilling in 1995-2005 was about 60%, whereas in 2007 it made 77%. In 2007 the Company drilled over 143 ths m of exploratory wells (including 130 ths m in Russia). Successful prospecting in the Caspian Sea, Yamal-Nenets Autonomous Okrug and Nenets Autonomous Okrug contributed to high efficiency of LUKOIL's exploration operations; the results were also influenced by detailed geophysical data. The Company also developed efficient well log survey complexes for specific conditions existing in various areas. High quality of formation exposure operations, unique crosssection research techniques and well stimulation contributed to high oil and gas flow rates in formations with complex reservoir properties.

Major additions to liquid hydrocarbons reserves were discovered in the Caspian Sea, Western Siberia, Timan-Pechora region and abroad. Additions to gas and condensate reserves were found on Yamal and in the Caspian Sea. In 2007 the Company spent 558 mln USD on exploration (including 378 mln USD in Russia).

The aim of exploration during that period was to ensure intense development and utilization of the raw materials base in the Company's top-priority regions, i.e. in Western Siberia, Timan-Pechora province and in the Caspian Sea.





## **FIELD DEVELOPMENT**

SINCE THE BEGINNING OF FIELD DEVELOPMENT IN THE AR-EAS OF ITS OPERATIONS, LUKOIL HAS PRODUCED 3 BLN TN OF OIL. IN 2007 OIL PRODUCTION TOTALED 96,645 THS TN, OF WHICH 94,147 THS TN WERE PRODUCED BY THE COMPANY'S SUBSIDIARIES. LUKOIL GROUP'S AVERAGE DAILY OIL PRO-DUCTION VOLUME INCREASED BY 1.4% AS COMPARED TO THAT OF 2006.

The Company is working hard to introduce and upgrade new development technology and is implementing various production enhancement techniques.

LUKOIL has been implementing its "Integrated Development and Oil Production Optimization Program". The program provides for application of development and operation improvement techniques, including development regulation technique, increased recovery rates, efficient geological and technical measures, application of production enhancement technology, system of development monitoring based on geological and technical models, etc.

Generally, the average oil flow rate per well has been increasing companywide (from 8.8 tn/day in 2001 to 11.5 tn in 2007).

The Company's primary strategic long-term objective is to ensure sustainable increment to hydrocarbon raw stock. This can be done if the recovered output is fully compensated for by the reserves increment. This goal can only be achieved if prospecting and exploration are carried out in new prospective oil and gas bearing regions and based on justified geological risks. In 2007 LUKOIL Group's oil production in Russia totaled 91,100 ths tn, including 90,735 ths tn produced by the Company's subsidiaries. As compared to 2006, production volumes in Russia have increased by 1.7%. In 2007 LUKOIL Group produced 16,397 mln cu.m of gas (including the share of affiliates in production of gas). Production of tank gas (after own consumption, injection of gas into the formation and transportation losses) totaled 13,955 mln cu.m, including 13,731 cu.m of gas produced by the Company's subsidiaries. As compared to 2006, the average daily production of tank gas has risen by 2.5 %. Natural gas output came to 10,787 mln cu.m including 9,652 mln cu.m of tank gas. The major achievement in 2007 related to natural gas production was the beginning of operation at Khauzak gas field which is a part of the Kadym - Khauzak - Shady project. By implementing its "Integrated Development and Oil Production Optimization Program" for 2006-2008, the Company intends to improve the efficiency of field development and reduce Opex.



#### **INTERNATIONAL ACTIVITIES**

INTERNATIONAL PROJECTS ACCOUNT FOR 6.6% OF OAO LUKOIL'S PROVEN RESERVES AND 6.6% OF COMMERCIAL HYDROCARBON PRODUCTION. THE COMPANY HAS BEEN ENGAGED IN TWENTY-FIVE PROJECTS IN TEN COUNTRIES. LUKOIL HAS BEEN CONDUCTING EXPLORATION IN AZERBAI-JAN, GHANA, UZBEKISTAN, IRAN, COLUMBIA, VENEZUELA, SAUDI ARABIA AND THE IVORY COAST. THE COMPANY IS ALSO ENGAGED IN OIL AND GAS PRODUCTION IN AZERBAI-JAN, KAZAKHSTAN, EGYPT AND IS PREPARING FOR PRODUC-TION IN IRAO. LUKOIL's foreign projects are managed by LUKOIL Overseas Holding Ltd. and LUKARCO B.V. These companies are engaged in production of hydrocarbons as part of 10 foreign projects such as Shakh-Deniz (Azerbaijan), Karachaganak, Kumkol, Tengiz, Kazakhoil Aktobe, Severnye Buzachi, Karakuduk (Kazakhstan), Arman (Iran), Meleya and WEEM block (Egypt) and Kadym – Khauzak – Shady (Uzbekistan). Specifically, in 2007 following implementation of the foregoing projects, oil production totaled 5.5 mln tn.

In 2007 commercial gas production as part of the Company's international projects made around 1.7 bln cu.m of gas which is by 41.6% more than the year before. Natural gas share accounted for 80% of the output.

## **TODAY OAO LUKOIL IS**

- COMPANY NO. 1 among the world's largest private oil and gas companies in terms of its proven oil reserves
- COMPANY NO. 3 among the world's largest private oil and gas companies in terms of its oil production
- COMPANY NO. 6 among the world's largest private oil and gas companies in terms of its hydrocarbons production 1,3% of the global oil reserves 2,3% of the global oil production

LUKOIL ANNUALLY INCREASES ITS HYDROCARBONS RESERVES BY ENHANCING THEIR PRODUCTION, EXPANDING ITS REFINING CAPABILITIES AND EXPORTS POTENTIAL.

THE COMPANY CONTRIBUTES TO SUCCESSFUL EXPANSION OF THE NATIONAL RESOURCE BASE, BETTER PERFORMANCE OF THE FUEL AND ENERGY COMPLEX AND SOCIAL AND ECONOMIC DEVELOPMENT OF THE RUSSIAN REGIONS.

