



LUKOIL

DOWNSTREAM





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LUKOIL's refining complex is one of the key structures of the Company. It includes four Russian refineries:

- OAO LUKOIL-Ukhtapererabotka
- OOO LUKOIL-Permnefteorgsintez
- OOO LUKOIL-Nizhegorodnefteorgsintez
- OOO LUKOIL-Volgogradneftepererabotka

and three refineries outside Russia:

- LUKOIL Neftokhim Burgas AD (Bulgaria)
- PETROTEL LUKOIL S.A. (Romania)
- OAO LUKOIL – ODESSA REFINERY (Ukraine)

The Downstream also includes two mini-refineries, located in Western Siberia.

The Company's objective is to increase its oil refining output every year. In 2007 the overall oil refining output of all of the Company's refineries including oil processed by third party refineries totaled 56.8 mln tn. The output of LUKOIL's oil refineries totaled 52.2 mln tn.

LUKOIL invests into upgrading and reconstruction of its refining facilities. For instance, in 2007 capital investments totaled 830 mln USD.

One of the most important achievements was the start of Euro-3 gasoline production (which became possible as a result of commissioning gasoline isomerization units at Nizhny Novgorod and Volgograd refineries). In 2007 the share of high-octane gasolines in the overall motor gasoline output of the Company's Russia-based refineries (excluding its mini-refineries) almost reached 83.5% (76.6% in 2006), the oil conversion rate came to 74%, and the output of light petroleum products almost reached 50% (this indicator exceeds 64% at the Company's refineries outside Russia).

Since 2005 LUKOIL's gas stations have been marketing new LUKOIL EURO-4 diesel fuel which contains a lot less sulphur and harmful additives. It was not long after this diesel fuel became available on the market that the "Za Rulem" magazine awarded it the Grand Prix in the "Breakthrough of the Year" category.

In 2006 LUKOIL put its new "EKTO" (environmentally friendly) fuel on the market. The new fuel has better qualities than those required for it to comply with the Euro-3 standard and contains special additives that improve the engine's performance.



LUKOIL'S REFINERIES IN RUSSIA

AO LUKOIL-UKHTAPERERABOTKA

THE REFINERY WAS PUT INTO OPERATION IN 1934 TO RE-FINE OIL PRODUCED IN THE KOMI REPUBLIC AND ALSO TO ENSURE THERE ARE SUFFICIENT SUPPLIES OF PETROLEUM PRODUCTS TO THE REGION AND NEIGHBORING AREAS.

In October 1999 the refinery became part of OAO LUKOIL specializing in production of fuels. The end of 1999 saw adoption and successful implementation of the "Integrated Program to Upgrade OAO LUKOIL-Ukhtaneftepererabotka in 2003-2005" which provides for upgrading of the existing and construction of new oil refining facilities.

The following measures were implemented in 2006 at the enterprise: upgrading of the catalytic reforming unit, conversion of AT-2 unit for visbreaking, construction of the railway loading rack for oil and dark petroleum products with the capacity of 4 mln tn/year, construction of an automatic loading terminal outside the Ukhta riverside area, re-equipment of the catalytic reforming unit (the unit's capacity increased from 300 to 380 ths tn/year, which resulted in lower gasoline production costs).

In 2007 a new 800 ths tn/year tar visbreaking unit was put into operation. This unit will help improve the conversion rate and substantially increase vacuum gas oil output.

Currently the installed primary crude distillation capacity of Ukhta refinery makes around 4 mln tn of oil per year. The refinery operates at almost 100% capacity and irreversible oil losses have been minimized to 0.22%. In 2007 the enterprise's primary distillation output exceeded 4.1 mln tn.

Oil production enterprises located in the Timan-Pechora oil and gas province supply the refinery with refining raw stock via the Usa-Ukhta refinery. Crude is supplied to the refinery from local fields both by rail and via oil pipelines operated by OAO Kombineft. It is also by rail that unique Yarega crudes and light crudes produced by OAO Tebukneft are transported to the refinery.

The products are primarily exported to the domestic markets of Finland and Sweden, as well as to Northwestern Europe via loading terminals in Vysotsk and Kaliningrad. Petroleum products are transported by rail and by motor transport.





OOO LUKOIL-PERMNEFTEORGSIINTEZ

PERM OIL REFINING COMPLEX WAS COMMISSIONED IN 1958. THE REFINERY WAS DEVELOPING QUICKLY, AND IN 1966 GREW INTO AN INTEGRATED ENTERPRISE TO BE SUBSEQUENTLY USED AS THE GROUNDWORK FOR ESTABLISHING PERMNEFTEORGSIINTEZ PRODUCTION ASSOCIATION IN 1977. IN 1991 THE ENTERPRISE BECAME PART OF LUKOIL.

In 1997 the first stage of refinery reconstruction was completed; as a result, conversion rate increased from 65.7 to 82.2%, and recovery rate of light petroleum products also improved. The refinery started to produce motor fuels fully compliant with high environmental requirements; the result was that the refinery began to produce non-ethylated gasolines only. The enterprise started producing diesel fuel with 0.035% of sulphur content, increased production of arctic diesel fuel, improved environmental protection at the refinery's location and enhanced occupational safety.

In September 2004 commissioning of a deep oil conversion unit marked the beginning of the second stage of Perm refinery reconstruction. This project is one of the largest projects ever implemented by LUKOIL. The estimated budget of the complex construction totaled 11 bln RUR, it included over 20 process facilities; foreign technologies and best practices were vastly used during its establishment. Texaco, ABB Lummus Global, Comprimo, Linde licenses were used when designing the complex. The major facility of the project was construction of a 3.5 mln tn/year T-star hydrocracker designed using Texaco technologies. The complex is capable of producing environmentally clean diesel fuels compliant with the prospective European standards (EURO-4 and EURO-5) in terms of their aromatics (total content less than 10%) and sulphur content (does not exceed 10 ppm).

LUKOIL-Permnefteorgsintez is always aiming at introduction of cutting-edge technologies, best practices and production

cost-effectiveness. In 2006 the enterprise developed and introduced a range of measures designed to improve performance and reduce costs related to energy resources. Moreover, a program for reconstruction and renovation of the plant, equipment and technologies was developed. This program provides for integrated and systemic development of refining and auxiliary facilities until 2016 in full compliance with the Company's general strategic objectives. The key objectives of the program aim to increase the efficiency of oil refining, and bring the quality and environmental properties of motor gasolines in conformity with prospective European Euro-3 (in 2009) and Euro-4 (in 2012) standards.

In 2007 the refinery commissioned an isomerization unit with the capacity of 450 ths tn/year. The new unit makes it possible to increase output of high-octane gasolines and reduce sulphur, benzene and aromatics content to comply with the Euro-3 and Euro-4 requirements.

Refinery capacity was also increased from 12 to 12.4 mln tn/year as a result of reconstruction of fractionators at crude distillation units.

In 2007 primary distillation output at the enterprise totaled almost 12 mln tn.

Crude is supplied to the refinery via the following oil pipelines: Kamenniy Log – Perm and Kungur – Perm, and Western Siberian crude is transported via Surgut – Polotsk and Kholmogory – Klin oil pipelines.

Currently, the refinery is supplying its products to 74 Russian regions. Its primary consumers include Perm, Khabarovsk, and Primorskiy Territories, Bashkortostan and Tartstan, Kirov, Chelyabinsk, Sverdlovsk, Leningrad, Arkhangelsk and Murmansk Oblasts, as well as various Siberian regions, Moscow and Moscow Oblast. A third of all products produced by the refinery is exported to 28 countries including Switzerland, Denmark, Norway, Sweden, Finland and Germany.





OOO LUKOIL-NIZHEGORODNEFTEORGSIINTEZ

ON AUGUST 23, 1958 THE VERY FIRST LINE OF RAILWAY CARS WITH COMMERCIAL PETROLEUM PRODUCTS WAS UNLOADED AT NOVIYE GORKI REFINERY. THIS DAY IS CONSIDERED TO BE THE OFFICIAL BIRTHDAY OF THE ENTERPRISE. AFTER SOME TIME THE REFINERY TURNED INTO ONE OF THE LARGEST OIL REFINING AND GAS PROCESSING ENTERPRISES AND BECAME ONE OF THE INDUSTRY'S LEADERS. AT THE END OF 2001 THE ENTERPRISE BECAME PART OF OAO LUKOIL AND THIS IS WHEN ITS DYNAMIC RECONSTRUCTION AND UPGRADING BEGAN.

In 2006 the refinery commissioned a gasoline isomerization unit with the designed capacity of 440 ths of tn/year. The unit produces isomerizates, i.e. high-octane components of motor gasolines. It allows to produce gasoline in which the overall aromatics content does not exceed 42%, and that of benzene does not go beyond 1%, which is in conformity with Euro-3. The production of Euro-3 gasoline will soon reach 50% of the total motor gasoline output.

The refinery's primary crude distillation capacity increased by 2 mln tn/year. As a result its installed capacity made up about 17 mln tn of products at 95% of capacity utilization.

2007 saw completion of the major tar visbreaking unit construction. The designed capacity of the unit is 2.4 mln tn/year.

To increase the quality of its products the refinery has reconstructed its hydrotreatment units. Consequently it was able to reduce the sulphur content in its diesel fuel to the Euro-4 level and start production of Euro-5 diesel fuel.

In 2007 the primary crude distillation output at the enterprise came to 16.7 mln tn.

The refinery introduced and certified a quality management system which is compliant with the requirements of AS 9100 standard entitled "Aviation and Aerospace", performed compliance auditing of its certified quality management system aimed at verifying its conformity to the requirements of ISO 9001:2000. It also introduced environmental management and industrial safety systems certified for compliance with the requirements of ISO 14001 and OHSAS 18001.

LUKOIL-Nizhegorodnefteorgsintez is one of the most attractive enterprises among the industry's refineries due to its technological potential, favorable location in central Russia, developed and extensive railway, waterway and pipeline networks. Today, the refinery produces motor fuel, lubricating oils and petroleum bitumens. Its state-of-the-art process facilities produce over 70 types of high quality products. Almet'yevsk - Nizhniy Novgorod and Surgut - Polotsk oil-trunk pipelines are used to transport crude to the refinery.





OOO LUKOIL-VOLGOGRADNEFTEPERERABOTKA

THE REFINERY WAS ESTABLISHED IN 1957 AS A FUEL AND LUBES PRODUCTION ENTERPRISE. IN 1991 OOO LUKOIL-VOLGOGRADNEFTEPERERABOTKA BECAME A PART OF LUKOIL. THE REFINERY PRODUCES FUEL, LUBES, PETROLEUM, COKE AND BITUMEN PRODUCTS.

The key lubes produced by the enterprise are motor oils (including synthetic and semi-synthetic), aviation, hydraulic, compressor, cable, transmission and industrial oils (doped and non-doped), pure oils and additives to numerous lubricating oils and LUKOIL cascade additives.

In 2002 Volgograd refinery was the first one in Russia to start production of isoparaffin pure oil (LUKOIL VHVI-4) using the technology developed by Chevron Chemical S.A. (US) applied for production of synthetic and semi-synthetic year-round motor and transmission oils. LUKOIL-LUX and LUKOIL-SYNTETIK oils are also produced by the refinery. The refinery's LUKOIL-LUX and LUKOIL-SUPER oils have been approved by such companies as MERSEDES-BENZ and VOLKSWAGEN AG. The enterprise also plans to start production of transmission semi-synthetic oil for automatic transmissions, and isoparaffin-based synthetic and semi-synthetic industrial oils for up-to-date reduction equipment.

LUKOIL-Volgogradneftepererabotka is one of Russia's largest coke producers. The enterprise produces low-sulphur petroleum coke that has unique properties in terms of sulphur and volatile compounds content and is capable of producing coke with a better microstructure. The refinery's designed capacity is 64 ths tn of products per annum.

In 2006 construction of a catalytic reformer with the capacity of 1 mln tn per year was completed. Putting it into operation made it possible to decrease the output of straight-run gasoline and increase the production of motor gasoline with a higher octane number. At the same time, the refinery expects the share of motor gasolines in the overall output to increase from 60% to 83%.

A 370 ths tn/year isomerization unit was brought into operation in 2007. The new unit enables the enterprise to increase the output of high-octane gasolines fully compliant with Euro-3 and Euro-4 requirements.

As of the end of 2007, installed capacity of the Volgograd refinery totaled 11 mln tn. The refinery's primary distillation volume in 2007 made up over 9.6 mln tn.





LUKOIL'S FOREIGN REFINERIES

LUKOIL NEFTOKHIM BURGAS AD (BULGARIA)

THE REFINERY IS LOCATED 15 KM AWAY FROM THE PORT OF BURGAS ON THE BLACK SEA COAST. IT WAS DESIGNED IN THE SOVIET TIMES AND HAS BEEN IN OPERATION SINCE 1964. THIS BULGARIAN ENTERPRISE HAS BEEN PART OF THE COMPANY SINCE 1999. LUKOIL NEFTOKHIM BURGAS AD IS THE LARGEST REFINERY LOCATED IN THE BALKANS, IT ALSO INCLUDES OIL REFINING AND PETROCHEMICAL COMPLEXES AND POLYMER PRODUCTION FACILITIES. ITS DESIGNED REFINING CAPACITY IS 8.8 MLN TN/YEAR.

Apart from its major production facilities, the Bulgarian refinery includes an offshore terminal with three docks, a large tank farm for oil, black oil, light petroleum products and petrochemicals.

The enterprise also has a heating plant that ensures 100% steam and power supply consumed by the production facilities, and a products pipeline to transfer diesel fuel and motor gasoline from LUKOIL Neftokhim Burgas to Sofia and back.

The refinery produces Euro-4 motor gasolines and diesel fuel. Starting from 2009, the enterprise is to start producing Euro-5 compliant motor gasolines and diesel fuel.

Construction of an n-butane isomerization unit with the capacity of 50 ths tn/year was completed in 2007. The unit made it possible to increase the output of feed stock for the sulfuric acid alkylation unit.

In 2007 primary crude distillation output exceeded 7 mln tn.





PETROTEL LUKOIL S.A. (ROMANIA)

THE ENTERPRISE WAS BROUGHT INTO OPERATION BACK IN 1927. IN 1999 IT BECAME PART OF LUKOIL. BEING CAPABLE OF REFINING 2.4 MLN TN OF OIL PER ANNUM, PETROTEL LUKOIL S.A. IS ONE OF ROMANIA'S TOP FIVE REFINERIES. A NETWORK OF PIPELINES CONNECTS THE ENTERPRISE TO OTHER ROMANIAN REFINERIES AND OIL TERMINALS LOCATED IN THE PORTS OF CONSTANTSA (BLACK SEA) AND GIURGIU (THE DANUBE). THE ENTERPRISE ALSO HAS PIPELINES CONNECTING IT TO UKRAINE.

In 2001 – 2004 the refinery underwent reconstruction; its primary objective was to start producing Euro-4 and Euro-5 petroleum products, reduce losses and power consumption, and increase industrial and environmental safety. It resulted in simultaneous upgrading of 18 process and auxiliary facilities, construction of three new process units and automation of the production management systems.

The enterprise plans to improve the operating efficiency of its production processes. Following Romania's EU membership and existing requirements related to production of biofuels, the enterprise plans to convert its MTBE unit into an ETBE unit¹.

In 2007 primary crude distillation output exceeded 2.5 mln tn.

¹ MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether) are high-octane oxygen-containing additives to motor fuels. ETBE is also the most environmentally friendly additive used in biofuels production.

OAO LUKOIL - ODESSA REFINERY (UKRAINE)

THE REFINERY WAS BUILT IN 1937. IN THE MID 2000 IT BECAME PART OF OAO LUKOIL WHICH UNDERTOOK TO INVEST INTO THE ENTERPRISE, UPGRADE IT AND SUPPLY RAW MATERIALS TO IT.

The refinery produces vacuum gas oil, straight-run gasoline and other primary distillation products, along with AI-92, AI-95, AI-98 motor gasolines and diesel fuel. Its designed capacity is 2.8 mln tn/year.

In the mid 2005 the enterprise was shut down for reconstruction intended to optimize refining capacity utilization at the refinery, increase the output of light petroleum products and increase the conversion rate.

The first stage of the refinery's reconstruction was completed in 2007. In 2008, as part of the second reconstruction stage, a visbreaking unit was constructed. This unit makes it possible to reduce the output of fuel oil and increase the output of vacuum gas oil. In April 2008 the refinery was put into operation. As a result of its upgrading, oil conversion rate at the plant is to increase from 56 to 78%.

LUKOIL's refining complex is one of the largest across the industry. LUKOIL is trying to ensure conformity of the products produced by its refineries with the global quality standards. That is why it is continuously upgrading its production facilities, implementing cutting-edge technologies and expanding its technological potential. All these measures are aimed at consolidating the position of OAO LUKOIL, increasing its competitive advantage and output of its products.





DISTRIBUTION OF LUKOIL'S PETROLEUM PRODUCTS

THE COMPANY'S **EXISTING DISTRIBUTION NETWORK** COVERS 60 RUSSIAN REGIONS AND OTHER COUNTRIES, INCLUDING THE CIS COUNTRIES, BALTIC STATES, CENTRAL, EASTERN AND SOUTHERN EUROPEAN COUNTRIES, THE USA.

In 2007 petroleum products output exported from Russia to the CIS and other foreign countries totaled 25.1 mln tn, which is by 22% more than in 2006. Over 85% in the Company's petroleum products exports belongs to diesel fuel, black oil and vacuum gas oil.

Petroleum products are primarily exported by rail (in 2007 more than 80% of petroleum products were transported using this mode of transport). Petroleum products are also exported by river, sea and through pipelines.

LUKOIL is continuously developing its own export terminals which make it possible to substantially reduce transportation costs and add flexibility to logistic schemes. The Company has completed the third construction stage of the Vysotsk terminal via which petroleum products are exported to Western Europe, US and Southeastern Asia. In 2007 the volume of petroleum products transshipped in Vysotsk totaled 11.7 mln tn. In April 2007 the Company entered into a contract with OAO RZD that provides for a 12 mln tn/year increase in the capacity of the railway to Vysotsk.

LUKOIL is actively developing its global petroleum products marketing segment by expanding the scope of its operations and making them more geographically diverse. In 2007 the company's global wholesales of petroleum products almost reached 64.4 mln tn which is by 11.9% more than in 2006.

LUKOIL'S **RETAIL DISTRIBUTION NETWORK** NOW COVERS 24 COUNTRIES, INCLUDING RUSSIA, US, CIS AND EUROPEAN COUNTRIES AND NUMBERS ALMOST 200 PETROLEUM INSTALLATIONS AND 6,090 GAS STATIONS (INCLUDING FRANCHISE ONES).

In 2007 LUKOIL was supplying petroleum products to the European and Asian-Pacific markets, and expanding its presence into new regions such as Africa, Latin America and the Middle East.

In 2007 the Company's retail marketing volume came to about 12.8 mln tn of petroleum products which is by over 14% more than the year before.

In 2007 the Company built 142, reconstructed 148 and purchased 533 gas stations.

The Company's retail distribution network in Russia includes 1,815 gas stations and 122 petroleum installations. Both gas stations and petroleum installations are run by 8 petroleum products supply organizations that operate in 60 Russian constituent entities. In 2007 the Company's retail sales in petroleum products in the domestic market totaled 4.85 mln tn. Capital investments into the Russian retail sector during the year came to 264 mln USD.

An important step forward in terms of the Russian sector development was the beginning of EKTO (environmentally friendly) motor gasolines marketing. The properties of new gasolines are in full compliance with the requirements of Euro-3 and exceed the requirements of the applicable Russian legislation. To ensure better operating properties, EKTO gasolines include





a multipurpose complex of additives that help improve detergent, rust-preventive and other properties. New gasolines are in high demand with consumers.

Having its focus on the consumer, the Company continuously monitors the quality of petroleum products marketed at its gas stations. For this purpose it operates a system of mobile laboratories that alongside with petroleum depot laboratories continuously monitor the quality of marketed fuel.

LUKOIL's retail network in Europe, CIS countries and the USA includes 4,275 gas stations (including franchise ones) and 75 petroleum depots. In 2007 the Company built 538 and reconstructed 54 gas stations.

LUKOIL is continuously expanding its distribution network. In 2004 it purchased 86 and built 101 gas stations in the CIS countries and in Europe. ConocoPhillips sold to the Company its US network that includes 308 gas stations located in New Jersey and Pennsylvania and entered into a contract that provides for supplies of petroleum products to 471 gas stations. In 2005 LUKOIL purchased shares of Finnish Oy Teboil Ab and Suomen Petrooli Oy, thus acquiring controlling interest in these companies; their key activities include operation of 289 gas stations and 132 diesel sales outlets, and production and sales of lubes.

In 2006 LUKOIL opened its first gas station in Macedonia. Following the year's results the average daily marketing output at the new gas stations exceeded 16 tn. The company has plans within the next four years to open another 40 gas stations in Macedonia. Petroleum products to such gas stations will be supplied by the Company's refineries in Bulgaria and Romania. In 2007 LUKOIL Group purchased 376 gas stations in seven European countries (Belgium, Luxemburg, the Czech Republic, Finland, Hungary, Poland and Slovakia) from ConocoPhillips.

LUKOIL's retail marketing volume in the international markets in 2007 exceeded 7.9 mln tn.

Another area of the Company's marketing business, apart from vehicle fuelling, is aircraft fuelling. LUKOIL-AERO, also part of LUKOIL Group, was founded in 1994. It supplies aviation kerosene mainly for wing fuelling purposes to over 50 Russian and foreign airports via a network of its own subsidiaries or under agreements concluded with third party fuelling companies. LUKOIL-AERO provides services to over 100 Russian and foreign-based airlines. The company's share in the overall fuel supplies output to the Russian market is around 25%.

