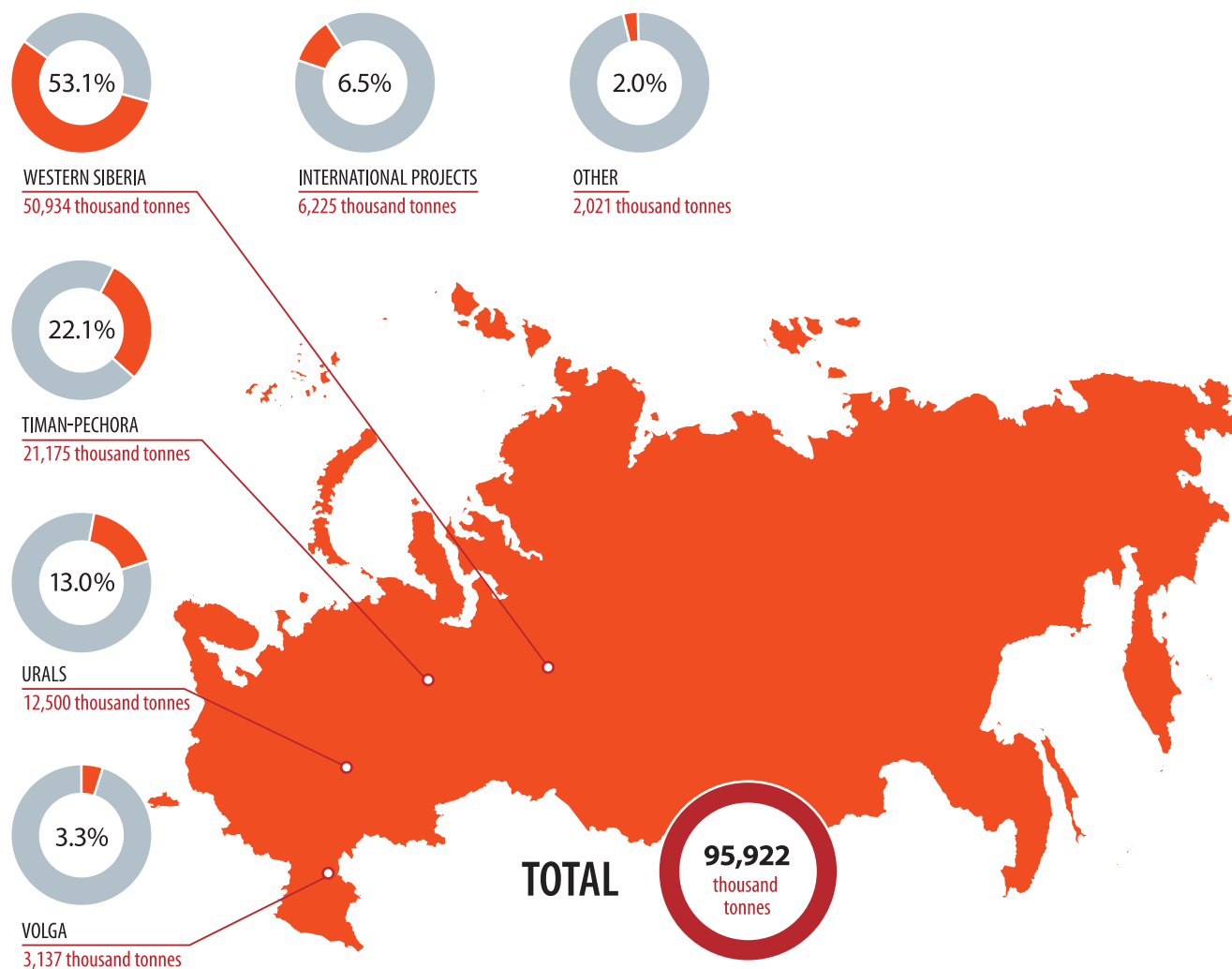
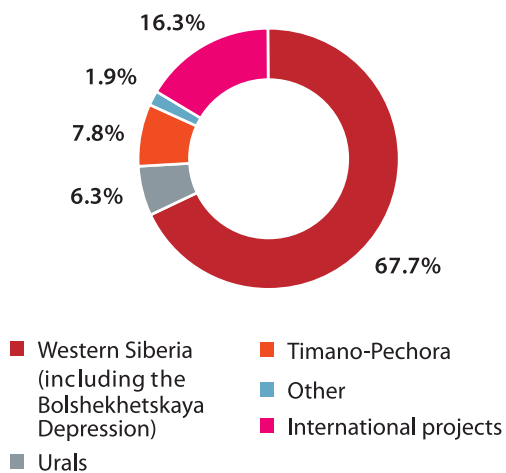


OIL FIELD DEVELOPMENT AND PRODUCTION

OIL PRODUCTION BY REGIONS



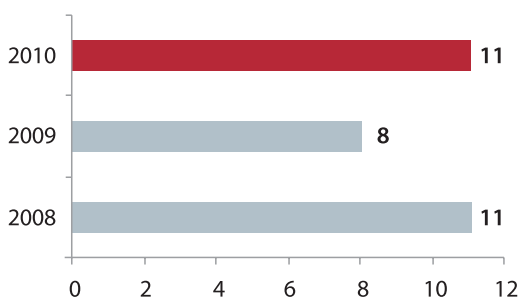
PRODUCTION DRILLING BY REGIONS (2010)



CRUDE OIL PRODUCTION BY LUKOIL GROUP IN 2010 (INCLUDING SHARE OF PRODUCTION BY EQUITY AFFILIATES) WAS 95.922 MILLION TONNES (1.940 MILLION BARRELS PER DAY).

Average daily output fell by 1.6% in comparison with 2009. Lower oil output in 2010 reflects a production decline at fields in Western Siberia, where the Company produces 53% of its crude, and was due primarily to objective changes in the structure of recoverable reserves. However, use of the latest enhanced recovery technologies and horizontal drilling enabled LUKOIL to reduce the rate of crude output decline in Western Siberia from 5.7% in 2009 to 3.8% in 2010. LUKOIL has also successfully addressed the problem of electricity supply shortages for production operations, which arose in recent years in Western Siberia. The Company is building and commissioning its own power generating capacities at fields, and the shortages have now been almost completely overcome.

NEW FIELDS COMMISSIONED, fields



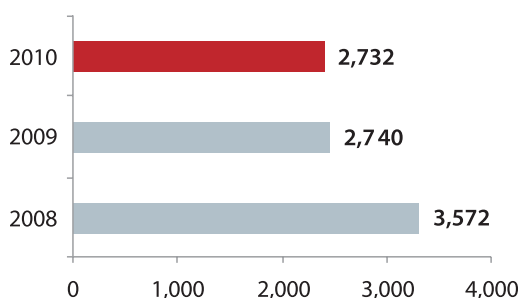
The main achievement in the Company's production business during 2010 was launch of production at the Yu. Korchagin field where annual oil extraction will reach 2.4 million tonnes and gas output will be 1 billion cubic meters at peak production. Yu. Korchagin is the first of a group of LUKOIL fields in Russian territorial waters of the Caspian Sea to have been brought into operation. Development of the field will use a system of long horizontal wells (over 5 km in length) representing a unique solution for the Russian industry. Logging will be carried out as part of the horizontal-well drilling process. Radial distribution of wells will enable simultaneous penetration of all productive layers.

The Company continued its work on improvement of field development efficiency and reduction of operating costs in the reporting year. LUKOIL production companies carried out a range of measures to raise well productivity and oil recovery rates in order to achieve oil production targets for 2010. As a result field development spending rose by 4.0% in 2010 compared with 2009 to a level of \$4.599 billion, despite increase of inflation to 8.7% and real strengthening of the rouble by 11.6%.

LUKOIL subsidiaries and equity affiliates produced hydrocarbons at 355 fields in Russia and 11 projects abroad in 2010. A total of 11 new fields were brought into development during the year, as follows: Severo-Pokamasovskoye, Mishaevskoye, Svobodnoye, Timerovskoye, Olginskoye and Lenzitskoye (Western Siberia); Yu. Korchagin (Volga); Sharonovskoye, Preobrazhenskoye (Urals); Olginskoye and Yu. Rossikhina (Timan-Pechora). The largest production increases (more than 200,000 tonnes) were achieved at four fields: Bayadynskoye and Usinskoye in Timan-Pechora; and Kechimovskoye and Urevskoye in Western Siberia.

The Company had 30,340 oil production wells as of January 1, 2011, of which 25,990 were actually in use, and the number of water injection wells was 10,320, of which 8,120 were under pressure. The number of oil production

OIL PRODUCTION DRILLING, thousand meters



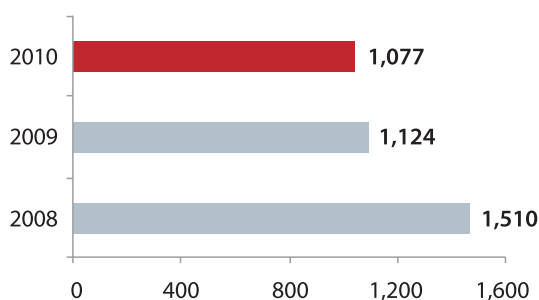
wells was 2.0% higher than in 2009. The share of idle wells was almost unchanged from the end of 2009 at 14.3% of the total number. Average daily oil flow from wells in projects with Group participation was 14.5 tonnes.

Volumes of production drilling were nearly unchanged, totaling 2,732,000 meters, which is 0.3% less than in 2009. The number of new production wells brought into operation was 1,077, of which 101 were horizontal. High efficiency of horizontal well drilling has persuaded the Company to increase numbers of such wells in the medium term. Average daily flow from new wells in projects, in which the Group is a participant, was 35.8 tonnes, including 156.6 tonnes from horizontal wells. Flow rates at new wells were 3% higher than in 2009 thanks to improvement in geological and hydrodynamic models and greater application of such models in planning of drilling work, and also as a result of further work to improve well completion technologies and initial and secondary penetration of productive formations.

USE OF NEW DRILLING AND WELL COMPLETION TECHNOLOGIES, SELECTION OF OPTIMAL BOREHOLE TRAJECTORY WITH CLARIFICATION OF THE GEOLOGICAL MODEL DURING DRILLING, USE OF BOTTOM-HOLE CONTROL SYSTEMS AND REAL-TIME DRILLING MANAGEMENT TO MAXIMIZE BOREHOLE CONTACT WITH THE RESERVOIR GAVE AN INCREASE OF AVERAGE OUTPUT FROM HORIZONTAL WELLS BY 2.3 TIMES COMPARED WITH 2009.

The Company increased efficiency of sidetracks by 17.3% in 2010, despite a 15.2% reduction of this work in Russian operations compared with 2009. The improvement was mainly due to more accurate forecasting of geological structure and the structure of reserves at areas where sidetracks were used. Sidetrack drilling is carried out mainly at wells, which have been taken out of operation, in order to extract residual oil reserves. Sidetracks were drilled at 224 wells in 2010 and gave average daily flow of 19.7 tonnes.

■ OIL PRODUCTION WELL LAUNCHES, wells



Efficiency of hydrofracturing operations at Company wells in 2010 was comparable with the result in 2009. Positive effect from hydrofracturing was maintained thanks to effective planning work, selection of wells using full-time hydrodynamic models, and tighter control over the quality of materials and reagents used by service companies.

A total of 4,869 operations were carried out on productive formations using physical, chemical, hydrodynamic and heat techniques (see 'Exploration and Production Technologies' on page 78). Additional oil output in Russia thanks to application of enhanced oil recovery techniques was 22.1 million tonnes, or 25% of total oil production by the Group in Russia.

RUSSIA

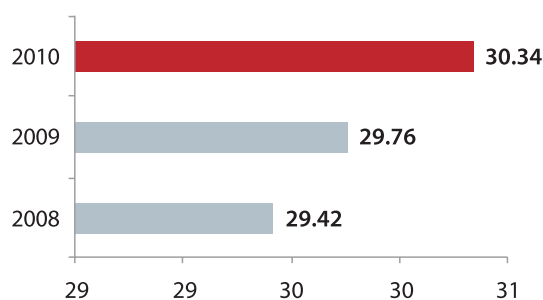
Oil production by LUKOIL in Russia during 2010 was 89.767 million tonnes, of which 89.431 million tonnes were produced by Group subsidiaries.

Subsidiaries and equity affiliates of LUKOIL produced hydrocarbons at 355 fields in Russia in 2010. Production drilling in Russia declined slightly to 2,286,000 meters. The Group owned 28,610 production wells at the end of 2010, of which 24,420 were actually in use.

Western Siberia

Fields in **Western Siberia** accounted for 56.7% of LUKOIL's Russian oil production in 2010. Production in the region was somewhat lower than in 2009 at 50.93 million tonnes. Use of enhanced oil recovery methods and drilling of horizontal boreholes enabled LUKOIL to reduce the rate of production decline in Western Siberia from 5.7% in 2009 to 3.8% in 2010. The Company will continue to focus

■ OIL PRODUCTION WELLS, thousand wells





on stabilization of production levels in main operating regions, stepping up investments into development of new technologies and improvement of field efficiency.

Stabilization of output levels in Western Siberia is complicated by gradual natural exhaustion of the resource base, due to the long period of production at most Company fields in the region, which has depleted their reserves. LUKOIL is combating output decline by use of the latest technologies, which enable substantial increase of the recovery ratio and production of oil from reservoirs with difficult access. Another problem is shortage of electric power supply in the region, which leads to losses in the production process and makes it difficult to pump in sufficient volumes of water to maintain reservoir pressure. The Company is successfully dealing with power shortages at its own fields by

construction of small power stations, fuelled mainly by associated gas (see 'Power Generation' on page 58).

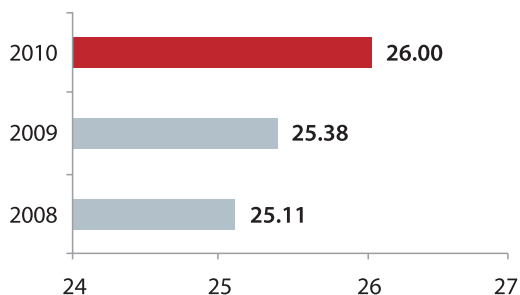
Despite long periods of exploitation, some of the Company's fields in Western Siberia have significant potential for production growth. In particular, the Kechimovskoye and Urevskoye fields showed strong oil production growth once again in 2010.

Oil production at the **Kechimovskoye field**, which was launched in 1995, grew by 30.2% in 2010 compared with 2009 to 2.01 million tonnes thanks to new production drilling: a total of 102 new wells were brought into production with average daily flow rates of 32.8 tonnes, including 27 horizontal wells with average daily flow rate of 61.9 tonnes. Oil production from new wells was 530,800. New wells brought into operation during 2009 (92 wells with average daily flow rate of 27.9 tonnes, totaling 644,300 tonnes in the year) made an important contribution to output in 2010, which was their first full calendar year in production. Work continued on a system to maintain reservoir pressure: 49 new injection wells were put under pressure during the reporting year.

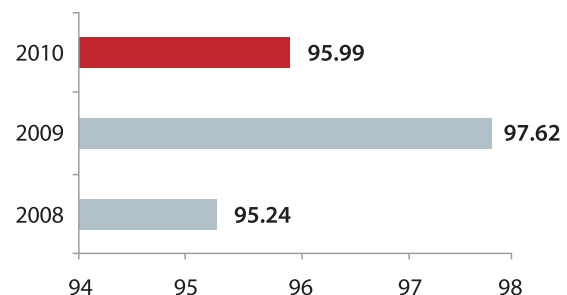
The Kechimovskoye field is one of the Company's largest investment projects in Western Siberia: in accordance with the project schedule, 361 wells remained to be drilled as of January 1, 2011, of which 270 oil wells and 91 injection wells.

Oil production at the **Urevskoye field**, which was brought into production in 1978, rose by 9.3% to 2.86 million tonnes in 2010. The increase was achieved thanks to production drilling: 83 new wells were launched with average daily output of 25.7 tonnes, including two horizontal wells with daily flow of 59.1 tonnes. Oil production at new wells in the reporting period was 352,300. A total of 12 sidetracks were drilled at the field in 2010 in order to maintain output levels at wells, and they gave average daily flow increases of 12.5 tonnes, producing 20,700

■ OIL PRODUCTION WELLS, thousand wells



■ OIL PRODUCTION, million tonnes



tonnes of additional oil in total. Work continued on a system for maintaining strata pressure, and 29 new injection wells were put under pressure in the reporting year. There were 843 wells still to be drilled at the Urevskoye field as of January 1, 2011, in accordance with the field development schedule. LUKOIL's development program for the Exploration & Production segment includes maintenance of high production drilling rates at Urevskoye with further increase of oil output.

Timan-Pechora

The Timan-Pechora oil province accounted for 23.6% of Company production in Russia in 2010. Output by LUKOIL in the province declined slightly in comparison with 2009 to a level of 21.18 million tonnes but Timan-Pechora still has great potential. LUKOIL will develop fields using new technologies in order to speed up extraction of heavy crude oil in Timan-Pechora. Such oil represents 4.3% of the Company's total proved hydrocarbon reserves, mostly located at the Yaregskoye and Usinskoye fields in Timan-Pechora.

The **Yaregskoye field** has proved reserves of 315 million barrels of high viscosity oil under SEC classification. Production at the field mainly uses a shaft technique. Industrial testing has been underway at Yaregskoye since 2005 of new techniques for production from the surface using horizontal wells and heat applications. The work will help the Company to assess technical aspects of use of horizontal wells for injection and production purposes. The technology is similar to Steam Assisted Gravity Drainage (SAGD), which is being applied for oil sands at Atabasca in Canada. Three pairs of horizontal boreholes with horizontal sections of 250–300 meters have been drilled using this technology at Test Area № 3. Further application of SAGD techniques involve constant steam input to an upper injection hole and extraction of oil from a lower production hole. Steam condenses on the walls of a steam chamber, which forms in the strata, then flows into the production hole together with oil under the effect of gravity.

Thermo-gravitational drainage technology was used at the Lyaelskaya area of the Yaregskoye field in 2010 for drilling of three horizontal wells with 1,000 meter horizontal sections. Industrial application of thermo-gravitational drainage will enable non-draining reserves to be brought into production, increasing the overall level of oil production at the Yaregskoye field.

The highest rate of oil production growth (more than 200,000 tonnes) in Timan-Pechora was achieved at the Usinskoye and Bayadynskoye fields.

Output increase of 210,700 tonnes (+10.0%) was achieved in 2010 at the **Usinskoye field**, thanks to higher extraction volumes from a Permian-Carbonaceous deposit (+219,200 tonnes). Higher extraction from the deposit was achieved using various efficient geological interventions (steam cycles, etc.), and diversion of wells to the deposit from other geological targets at the Usinskoye field.

Two wells were transferred from drilling to production status and gave average daily flow rates of 93.1 tonnes, totalling 8,900 tonnes for the year. A further 522 wells remain to be drilled as of January 1, 2011, in accordance with the field schedule. Application of enhanced recovery techniques in future drilling will enable the Company to maintain strong results in work at the Usinskoye field.

Extensive industrial testing of steam-heat treatment is being carried out in order to improve recovery ratios from high-viscosity Permian-Carbonaceous deposits. Heat treatment of strata using a system of horizontal boreholes was applied in practice at a deposit for the first time in 2010, and testing of a perpendicular thermo-gravitational drainage technique is planned. Drilling of a new horizontal well with length up to 900 meters is scheduled, and the well will be capable of supporting steam-cycle treatment techniques.

The **Permian-Carbonaceous deposit at the Usinskoye field** was brought into operation in 1977 and its proved reserves under SEC standards as of January 1, 2011 were 434 million barrels. Structure of the Carbonaceous reservoir is discontinuous, it contains high-viscosity oil and is a natural target for heat treatment. In order to raise the recovery ratio, steam is being injected in a steam-heat process across an area of the deposit, with application of a steam cycle at several production wells, combined in some places with use of chemical reagents. Additional output from the deposit thanks to application of heat methods has totaled 6.1 million tonnes since the





operation was started. Other new technologies are also being tested at the deposit, including drilling of radial drain-holes with subsequent steam-cycle treatment, and drilling of sidetracks. Application of binary mixtures at production wells is also planned.

The highest rates of production growth in Timan-Pechora were at the **Bayandyskoye field**. Growth of output at the field in 2010 compared with 2009 was 265,500 tonnes (+123.6%). This was achieved thanks to transfer of seven wells (six production and one exploration) from drilling to production status. These wells gave average daily oil flow of 258.5 tonnes and total output of 322,000 tonnes in the reporting period. The current state of development suggests that it will be possible to produce confirmed recoverable reserves without installing a system for maintenance of strata pressure. Construction of a horizontal well with horizontal section of about 3,000 meters is planned in order to optimize the well combination at this highly productive field.

Crude oil output at the **Yuzhnaya Khylichuya field**, which was commissioned jointly with ConocoPhillips in mid-2008, was 6.9 million tonnes in 2010, which is 1.1% less than in 2009. Rapid production drilling and simultaneous launch of new production wells in 2008–2009 gave high oil-take from initial recoverable reserves, so that

stabilization was inevitable in 2010, when five wells were transferred to production status (four production wells and one exploration well), with average daily output of 806 tonnes, and five injection wells were brought into operation. Measures to regulate field operations are now being carried out. They include reinforcement of the system for strata pressure maintenance at the north-eastern part of the deposit, and increase of injection pressure at the modular cluster pump station to planned levels.

LUKOIL is working hard to ensure rapid development of Timan-Pechora's substantial reserves, which will help to compensate natural decline of output in traditional production regions.

Urals

PRODUCTION OF OIL BY LUKOIL IN THE URALS REGION INCREASED TO 12.5 MILLION TONNES IN 2010, OR BY 3.8%, THANKS TO USE OF NEW TECHNOLOGIES, SUCH AS SIDETRACKS, RADIAL DRILLING AND ACID HYDROFRACTURING. THE URALS ACCOUNTED FOR 13.9% OF TOTAL PRODUCTION BY THE COMPANY IN RUSSIA DURING 2010, COMPARED WITH A FIGURE OF 13.4% IN 2009.

Output at the Unvinskoye field grew by 6.2% in 2010 to 1.5 million tonnes. The increase was due to extensive use of new enhanced recovery methods and large-scale production drilling. Eight sidetracks were drilled and gave average daily flow of 26 tonnes, four hydrofracturing operations were carried out, giving 20.4 tonnes additional daily flow, and radial drilling technology was used at two wells (resulting average daily production growth was 7.7 tonnes). Overall production growth as a result of these measures and various traditional technologies was more than 80,000 tonnes. Two new wells were transferred to production status with average daily flow of 34.4 tonnes, including one well with a horizontal borehole.

The Unvinskoye field is one of the Company's biggest investment projects in Perm Region by size of initial oil reserves. The field has been almost completely drilled over and only fringe zones of deposits remain to be drilled.

Oil production at the **Sibirskoye field** rose by 4.5% in 2010 to 0.7 million tonnes thanks to geological work at wells and use of various techniques for enhanced recovery and production intensification. The techniques were applied at nine wells in 2010 and enabled additional extraction of 12,700 tonnes of oil. However, most of production growth in 2010 was obtained from continuation of geological interventions from 2009: a total of 18 well operations, which gave average daily output growth of 19.9 tonnes and total additional output of 58,100 tonnes. Principal techniques used at the field are acid and proppant fracturing of strata, repeat fracturing of strata at a depression and drilling of sidetracks and radial holes at wells.

The field is of average size by reserves compared with others in the region around Perm. Main geological targets at the field are Riphean sediments of the Turnei-Famenskiye stages, Terrigenous sediments in the Tulsko-Bobrikovsky horizon and Carbonaceous sediments in the Bashkirean stage. Nearly all planned wells have now been drilled.

Volga

Crude oil production by LUKOIL in the Volga region increased by 2.1% in 2010 compared with 2009 to 3.14 million tonnes. Work by the Company to improve field development efficiency in the region has led to increase of the oil recovery rate and made it possible to maintain output levels, despite considerable depletion of reserves.

LUKOIL's most important achievement in the E&P segment during 2010 was launch of production at the **Yu. Korchagin field**, where peak production levels will be about 2.5 million tonnes of oil and 1 billion cubic meters of gas.

The Yu. Korchagin field is the first to come on line of a series of fields that are being developed by the Company in the offshore Caspian. Development of these fields will be the main source of oil production growth for LUKOIL in the medium term. The Yu. Korchagin and Viktor Filanovsky fields will account for most production growth, and they are the first in order for launch. The Yu. Korchagin field development will use a system of extra-long horizontal wells (over 5,000 meters), representing a unique solution for Russia. Well logging will be carried out in the process of horizontal drilling, and radial distribution of wells will enable simultaneous penetration of all productive strata. Rates of field development slowed down in 2010 due to lower commercial drilling speed and 14% loss of calendar work time due to accidents and downtime.

Work is being carried out on production stabilization at the **Pamyatno-Sasovskoye field**, which is one of the largest in the Volga region, accounting for 77% of LUKOIL's regional output. Total additional oil production achieved by drilling of sidetracks was 67,300 tonnes, average daily flow rates were increased by 122 tonnes. Two efficient repair and insulation operations were carried out, giving average 53.5 tonnes additional daily output, and adding 30,600 tonnes of oil for the year.

INTERNATIONAL PROJECTS

LUKOIL'S SHARE OF PRODUCTION IN INTERNATIONAL PROJECTS WAS 6.255 MILLION TONNES, WHICH IS 8.3% MORE THAN IN 2009. THE GROWTH WAS MAINLY DUE TO THE TENGIZ AND NORTH BUZACHI PROJECTS IN KAZAKHSTAN, SOUTH-WEST GISSAR IN UZBEKISTAN AND SHAKH-DENIZ IN AZERBAIJAN.

Production drilling in the Company's international projects increased by 25.6% in 2010 compared with 2009 to 446,000 meters. The number of oil production wells rose by 14.2% to 1,738, of which 1,583 were actually in use. A total of 279 new production wells were commissioned as part of international projects, in which the Company is a participant.

The largest oil production increase as part of international projects came from the **Tengiz** project in **Kazakhstan**.

Crude oil production from the project (Company share) grew by 101.8% to 1,296,000 tonnes, and average daily output per well was 955 tonnes. PreFEED work was completed in 2010 for planned expansion of the Tengiz field, which will involve construction of a new oil preparation plant with 12 million tonnes annual capacity and enlargement of the gas reinjection system. The Company plans to resume drilling at Tengiz in order to load existing plant capacities and as part of the future expansion project. The rate of use of associated gas at Tengiz has been raised to 99% thanks to a series of measures, ending routine flaring of gas at the field.

The Group's share of crude oil and gas condensate production in the **Karachaganak project in Kazakhstan** was 1.5 million tonnes in 2010, almost unchanged from the previous year. Five new horizontal wells with average daily flow of 761 tonnes were brought into production during the year as part of the field investment programme.

Rapid development work continued at the **Kumkol field in Kazakhstan** during the reporting year. LUKOIL's share in crude production in this project during 2010 was 1.47 million tonnes. 71 new production wells were drilled in the reporting year and gave average daily flow of 36 tonnes.

Share of the Group in the **KarakudukMunai project in Kazakhstan** was 718,900 tonnes in 2010. In the course of the year 19 new wells were brought into operation, and gave average daily production of 18.3 tonnes. Expansion of the system for maintenance of strata pressure was completed by commissioning of two pumping units with daily capacity of 10,000 cubic meters. The central oil processing unit was modernized by assembly and activation of a compressor with capacity of 1,100 cubic meters per hour. A separator for natural gas liquids was built and brought into use.

Intensive development work continued at the **North Buzachi field in Kazakhstan**, where LUKOIL's share of production grew by 3.8% to 497,500 tonnes, and 151 new production wells were commissioned giving average daily flows of 9.7 tonnes. Five pumping stations were built in the reporting year, and work was completed on three horizontal wells and eight sidetracks.

Oil production grew by 4.3% at the **Alibekmola and Kozhasai fields** (the **Kazakhoil Aktobe project in Kazakhstan**) to a level of 244,000 tonnes. Nine new wells were brought into operation with average daily output of 57.1 tonnes, and an agreement was reached for carrying out of two pilot actions for deep treatment of strata. Construction of a system of strata pressure



maintenance was completed at the Kozhasai field, and planning and equipment sourcing was carried out for a complex gas preparation facility at the Alibekmola field and a gas preparation facility at the Kozhasai field, both as part of the project for use of associated gas.

Gas condensate production as part of the **Shakh-Deniz** project in **Azerbaijan** rose by 7.3%, to 149,300 tonnes in response to growth of demand in Azerbaijan and from Turkish consumers. Four wells were in operation during 2010. Gas was supplied through the South-Caucasus pipeline to Azerbaijan, Georgia and Turkey. Condensate was shipped via the Baku-Tbilisi-Ceyhan pipeline.

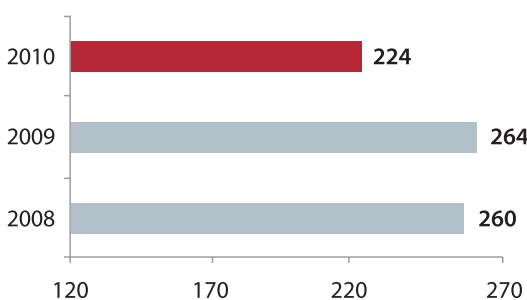
The Company's share of gas condensate production at the **Khauzak-Shady** area in **Uzbekistan** (developed as part of the Kandym-Khauzak-Shady project), which was commissioned in 2007, was 10,400 tonnes in 2010. One new production well was commissioned in the course of the year and gave daily flow of 2.8 tonnes of condensate. A tendering competition was announced for design and construction of a booster compressor station.

LUKOIL's share of production at the **South-West Gissar** project in **Uzbekistan**, which was acquired in 2008,

grew by a substantial 131% in 2010 compared with 2009 to 87,900 tonnes. Four new production wells were brought into operation during the reporting year and gave average daily output of 47.7 tonnes. A contract and agreement was made concerning supply of technical documentation and equipment for the Adamtash, Gumbulak, and Djarkuduk-Yangi-Kizilcha gas condensate fields in the Republic of Uzbekistan.

The Group's share in the **Meleiha** project in **Egypt** was 12.6% less in 2010 than in 2009 and amounted to 69,000 tonnes, despite overall growth of project output. This was due to reduction of LUKOIL's production share from 9.57% to 7.35% resulting from increase of Brent prices and 18% reduction of capital expenditures in 2010 to \$19.3 million. Lower investments were due to change in the construction schedule of the project operator, Agiba Petroleum, which delayed construction of vent lines to the new wells (part of the loss-reduction project) and construction of burial facilities for radioactive waste until 2011. A further 16 wells with average daily output of 34.9 tonnes were brought into operation in 2010.

■ DRILLING OF SIDETRACKS, sidetracks



■ DRILLING OF HORIZONTAL WELLS, wells

