



PJSC LUKOIL

**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL
CONDITION AND RESULTS OF OPERATIONS**

**for the three-month periods ended
31 December and 30 September 2019
and for the years
2019 and 2018**

The following report contains a discussion and analysis of the financial position of PJSC LUKOIL at 31 December 2019 and the results of its operations for the three-month periods ended 31 December and 30 September 2019 and for the years 2019 and 2018, as well as significant factors that may affect its future performance. It should be read in conjunction with our International Financial Reporting Standards (“IFRS”) consolidated financial statements, including notes and supplementary information on oil and gas exploration and production activities.

References to “LUKOIL,” “the Company,” “the Group,” “we” or “us” are references to PJSC LUKOIL and its subsidiaries and equity affiliates. All ruble amounts are in millions of Russian rubles (“RUB”), unless otherwise indicated. Income and expenses of our foreign subsidiaries were translated to rubles at rates, which approximate actual rates at the date of the transaction. Tonnes of crude oil and natural gas liquids produced were translated into barrels using conversion rates characterizing the density of crude oil from each of our oilfields and the actual density of liquids produced at our gas processing plants. Hydrocarbon extraction expenses per barrel were calculated using these actual production volumes. Other operational indicators expressed in barrels were translated into barrels using an average conversion rate of 7.33 barrels per tonne. Translations of cubic meters to cubic feet were made at the rate of 35.31 cubic feet per cubic meter. Translations of barrels of crude oil into barrels of oil equivalent (“BOE”) were made at the rate of 1 barrel per BOE and of cubic feet – at the rate of 6 thousand cubic feet per BOE.

This report includes forward-looking statements – words such as “believes,” “anticipates,” “expects,” “estimates,” “intends,” “plans,” etc. – that reflect management’s current estimates and beliefs, but are not guarantees of future results. Please see “Forward-looking statement” on page 42 for a discussion of some factors that could cause actual results to differ materially.

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Business overview

The primary activities of LUKOIL and its subsidiaries are hydrocarbon exploration, production, refining, marketing and distribution.

LUKOIL is one of the world's largest publicly traded vertically integrated energy companies. Our proved reserves under SEC standards amounted to 15.8 billion BOE at 31 December 2019 and comprised of 12.0 billion barrels of crude oil and 22.5 trillion cubic feet of gas. Most of our reserves are conventional. We undertake exploration for, and production of, crude oil and gas in Russia and internationally. In Russia, our major oil producing regions are West Siberia, Timan-Pechora, Ural and Volga region. Our international upstream segment includes stakes in PSA's and other projects in Kazakhstan, Azerbaijan, Uzbekistan, Romania, Iraq, Egypt, Ghana, Norway, Cameroon, Nigeria, Mexico, the Republic of Congo and the UAE. Our daily hydrocarbon production in 2019 amounted to 2.4 million BOE, with liquid hydrocarbons representing approximately 76% of our overall production volumes.

LUKOIL has geographically diversified downstream assets portfolio primarily in Russia and Europe. Our downstream operations include crude oil refining, petrochemical and transport operations, marketing and trading of crude oil, natural gas and refined products, power generation, transportation and sales of electricity, heat and related services.

We own and operate four refineries located in European Russia and three refineries located outside Russia – in Bulgaria, Romania, and Italy. Moreover, we have a 45% interest in the Zeeland refinery in the Netherlands. We also own two petrochemical plants in Russia and have petrochemical facilities at our refineries in Bulgaria and Italy. Along with our own production of refined products, we refine crude oil at third party refineries depending on market conditions and other factors. Throughput at our refineries in 2019 amounted to 1.4 million barrels per day, and we produced 1.1 million tonnes of petrochemicals.

We market our own and third-party crude oil and refined products through our sales channels in Russia, Europe, South-East Asia, Central and North America and other regions. We own petrol stations in 18 countries. Most of our retail networks are located close to our refineries. Our retail sales in 2019 amounted to 14.1 million tonnes of refined products.

We are involved in production, distribution and marketing of electrical energy and heat both in Russia and internationally. In 2019, our total output of electrical energy was 18.3 billion kWh.

Our operations and finance activities are coordinated from headquarters in Moscow. We divide our operations into three main business segments: "Exploration and production," "Refining, marketing and distribution," and "Corporate and other".

Key financial and operational results

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
(millions of rubles)						
Sales.....	1,912,439	1,952,322	(2.0)	7,841,246	8,035,889	(2.4)
EBITDA ¹ , including.....	278,160	327,805	(15.1)	1,236,192	1,114,800	10.9
Exploration and production segment.....	211,786	211,958	(0.1)	893,950	870,287	2.7
Refining, marketing and distribution segment.....	82,157	116,380	(29.4)	371,642	282,144	31.7
EBITDA ¹ net of West Qurna-2 project.....	276,055	321,126	(14.0)	1,214,502	1,089,370	11.5
Profit for the year attributable to LUKOIL shareholders ...	119,310	190,387	(37.3)	640,178	619,174	3.4
Capital expenditures.....	135,937	109,062	24.6	449,975	451,526	(0.3)
Free cash flow ²	184,744	208,859	(11.5)	701,869	555,125	26.4
Free cash flow before changes in working capital	139,784	196,063	(28.7)	708,650	588,717	20.4
(thousand BOE per day)						
Production of hydrocarbons, including our share in equity affiliates	2,419	2,339	3.4	2,380	2,347	1.4
crude oil and natural gas liquids.....	1,816	1,811	0.3	1,815	1,806	0.5
gas	603	528	14.2	565	541	4.4
Refinery throughput at the Group refineries	1,355	1,454	(6.8)	1,381	1,352	2.1

¹ Profit from operating activities before depreciation, depletion and amortization.

² Cash flow from operating activities less capital expenditures.

Compared to the third quarter of 2019, our results were negatively affected by a decrease in refining margins and in profitability of our retail business, as well as by accounting specifics of our international trading operations. However, this was partially offset by positive export duty and mineral extraction tax lag effects, higher international hydrocarbon production volumes, bigger share of high-margin volumes in our domestic crude oil production structure, and better product slate at our refineries.

Compared to 2018, our results improved due to growth in volumes of gas production outside Russia, an increase in share of high-margin volumes in our domestic crude oil production structure, an implementation of a tax on additional income from the hydrocarbon production at certain license areas, higher throughput volumes and better product slate at our refineries, better profitability of our retail and trading businesses, as well as the effect of the ruble devaluation. At the same time, our results dynamics was negatively affected by a decrease in international hydrocarbon prices, benchmark refining margins, and accounting specifics of our trading operations.

From 1 January 2019, the Company adopted IFRS 16 “Leases” that had a positive impact on our EBITDA in 2019 in the amount of 37.0 billion RUB, on our profit for the year in the amount of 5.1 billion RUB, and on our free cash flow in the amount of 46.7 billion RUB.

Our EBITDA amounted to 278 billion RUB in the fourth quarter of 2019, a decrease of 15.1% to the third quarter of 2019, and amounted to 1,236 billion RUB in 2019, an increase of 10.9% to 2018.

Our depreciation, depletion and amortization expenses increased compared to 2018 mainly as a result of the adoption of IFRS 16 “Leases”, as well as due to an increase in gas production outside Russia.

In the fourth quarter of 2019, profit attributable to LUKOIL shareholders amounted to 119 billion RUB, a decrease of 37.3% to the third quarter of 2019. In 2019, profit attributable to LUKOIL shareholders amounted to 640 billion RUB, an increase of 3.4% to 2018.

Our capital expenditures increased by 27 billion RUB, or by 24.6%, compared to the third quarter of 2019, and did not change significantly compared to 2018.

Our free cash flow amounted to 185 billion RUB in the first quarter of 2019, a decrease of 11.5% compared to the third quarter of 2019, and amounted to 702 billion RUB in 2019, an increase of 26.4% to 2018. A decrease to the third quarter of 2019 was mainly a result of higher capital expenditures and an increase to 2018 was mainly a result of an increase in profitability of our core operations.

The Group’s average daily hydrocarbon production increased by 3.4% compared to the third quarter of 2019 and by 1.4% compared to 2018, driven primarily by an increase in hydrocarbon production volumes outside Russia.

In the fourth quarter of 2019, throughput at our refineries decreased by 6.8% mainly due to scheduled maintenance works at the refineries both in and outside Russia. Compared to 2018, an increase in throughput at our refineries by 2.1% was mainly due to higher utilization rate of the Nizhny Novgorod refinery, as well as maintenance at the refinery in Bulgaria in the first quarter of 2018.

Changes in accounting policies

The Group adopted IFRS 16 “Leases” (“IFRS 16”) from 1 January 2019, which introduced a single, on-balance sheet lease accounting model for lessees. Under IFRS 16, a contract is, or contains, a lease if it conveys a right to control the use of an identified asset for a period of time in exchange for consideration. A lessee recognizes a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low value items.

The Group applied IFRS 16 using the modified retrospective approach by one-off recognition of non-current assets and financial liabilities of 162 billion RUB at 1 January 2019 measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate as at 1 January 2019.

Primarily the Group leases such assets as transport (vessels, tank cars), land, drilling rigs and other equipment, storage facilities. The lease typically runs for a period of 3–5 years. Some leases include an option to renew the lease for additional period after the end of the non-cancellable period. The Group has applied judgement to determine the lease term for some lease contracts in which it is a lessee that includes renewal option. Moreover, in determining the lease term the Group also took into account economic factors, which influence asset usage duration in its activity.

The nature of expenses related to new assets and liabilities recognized for operating leases will now change because the Group will recognize a depreciation charge for right-of-use assets and interest expense on lease liabilities. Previously the Group recognized lease expenses on a straight-line basis over the term of the lease, and recognized assets and liabilities only to the extent that there was a timing difference between actual lease payments and the expense recognized.

Adoption of IFRS 16 in 2019 had the following effects on the Group's financial statements.

Our operating, transportation and selling, general and administrative expenses decreased by 5.7 billion RUB, 22.4 billion RUB and 8.8 billion RUB, respectively. Our depreciation expenses, finance costs and income tax expenses increased by 33.0 billion RUB, 6.7 billion RUB and 0.5 billion RUB, respectively. The Group also recognized a foreign exchange gain of 7.9 billion RUB related to certain lease liabilities in foreign currencies. As a result, our EBITDA increased by 37.0 billion RUB, our profit for the year attributable to LUKOIL shareholders increased by 5.1 billion RUB and our free cash flow increased by 46.7 billion RUB.

At the same time, our debt at 31 December 2019 increased by 136.9 billion RUB.

Changes in the Group structure

In October 2019, a Group company acquired a 5% interest in the Ghasha Concession in the United Arab Emirates from the Abu Dhabi National Oil Company for approximately 13.8 billion RUB (\$214 million).

In the second quarter of 2019, a Group company entered into a contract with New Age M12 Holdings Limited to acquire a 25% interest in the Marine XII license in the Republic of Congo (Congo, Brazzaville). In September 2019, the transaction in the amount of 51.4 billion RUB (\$768 million) was closed after all the customary conditions, including approval by the government of the Republic of Congo, were fulfilled.

Changes in ruble exchange rate and inflation

A substantial part of our revenue either is denominated in US dollars and euro or is correlated to some extent with US dollar crude oil prices, while most of our costs are settled in Russian rubles. Therefore, a devaluation of the ruble against the US dollar and euro generally causes our revenues to increase in ruble terms, and vice versa. Ruble inflation also affects the results of our operations.

The following table provides data on inflation in Russia and change in the ruble-dollar and the ruble-euro exchange rates.

	Q4 2019	Q3 2019	12 months of	
			2019	2018
Ruble inflation (CPI), %	0.8	(0.2)	3.0	4.2
Ruble to US dollar exchange rate				
Average for the period	63.7	64.6	64.7	62.7
At the beginning of the period.....	64.4	63.1	69.5	57.6
At the end of the period.....	61.9	64.4	61.9	69.5
Ruble to euro exchange rate				
Average for the period	70.5	71.8	72.5	74.0
At the beginning of the period.....	70.3	71.8	79.5	68.9
At the end of the period.....	69.3	70.3	69.3	79.5

Source: CBR, Federal State Statistics Service.

Taxation

Key upstream tax rates. The following tables represent average enacted rates applicable to our upstream operations in Russia for the respective periods.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
				(US dollars per tonne)		
Mineral extraction tax ¹	198.31	192.12	3.2	201.40	198.83	1.3
Export duty on crude oil	88.67	95.08	(6.8)	93.77	128.52	(27.1)

¹ Translated from rubles using average exchange rate for the period.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
				(rubles per tonne)		
Mineral extraction tax.....	12,636	12,405	1.9	13,038	12,468	4.6
Export duty on crude oil ¹	5,650	6,139	(8.0)	6,070	8,059	(24.7)

¹ Translated to rubles using average exchange rate for the period.

These rates are linked to international crude oil prices and are changed in line with them.

Tax manoeuvre. The Russian Government has been implementing the so-called tax manoeuvre in the oil industry, which involves reduction of export duty rate and increase in the crude oil extraction tax and excise tax rates, as well as an introduction of a negative excise tax on refinery feedstock.

In 2018, new laws were adopted which came into effect on 1 January 2019. These laws provide for concluding the tax manoeuvre by 2024 through the gradual reduction of crude oil export duty rate to zero and the equivalent increase in the mineral extraction tax rate for crude oil. To eliminate the negative effect of export duty reduction on refining margins, a negative excise on refinery feedstock was introduced. To reduce the sensitivity of domestic prices for motor fuel to changes in international prices, a so-called damper coefficient was included into the negative excise formula and the mineral extraction tax rate was incrementally increased.

Excise tax rates on motor fuels in Russia also increased from 1 January 2019 after a temporary reduction in June–December 2018.

Crude oil extraction tax rate is calculated on a monthly basis. Crude oil extraction tax is payable in rubles per metric tonne extracted. The tax rate is calculated according to the formula below:

$$\text{Rate} = 919 \times (\text{Price} - 15) \times \frac{\text{Exchange Rate}}{261} - \text{Incentive} + \text{Fixed Factor} \\ + \text{Tax Manoeuvre Factor} + \text{Damper Factors},$$

where *Price* is a Urals blend price in US dollars per barrel and *Exchange Rate* is an average ruble exchange rate to US dollar during the period. The *Incentive Factor* represents incentives discussed further in this section. The *Fixed Factor* is presented in the table below. The *Tax Manoeuvre Factor* is derived as Export duty reduction factor multiplied by the base export duty rate. The *Damper Factors* are applicable when the corresponding components of a negative excise formula are positive.

The table below sets out key fixed components of the extraction tax formula for crude oil.

	2018	1 January to 30 September 2019	1 October to 31 December 2019	2020	2021	2022	2023	2024 and further
Export duty rate reduction factor	-	0.167	0.167	0.333	0.500	0.667	0.833	1
				(rubles)				
Fixed Factor.....	357	428	428	428	428	428	428	428
Damper Factor for gasoline	-	125	200	105	105	105	105	105
Damper Factor for diesel fuel	-	110	185	92	92	92	92	92

From 2020, a new variable Damper Factor will be added to the formula in addition to the fixed factors.

There are different types of tax incentives on the mineral extraction tax on crude oil applied to our fields and deposits:

- A special reducing coefficient is applied to the standard tax rate depending on location, depletion, type of reserves, size and complexity of a particular field. This type of incentive with different coefficients is applied to our highly depleted fields (more than 80% depletion), our Yu. Korchagin field located in the Caspian offshore, the Permian layers of our Usinskoye field in Timan-Pechora producing high-viscous crude oil, our Pyakyakhinskoye field located in the Yamal-Nenets Autonomous region of West Siberia (starting from 2019, the field is subject to the tax on additional income from hydrocarbon production), a number of fields in the Nenets Autonomous region, as well as to our new small-sized fields (recoverable reserves less than 5 million tonnes) and fields and deposits with low permeability like V.N. Vinogradov and Imilorskoye fields and Tyumen deposits;
- A fixed tax rate of 15% of the Urals price is applied to our V. Filanovsky offshore field and other greenfields, located in the Caspian offshore;
- A fixed tax rate of 30% of the Urals price is applied to our offshore greenfields, located in the Baltic Sea;
- A reduced tax rate is applied to our Yaregskoye field producing extra-viscous crude oil, as well as to certain unconventional deposits.

Some of the mineral extraction tax incentives are limited in time or by cumulative oil production volumes.

The table below illustrates the impact of tax incentives on taxation of crude oil production from different fields and deposits in our portfolio at \$50 per barrel Urals price.

	Mineral extraction tax	Export duty (in US dollars per barrel)	Total	As % of oil price
Under 2019 tax formulas				
Standard	20.2	9.6	29.8	59.6
Yaregskoye field	0.7	0.9	1.6	3.3
Yu. Korchagin field.....	8.0	0.0	8.0	16.0
V. Filanovsky field.....	7.5	0.0	7.5	15.0
Usinskoye (Permian layers).....	9.9	9.6	19.5	39.0
V. Vinogradov and Imilorskoe fields	12.0	9.6	21.6	43.1
Fields with depletion above 80%	13.0–20.2	9.6	22.6–29.8	45.2–59.6
New fields with reserves below 5 million tonnes.....	13.8–20.2	9.6	23.4–29.8	46.7–59.6
Tyumen deposits	18.1	9.6	27.7	55.5

Tax on additional income. Starting from 2019, a tax on additional income from the hydrocarbon production (hereinafter TAI) has been implemented for certain license areas. The TAI rate is set at 50% and is applied to the estimated sales revenue less actual and estimated costs, where actual costs include both operating expenses and capital expenditures. Moreover, TAI tax base may be reduced by the historical cumulative losses attributable to the license area. For crude oil production subject to TAI, a special mineral extraction tax rate formula is applied. The special mineral extraction tax rate (in US dollars per barrel) equals to 50% of the difference between Urals oil price and \$15 less the enacted export duty rate.

TAI is implemented for four groups of license areas. In Group 1, LUKOIL has nineteen license areas with greenfields in new regions, including Pyakyakhinskoye field, and a number of fields in Timan-Pechora with total crude oil and gas condensate production of 2,011 thousand tonnes in 2019. In Group 3, LUKOIL has eight license areas with brownfields in West Siberia with total crude oil and gas condensate production of 2,896 thousand tonnes in 2019. In Group 4, LUKOIL has two license areas with greenfields in traditional regions (West Siberia) with total crude oil and gas condensate production of 41 thousand tonnes in 2019.

TAI has significant positive impact on development plans for, and production profile of, the Company's license areas subject to TAI.

Crude oil export duty rate is denominated in US dollars per tonne of crude oil exported and is calculated by multiplying the base export duty rate calculated on a monthly basis by the adjusting factor from tables below.

International Urals price	Base export duty rate
Less than, or equal to, \$109.5 per tonne (\$15 per barrel)	\$0 per tonne
Above \$109.5 but less than, or equal to, \$146.0 per tonne (\$20 per barrel)	35% of the difference between the actual price and \$109.5 per tonne (or \$0.35 per barrel per each \$1 increase in crude oil price over \$15 per barrel)
Above \$146.0 but less than, or equal to, \$182.5 per tonne (\$25 per barrel)	\$12.78 per tonne plus 45% of the difference between the actual price and \$146.0 per tonne (or \$1.75 plus \$0.45 per barrel per each \$1 increase in crude oil price over \$20 per barrel)
Above \$182.5 per tonne (\$25 per barrel)	\$29.2 per tonne plus 30% of the difference between the actual price and \$182.5 per tonne (or \$4 plus \$0.3 per barrel per each \$1 increase in crude oil price over \$25 per barrel)

	2018	2019	2020	2021	2022	2023	2024 and further
Adjusting factor	-	0.833	0.667	0.500	0.333	0.167	0

The rate for the next month is being based on average Urals price for the period from the 15th day of the previous month to the 14th day of the current month. This calculation methodology results in the so-called "export duty lag effect," when export duty rate lags the oil price changes, which may result in sizeable impact on our financial results in the periods of high oil price volatility. As a result of the tax manoeuvre, the lag effect will gradually migrate from the export duty to the mineral extraction tax by 2024.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(US dollars per barrel)					
Urals price (Argus)	62.67	61.26	2.3	63.89	69.75	(8.4)
Export duty on crude oil	12.15	13.02	(6.7)	12.85	17.61	(27.0)
Mineral extraction tax on crude oil	27.17	26.32	3.2	27.59	27.24	1.3
Net Urals price ¹	23.35	21.92	6.5	23.45	24.90	(5.8)
Export duty lag effect	0.59	(0.64)	-	0.20	(0.19)	-
Mineral extraction tax lag effect	0.10	(0.11)	-	0.03	-	-
Net Urals price ¹ assuming no lag	22.66	22.67	-	23.22	25.09	(7.5)
	(rubles per barrel) ²					
Urals price (Argus)	3,993	3,955	1.0	4,136	4,374	(5.4)
Export duty on crude oil	774	841	(8.0)	832	1,104	(24.6)
Mineral extraction tax on crude oil	1,731	1,699	1.9	1,786	1,708	4.6
Net Urals price ¹	1,488	1,415	5.2	1,518	1,562	(2.8)
Export duty lag effect	38	(41)	-	13	(12)	-
Mineral extraction tax lag effect	6	(7)	-	2	-	-
Net Urals price ¹ assuming no lag	1,444	1,463	(1.3)	1,503	1,574	(4.5)

¹ Urals price net of export duty and mineral extraction tax on crude oil.

² Translated to rubles using average exchange rate for the period.

Crude oil produced at some of our fields is subject to special export duty rates calculated according to specific formulas and are lower than the standard rates. A reduced rate is applied to crude oil produced at our Yaregskoye field producing extra-viscous crude oil and our Yu. Korchagin field in the Caspian offshore. A zero rate applies to crude oil of our V. Filanovsky field also located in the Caspian offshore, as well as the offshore greenfields in the Baltic Sea.

Crude oil exported to member countries of the Customs Union in the Eurasian Economic Union of Russia, Belarus, Kazakhstan, Armenia and the Kyrgyz Republic (Customs Union) is not subject to export duties.

Crude oil and refined products exported from Russia are subject to two steps of customs declaration and duty payments: temporary and complete. A temporary declaration is submitted based on preliminary exports volumes and the duty is paid in rubles translated from US dollars at the date of the temporary declaration. A complete declaration is submitted after receiving the actual data on the exported volumes, but no later than six months after the date of the temporary declaration. The final amount of the export duty is adjusted depending on the actual volumes, the ruble-US dollar exchange rate at the date of the complete declaration (except for pipeline deliveries for which the exchange rate at the temporary declaration date is used) and the export duty rate. If temporary and complete declarations are submitted in different reporting periods, the final amount of the export duty is adjusted in the period of submission of the complete declaration. The high volatility of the ruble-dollar exchange rates may lead to significant adjustments. For the purposes of the IFRS consolidated financial statements, data from temporary declarations at the reporting period end is translated to rubles from US dollars using the period-end exchange rate.

Natural gas extraction tax rate is calculated using a special formula depending on average regulated wholesale natural gas price in Russia, Urals price, the share of gas production in total hydrocarbon production at particular license area, regional location and complexity of particular gas field. Reinjected natural gas and associated petroleum gas are subject to zero extraction tax rate.

Gas produced from our two major fields in Russia, Nakhodkinskoye and Pyakyakhinskoye, is taxed at the rates subject to application of reducing coefficients due to the fields' geographical location and the depth of reservoir.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
	(US dollars per thousand cubic meters) ¹					
Nakhodkinskoye field.....	5.62	5.54	1.4	5.48	4.86	12.9
Pyakyakhinskoye field.....	8.43	8.16	3.3	8.26	8.55	(3.3)

¹ Translated from rubles using average exchange rate for the period.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
	(rubles per thousand cubic meters)					
Nakhodkinskoye field.....	358	358	-	355	305	16.6
Pyakyakhinskoye field.....	537	527	1.9	535	536	(0.2)

Export duty rates on refined products are calculated by multiplying the enacted crude oil export duty rate by a coefficient according to the table below.

	2018 and further
Multiplier for:	
Gasolines, diesel fuel and other light and middle distillates	0.30
Straight-run gasoline.....	0.55
Fuel oil.....	1.00

Refined products exported to member countries of the Customs Union are not subject to export duties.

Excise taxes on refined products. The responsibility to pay excises on refined products in Russia is imposed on refined product producers (except for straight-run gasoline). Only domestic sales volumes are subject to excises.

Excise tax expense on straight-run gasoline used as a petrochemical feedstock is reimbursed with a coefficient of 1.7, and excise tax expense on middle distillates processed and bunker fuel marketed is reimbursed in double amount.

In other countries where the Group operates, excise taxes are paid by either producers or retailers depending on the local legislation.

Excise rates on motor fuels in Russia are tied to the ecological class of fuel. Excise tax rates for the periods considered are listed below.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(rubles per tonne)					
Gasoline						
Below Euro-5	13,100	13,100	-	13,100	13,100	-
Euro-5	12,314	12,314	-	12,314	9,454	30.3
Diesel fuel						
All ecological classes	8,541	8,541	-	8,541	6,492	31.6
Motor oils	5,400	5,400	-	5,400	5,400	-
Middle distillates	9,241	9,241	-	9,241	7,491	23.4
Straight-run gasoline.....	13,912	13,912	-	13,912	13,100	6.2

Established excise tax rates are listed below.

	1 January to 31 May 2018	1 June to 31 December 2018	2019	2020	2021	2022
	(rubles per tonne)					
Gasoline						
Below Euro-5	13,100	13,100	13,100	13,100	13,624	14,169
Euro-5	11,213	8,213	12,314	12,752	13,262	13,793
Diesel fuel						
All ecological classes ...	7,665	5,665	8,541	8,835	9,188	9,556
Motor oils	5,400	5,400	5,400	5,616	5,841	6,075
Middle distillates	8,662	6,665	9,241	variable rate	variable rate	variable rate
Straight-run gasoline.....	13,100	13,100	13,912	14,720	15,533	16,345

Negative excise tax on refinery feedstock

The reduction of export duties on crude oil in the course of the tax manoeuvre in Russia leads to an increase in feedstock costs for the domestic refineries. This negative effect is partially compensated by a decrease in export duties on refined products, with the remaining part of the negative effect being fully offset by the negative excise tax implemented from 1 January 2019. The negative excise tax is payable by the Government to the refineries. The negative excise tax rate is calculated separately for each refinery based on the average Urals crude oil price and refinery slate during the month. Our Ukhta refinery benefits from a special uplift regional coefficient of 1.3 applied to the negative excise tax.

The negative excise tax formula also includes the damper coefficient for gasoline and diesel fuel sold on the domestic market. The damper coefficient is calculated by multiplying *Compensation Coefficient* and a difference between gasoline and diesel fuel export netbacks at North-Western Russia delivery basis and corresponding *Fixed benchmarks*. When the damper coefficient is positive, it is payable by the Government to the refinery, and vice versa.

The *Fixed benchmarks* and *Compensation Coefficients* are presented in the tables below:

	1 January to 30 June 2019	1 July to 31 December 2019	2020	2021	2022	2023	2024
	(rubles per tonne)						
Fixed benchmark for gasoline.....	56,000	51,000	53,600	56,300	59,000	62,000	65,000
Fixed benchmark for diesel fuel	50,000	46,000	48,300	50,700	53,250	56,000	58,700

	1 January to 30 June 2019	1 July to 31 December 2019	2020 and further
Compensation coefficient for gasoline	0.60	0.75	0.68
Compensation coefficient for diesel fuel	0.60	0.70	0.65

The following table presents the average enacted damper coefficients for the respective periods:

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(US dollars per tonne) ¹					
Gasoline.....	47.06	80.64	(41.6)	56.52	-	-
Diesel fuel.....	64.63	65.70	(1.6)	72.93	-	-

¹ Translated from rubles using average exchange rate for the period.

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(rubles per tonne)					
Gasoline.....	2,999	5,207	(42.4)	3,659	-	-
Diesel fuel.....	4,118	4,242	(2.9)	4,721	-	-

Income tax. Operations in the Russian Federation are subject to a 20% income tax rate. For the period from 2017 till 2024 (inclusive) a Federal income tax rate is set as 3.0% and a regional income tax rate is 17.0% at the discretion of the individual regional administration. Regional income tax rate may be reduced for certain categories of taxpayers by the laws of constituent entities of the Russian Federation, however certain restrictions apply on the application of the reduced regional rates.

The Company and its Russian subsidiaries file income tax returns in Russia. A number of Group companies in Russia are paying income tax as a consolidated taxpayers' group ("CTG"). This allows taxpayers to offset taxable losses generated by certain participants of a CTG against taxable profits of other participants of the CTG.

The Group's foreign operations are subject to taxes at the tax rates applicable to the jurisdictions in which they operate.

Transportation tariffs on crude oil, natural gas and refined products in Russia

Many of our production assets are located relatively far from our customers. As a result, transportation tariffs are an important factor affecting our profitability.

Crude oil produced at our fields in Russia is transported to refineries and exported primarily through the trunk oil pipeline system of the state-owned company, Transneft. In some cases, crude oil is also shipped via railway infrastructure of the state-owned company, Russian Railways.

Refined products produced at our Russian refineries are transported primarily by railway (Russian Railways) and the pipeline system of Transneftproduct, a subsidiary of Transneft.

Gas that is not sold at the wellhead is transported through the Unified Gas Supply System owned and operated by Gazprom.

Transneft, Russian Railways and Gazprom are state-controlled natural transportation infrastructure monopolies and their tariffs are regulated by the Federal Antimonopoly Service of Russia and set in rubles.

The following table sets forth the changes in the average tariffs charged by the state-controlled transportation service providers in Russia.

	Q4 2019 to Q3 2019	12 months of 2019 to 12 months of 2018
Transneft (crude oil)	0.0%	3.9%
Russian Railways (crude oil and refined products).....	0.0%	3.6%

The tariffs for transportation of crude oil and refined products were increased on 1 January 2019. Tariffs for crude oil export through the trunk oil pipeline system grew by 3.9%. Tariffs for crude oil and refined products transportation via railway infrastructure increased by 3.6%, while tariffs for transportation of refined products by pipeline increased for the Groups' refineries in a range from 3.6% to 3.8%.

Reserves base

The tables below summarize the net proved reserves of our consolidated subsidiaries and our share in equity affiliates under the standards of the US Securities and Exchange Commission (until the economic limit of commercial production is reached) that have been derived from our reserve reports audited by Miller and Lents Ltd, our independent reservoir engineers, at 31 December 2019 and 2018.

(hydrocarbons, millions of BOE)	Changes in 2019				31 December 2018
	31 December 2019	Production ⁽¹⁾	Extensions, discoveries and changes in structure	Revision of previous estimates	
Western Siberia	8,185	(353)	336	(102)	8,304
Timan-Pechora	2,414	(130)	113	7	2,424
Ural region	2,247	(131)	78	39	2,261
Volga region	1,173	(98)	92	23	1,156
Other in Russia	176	(12)	3	-	185
Outside Russia	1,574	(145)	90	28	1,601
Proved oil and gas reserves	15,769	(869)	712	(5)	15,931
Probable oil and gas reserves	6,217				6,424
Possible oil and gas reserves	3,000				3,242

¹ Gas production shown before own consumption.

(crude oil, millions of barrels)	Changes in 2019				31 December 2018
	31 December 2019	Production	Extensions, discoveries and changes in structure	Revision of previous estimates	
Western Siberia	6,070	(279)	283	(118)	6,184
Timan-Pechora	2,289	(118)	106	10	2,291
Ural region	2,112	(122)	74	38	2,122
Volga region	810	(88)	85	16	797
Other in Russia	174	(12)	3	-	183
Outside Russia	560	(43)	55	43	505
Proved oil reserves	12,015	(662)	606	(11)	12,082
Probable oil reserves	4,671				4,855
Possible oil reserves	2,506				2,727

(gas, billions of cubic feet)	Changes in 2019				31 December 2018
	31 December 2019	Production ⁽¹⁾	Extensions, discoveries and changes in structure	Revision of previous estimates	
Western Siberia	12,688	(441)	319	87	12,723
Timan-Pechora	748	(73)	44	(20)	797
Ural region	812	(51)	23	8	832
Volga region	2,182	(63)	42	50	2,153
Other in Russia	14	(1)	-	1	14
Outside Russia	6,083	(609)	208	(90)	6,574
Proved gas reserves	22,527	(1,238)	636	36	23,093
Probable gas reserves	9,275				9,414
Possible gas reserves	2,966				3,091

¹ Gas production shown before own consumption.

The Company's proved hydrocarbon reserves at 31 December 2019 amounted to 15.8 billion BOE and comprised of 12.0 billion barrels of crude oil and 22.5 trillion cubic feet of gas.

As a result of geological exploration and production drilling conducted in 2019, LUKOIL added 642 million barrels of oil equivalent to proved reserves, which is 11% higher year-on-year. The largest contribution was from the assets in West Siberia, Timan-Pechora and Russian sector of the Caspian Sea.

A positive revision of the proved reserves in the aggregate of 108 million barrels of oil equivalent was driven by optimization of development systems and wellwork programmes at existing fields, as well as conversion of contingent resources to reserves. Acquisition of assets in Russia and abroad in 2019 added 70 million barrels of oil equivalent to proved reserves.

The reserves dynamics was negatively affected by an 11% decrease in oil price and US dollar to ruble exchange rate used for reserves evaluation.

Segments highlights

Our operations are divided into three main business segments:

- **Exploration and Production** – which includes our exploration, development and production operations related to crude oil and gas. These activities are primarily located within Russia, with additional activities in Azerbaijan, Kazakhstan, Uzbekistan, the Middle East, Northern and Western Africa, Norway, Romania and Mexico.
- **Refining, Marketing and Distribution** – which includes refining, petrochemical and transport operations, marketing and trading of crude oil, natural gas and refined products, generation, transportation and sales of electricity, heat and related services.
- **Corporate and other** – which includes operations related to our headquarters (which coordinates operations of the Group companies), finance activities, and certain other activities, that are not primary to the Group.

Each of our segments is dependent on the others, with a portion of the revenues of one segment being a part of the costs of the others. In particular, our Refining, Marketing and Distribution segment purchases crude oil from our Exploration and Production segment. As a result of certain factors considered in the “Domestic crude oil and refined products prices” section on p. 7, benchmark crude oil market prices in Russia cannot be determined with certainty. Therefore, the prices set for inter-segment purchases of crude oil reflect a combination of market factors, primarily international crude oil market prices, transportation costs, regional market conditions, the cost of crude oil refining and other factors. We present the financial data for each segment in Note 33 “Segment information” to our consolidated financial statements.

Exploration and production

The following table summarizes key figures on our Exploration and production segment:

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
				(millions of rubles)		
EBITDA	211,786	211,958	(0.1)	893,950	870,287	2.7
in Russia	173,108	169,844	1.9	729,077	717,244	1.6
outside Russia and Iraq.....	36,573	35,435	3.2	143,183	127,613	12.2
in Iraq	2,105	6,679	(68.5)	21,690	25,430	(14.7)
Hydrocarbon extraction expenses	54,010	53,428	1.1	210,867	213,815	(1.4)
in Russia	43,285	42,970	0.7	170,590	175,131	(2.6)
outside Russia and Iraq.....	6,592	6,607	(0.2)	23,267	21,096	10.3
in Iraq	4,133	3,851	7.3	17,010	17,588	(3.3)
				(rubles per BOE)		
Hydrocarbon extraction expenses (excluding Iraq)	233	239	(2.6)	232	238	(2.5)
in Russia	239	239	0.2	237	244	(2.7)
outside Russia and Iraq.....	200	245	(18.1)	200	199	0.3
				(US dollars per BOE)		
Hydrocarbon extraction expenses (excluding Iraq)	3.66	3.71	(1.3)	3.59	3.81	(5.9)
in Russia	3.75	3.70	1.5	3.67	3.90	(6.0)
outside Russia and Iraq.....	3.15	3.79	(17.0)	3.09	3.16	(2.1)

Our upstream EBITDA did not change compared to the third quarter of 2019. In Russia, our EBITDA increased mainly as a result of positive export duty and mineral extraction tax lag effects and bigger share of high-margin volumes in our crude oil production structure, which was partially offset by an increase in extraction tax rate and the effect of the ruble appreciation. Outside Russia, our upstream EBITDA increased mainly owing to an increase in hydrocarbon production volumes. At the same time, results of our international upstream were negatively affected by dry hole write-off in Romania and the ruble appreciation.

Compared to 2018, our upstream EBITDA increased by 2.7% despite a decrease in crude oil prices. In Russia, this decrease in prices was offset by bigger share of high-margin volumes in our production structure, an implementation of a tax on additional income from the hydrocarbon production at certain license areas, lower hydrocarbon extraction expenses, as well as the ruble devaluation and positive export duty and mineral extraction tax lag effects. Outside Russia, our upstream EBITDA was positively impacted by an increase in gas production volumes and gas prices in Uzbekistan, the ruble devaluation that was partially offset by a dry hole write-off in Romania.

EBITDA of the West Qurna-2 project decreased compared to the third quarter of 2019 and the twelve months of 2018 mainly as a result of an accrual of a provision for expected credit losses.

In 2019, our upstream EBITDA was also positively affected by the effect of IFRS 16 adoption, which resulted in lower operating expenses.

The following table summarizes our hydrocarbon production by major regions.

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(thousand BOE per day)					
Crude oil and natural gas liquids						
Consolidated subsidiaries						
West Siberia	760	768	(1.0)	765	774	(1.2)
Timan-Pechora	313	320	(2.2)	317	318	(0.3)
Ural region	334	334	-	334	328	1.8
Volga region	235	228	3.1	235	229	2.6
Other in Russia	31	31	-	32	32	-
Total in Russia	1,673	1,681	(0.5)	1,683	1,681	0.1
Iraq ¹	31	31	-	30	28	7.1
Other outside Russia	61	51	19.6	52	47	10.6
Total outside Russia	92	82	12.2	82	75	9.3
Total consolidated subsidiaries	1,765	1,763	0.1	1,765	1,756	0.5
Our share in equity affiliates						
in Russia	13	13	-	13	13	-
outside Russia	38	35	8.6	37	37	-
Total share in equity affiliates	51	48	6.3	50	50	-
Total crude oil and natural gas liquids	1,816	1,811	0.3	1,815	1,806	0.5
Natural and petroleum gas²						
Consolidated subsidiaries						
West Siberia	205	196	4.6	201	210	(4.3)
Timan-Pechora	33	33	-	33	33	-
Ural region	25	23	8.7	23	15	53.3
Volga region	31	23	34.8	28	27	3.7
Other in Russia	-	-	-	1	1	-
Total in Russia	294	275	6.9	286	286	-
Uzbekistan	248	206	20.4	228	216	5.6
Other outside Russia	49	36	36.1	40	27	48.1
Total outside Russia	297	242	22.7	268	243	10.3
Total consolidated subsidiaries	591	517	14.3	554	529	4.7
Share in equity affiliates						
in Russia	1	1	42.2	1	2	(28.6)
outside Russia	11	10	13.0	10	10	3.3
Total share in production of equity affiliates	12	11	9.1	11	12	(8.3)
Total natural and petroleum gas	603	528	14.2	565	541	4.4
Total daily hydrocarbon production	2,419	2,339	3.4	2,380	2,347	1.4
Including natural gas liquids produced at the gas processing plants	43	41	5.3	44	42	3.6

¹ Compensation crude oil related to the Group.

² Natural and petroleum gas production excluding flaring, reinjected gas and gas used in production of natural gas liquids.

Crude oil production by major regions is presented in the table below.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(thousands of tonnes)					
West Siberia.....	9,261	9,366	(1.1)	36,999	37,471	(1.3)
Timan-Pechora	4,005	4,088	(2.0)	16,099	16,124	(0.2)
Ural region.....	3,929	3,933	(0.1)	15,527	15,251	1.8
Volga region	2,830	2,737	3.4	11,207	10,969	2.2
Other in Russia	400	428	(6.5)	1,626	1,597	1.8
Crude oil produced in Russia.....	20,425	20,552	(0.6)	81,458	81,412	0.1
Iraq ¹	424	417	1.7	1,616	1,514	6.7
Other outside Russia.....	616	534	15.4	2,110	1,901	11.0
Crude oil produced outside Russia	1,040	951	9.4	3,726	3,415	9.1
Total crude oil produced by consolidated subsidiaries	21,465	21,503	(0.2)	85,184	84,827	0.4
Our share in crude oil produced by equity affiliates:						
in Russia	152	152	-	610	633	(3.6)
outside Russia	441	402	9.7	1,694	1,664	1.8
Total crude oil produced	22,058	22,057	-	87,488	87,124	0.4

¹ Compensation crude oil related to the Group.

Our main oil producing region is West Siberia where we produced 43.1% of our crude oil in the fourth quarter of 2019 and 43.4% in 2019 (43.6% in the third quarter of 2019 and 44.2% in 2018).

The dynamics of our crude oil production volumes was mainly driven by external limitations due to an agreement of OPEC and some of the non-OPEC countries, including Russia, to cap production levels in order to stabilize the global crude oil market. During the first half of 2018, our production was limited in accordance with the first OPEC+ agreement valid until the end of June 2018. We increased our production in July 2018, when the parameters of the agreement were amended. In December 2018, the OPEC+ countries agreed to decrease crude oil production relative to October 2018 levels until June 2019, which subsequently was prolonged until March 2020. The Group limited production in our traditional regions (West Siberia, Timan-Pechora, and Ural) at the least-productive fields and fields with high water-cuts.

The active development of the priority projects was on track. We produced 6,387 thousand tonnes of crude oil at the V. Filanovsky field in 2019, an increase of 5%, compared to 2018. In November 2019, the third stage of the field was launched.

In 2019, crude oil production at the Yu. Korchagin field increased by 21% year-on-year as a result of drilling programme at the field's second development stage.

The development of the Yaregskoye field and Permian reservoir of the Usinskoye field, including the launch of new steam-generating facilities, led to an increase in the high viscosity crude oil production to 4.9 million tonnes, or by 15%, compared to 2018.

The development of growth projects in West Siberia also continued. The aggregate crude oil and gas condensate production at the V. Vinogradov, Imilorskoye and Pyakyakhinskoye fields in 2019 increased by 17% year-on-year.

In 2019, crude oil production outside Russia increased mainly due to the launch of the second phase of Shah-Deniz project in Azerbaijan in 2018, as well as by an acquisition of a 25% interest in the Marine XII license area in the Republic of Congo (Congo, Brazzaville) in September 2019.

Gas production (excluding flaring, reinjected gas and gas used in production of natural gas liquids) by major regions is presented in the table below.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
	(millions of cubic meters)					
	2019	2019		2019	2018	
West Siberia.....	3,202	3,070	4.3	12,492	13,001	(3.9)
Timan-Pechora	519	509	2.0	2,050	2,072	(1.1)
Ural region.....	387	358	8.1	1,432	923	55.1
Volga region.....	479	362	32.3	1,711	1,690	1.2
Other in Russia	6	5	20.0	24	26	(7.7)
Gas produced in Russia	4,593	4,304	6.7	17,709	17,712	-
Uzbekistan	3,875	3,225	20.2	14,130	13,262	6.5
Other outside Russia.....	774	562	37.7	2,478	1,834	35.1
Gas produced outside Russia	4,649	3,787	22.8	16,608	15,096	10.0
Total gas produced by consolidated subsidiaries	9,242	8,091	14.2	34,317	32,808	4.6
Our share in gas produced by equity affiliates:						
in Russia	22	22	-	88	92	(4.3)
outside Russia.....	168	149	12.8	641	643	(0.3)
Total gas produced	9,432	8,262	14.2	35,046	33,543	4.5

In Russia, our major gas production region is West Siberia (Bolshekhetskaya depression), where gas is produced from the Nakhodkinskoe and Pyakyakhinskoe fields. Outside Russia, the main gas production region is Uzbekistan where we have shares in two PSAs. In 2019, LUKOIL Group's gas production was 35.0 billion cubic meters, which was 4.5% higher year-on-year. The main driver of gas production growth was the development of projects in Uzbekistan and Azerbaijan. As a result of the launch of the second stage of the Kandym gas processing plant in April 2018, our international gas production (including our share in affiliates' production) increased by 9.6%. In the fourth quarter of 2019, we started pilot production at the Yuzhno-Messoyakhskoye gas condensate field in West Siberia (Bolshekhetskaya depression) and launched a compressor booster station at the Nakhodkinskoye field.

West Qurna-2 project

The West Qurna-2 field in Iraq is developed under the service contract, signed in January 2010. In May 2018, a Group company and Iraqi party signed a new field development plan, according to which, crude oil production is planned to increase to 800 thousand barrels per day by 2025.

Accounting for the cost compensation within the West Qurna-2 project in our consolidated statement of financial position and consolidated statement of profit or loss and other comprehensive income is as follows.

Capital expenditures are recognized in *Property, plant and equipment*. Extraction expenses are recognized in *Operating expenses* in respect of all the volume of crude oil production at the field regardless of the volume of compensation crude oil the Group is eligible for. As the compensation revenue is recognized, capitalized costs are amortized.

There are two steps of revenue recognition:

- The Iraqi party, on a quarterly basis, approves invoice for cost recovery and remuneration fee for which the Group is eligible for in the reporting period. Amount of the invoice depends on crude oil production volumes during the period and amount of costs claimed for reimbursement. Approved invoice amount for the reporting quarter is recognized in crude oil sales revenue.
- Based on the approved invoices, the Iraqi party arranges schedule of crude oil shipments against its liability for cost compensation and remuneration. As this crude oil is actually shipped, its cost is recognized at current market price in Cost of purchased crude oil, gas and products. Further, revenue from sales of this crude oil, or products from its refining, is recognized in *Sales*. Unsold crude oil and refined products are recognized in *Inventories*.

The following table summarizes data on capital and operating costs incurred, compensation crude oil received, costs yet unrecovered and remuneration fee.

(millions of US dollars)	Costs incurred ¹	Remuneration fee	Crude oil received	Crude oil to be received
Cumulative at 31 December 2018.....	8,597	424	8,681	340
Change in 2019.....	632	124	561	195
Cumulative at 31 December 2019.....	9,229	548	9,242	535

¹ Including prepayments.

The West Qurna-2 project summary is presented below:

	Q4 2019		Q3 2019		Change, %	
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	37,098	5,423	37,127	5,428	(0.1)	(0.1)
Production related to cost compensation and remuneration.....	2,902	424	2,854	417	1.7	1.7
Shipment of compensation crude oil ¹	2,779	406	2,904	425	(4.5)	(4.5)
	(millions of rubles)	(millions of US dollars)	(millions of rubles)	(millions of US dollars)		
Cost compensation.....	9,077	142	8,553	133	6.1	6.8
Remuneration fee.....	2,035	32	2,066	32	(1.5)	-
	11,112	174	10,619	165	4.6	5.5
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil, gas and products) ¹	10,341	162	10,399	161	(0.6)	0.6
Extraction expenses	4,133	65	3,851	60	7.3	8.3
Depreciation, depletion and amortization	4,988	78	4,735	73	5.3	6.8
EBITDA	2,105	33	6,679	103	(68.5)	(68.0)

¹ This crude oil is sold to third party customers or delivered to our refineries. After realization of these products, respective sales revenues are recognized.

	12 months of				Change, %	
	2019	2018	2018	2018		
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	142,684	20,860	139,430	20,385	2.3	2.3
Production related to cost compensation and remuneration.....	11,054	1,616	10,355	1,514	6.7	6.7
Shipment of compensation crude oil ¹	9,412	1,376	12,851	1,879	(26.8)	(26.8)
	(millions of rubles)	(millions of US dollars)	(millions of rubles)	(millions of US dollars)		
Cost compensation.....	35,836	554	32,665	523	9.7	5.9
Remuneration fee.....	8,023	124	9,685	153	(17.2)	(19.0)
	43,859	678	42,350	676	3.6	0.3
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil, gas and products) ¹	36,225	560	52,817	839	(31.4)	(33.3)
Extraction expenses	17,010	263	17,588	280	(3.3)	(6.1)
Depreciation, depletion and amortization	18,950	293	15,218	246	24.5	19.1
EBITDA	21,690	334	25,430	406	(14.7)	(17.7)

¹ This crude oil is sold to third party customers or delivered to our refineries. After realization of these products, respective sales revenues are recognized.

Refining and petrochemicals

The following table summarizes key figures for our refining and petrochemical volumes.

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(thousands of tonnes)					
Refinery throughput at the Group refineries	17,009	18,246	(6.8)	68,746	67,316	2.1
in Russia.....	10,828	11,610	(6.7)	44,154	43,189	2.2
outside Russia, including	6,181	6,636	(6.9)	24,592	24,127	1.9
crude oil.....	5,687	6,208	(8.4)	22,673	21,270	6.6
refined products.....	494	428	15.4	1,919	2,857	(32.8)
Refinery throughput at third party refineries	(513)	1,742	(129.4)	4,460	6,547	(31.9)
Total refinery throughput	16,496	19,988	(17.5)	73,206	73,863	(0.9)
Production of the Group refineries in Russia¹.....	10,220	11,032	(7.4)	41,831	40,985	2.1
diesel fuel.....	4,196	4,339	(3.3)	16,532	16,215	2.0
motor gasoline.....	2,009	2,202	(8.8)	7,864	8,022	(2.0)
fuel oil.....	947	1,204	(21.3)	4,657	4,814	(3.3)
jet fuel	656	835	(21.4)	2,843	2,760	3.0
lubricants and components.....	242	261	(7.3)	963	961	0.2
straight-run gasoline.....	623	525	18.7	2,655	2,143	23.9
vacuum gas oil	51	-	-	332	844	(60.7)
bitumen	216	262	(17.6)	908	793	14.5
coke.....	292	276	5.8	1,072	1,106	(3.1)
bunker fuel	413	450	(8.2)	1,546	1,591	(2.8)
gas products	72	85	(15.3)	317	355	(10.7)
petrochemicals	103	98	5.1	392	327	19.9
other products.....	400	495	(19.2)	1,750	1,054	66.0
Production of the Group refineries outside						
Russia.....	5,850	6,209	(5.8)	23,250	22,789	2.0
diesel fuel.....	2,695	2,807	(4.0)	10,570	9,619	9.9
motor gasoline.....	1,309	1,384	(5.4)	5,065	4,545	11.4
fuel oil.....	473	464	1.9	2,121	2,710	(21.7)
jet fuel	275	351	(21.7)	1,149	1,191	(3.5)
straight-run gasoline.....	599	663	(9.7)	2,285	2,073	10.2
coke.....	23	25	(8.0)	107	206	(48.1)
gas products	144	164	(12.2)	588	498	18.1
petrochemicals	9	14	(35.7)	43	51	(15.7)
other products.....	323	337	(4.2)	1,322	1,896	(30.3)
Refined products produced by the Group	16,070	17,241	(6.8)	65,081	63,774	2.0
Refined products produced at third party refineries	(483)	1,641	(129.4)	4,215	6,414	(34.3)
Total refined products produced	15,587	18,882	(17.5)	69,296	70,188	(1.3)
Reference: Net of cross-supplies of refined products between the Group refineries.....	483	380	27.1	1,561	1,589	(1.8)
Products produced at petrochemical plants and facilities.....	253	263	(3.8)	1,137	1,246	(8.7)
in Russia.....	170	170	-	790	934	(15.4)
outside Russia	83	93	(10.8)	347	312	11.2

¹ Net of cross-supplies of refined products among the Group.

Compared to the third quarter of 2019, refinery throughput at the Group refineries decreased by 6.8%. A decrease was due to scheduled maintenance works at our refineries in Volgograd, Nizhny Novgorod and Italy.

In 2019, refinery throughput at the Group refineries was 68.7 million tonnes, which is 2.1% higher year-on-year. In Russia, an increase of 2.2% was mainly due to higher utilization rate of the Nizhny Novgorod refinery. Outside Russia, the growth of 1.9% was explained by the maintenance at the refinery in Bulgaria in the first quarter of 2018. We continued enhancing the product slate with fuel oil production volumes being 10% lower than in 2018.

In the periods considered, we processed our crude oil at third party refineries in Belarus, Kazakhstan and Canada.

In 2016, a Group company entered into a tolling agreement with a Canadian refinery originally valid through 2019. Subsequently, it was prolonged until 31 August 2022 with modification of certain provisions that changed its substance from a tolling agreement to a financial arrangement. Therefore, from September 2019, we ceased to recognize throughput and production cost related to this arrangement. The Group recognizes interest it earns on the financing provided and administrative fee.

As the treatment of the arrangement was amended in our 2019 annual financial statements, our figures for the fourth quarter of 2019 naturally include adjustments related for September 2019 to the following items: throughput volumes, crude oil and refined product revenue, cost of purchased crude oil, operating expenses, inventories, trade accounts receivable and payable.

In 2019, attributable refined products output related to tolling arrangement amounted to 4.0 million tonnes (1.6 million tonnes in the third quarter of 2019 and 6.2 million tonnes in 2018).

Marketing and trading

In addition to our production, we purchase crude oil in Russia and on international markets. In Russia, we primarily purchase crude oil from affiliated producing companies and other producers. Then we either refine or export purchased crude oil. Crude oil purchased on international markets is used for trading activities, for supplying our international refineries or for processing at third party refineries.

In Russia, we purchase refined products on occasion, primarily to manage supply chain bottlenecks. Refined products purchases outside Russia are either traded or supplied to our international refineries.

We undertake trading operations on international markets through our 100% subsidiary LITASCO SA. We use traditional physical volumes hedging techniques to hedge our trading operations to secure trading margin.

The following table shows the volumes of crude oil purchases by the Group during the periods considered.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(thousands of tonnes)					
Crude oil purchases						
In Russia	229	171	33.9	756	874	(13.5)
For trading internationally	13,193	14,265	(7.5)	52,299	46,345	12.8
For refining internationally	4,244	5,922	(28.3)	21,686	22,527	(3.7)
Shipment of the West Qurna-2 compensation crude oil	406	425	(4.5)	1,376	1,879	(26.8)
Total crude oil purchased	18,072	20,783	(13.0)	76,117	71,625	6.3

The table below summarizes figures for our refined products and petrochemicals marketing and trading activities.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(thousands of tonnes)					
Refined products retail sales	3,520	3,772	(6.7)	14,129	15,144	(6.7)
Refined products wholesale sales	25,957	27,175	(4.5)	106,898	108,397	(1.4)
Total refined products sales	29,477	30,947	(4.8)	121,027	123,541	(2.0)
Refined products purchased in Russia	235	244	(3.7)	920	1,242	(25.9)
Refined products purchased internationally	13,233	13,057	1.3	53,274	54,728	(2.7)
Total refined products purchased	13,468	13,301	1.3	54,194	55,970	(3.2)
Petrochemical products purchased in Russia	12	8	50.0	39	34	14.7
Petrochemical products purchased internationally	180	216	(16.7)	1,049	583	79.9
Total petrochemical products purchased	192	224	(14.3)	1,088	617	76.3

Exports of crude oil, refined and petrochemical products from Russia by our subsidiaries and export revenues (both to the Group companies and third parties) are summarized as follows:

	Q4 2019	Q3 2019	Change, %	12 months of 2019	2018	Change, %
	(millions of rubles)					
Exports of crude oil to Customs Union.....	15,966	16,664	(4.2)	63,879	64,015	(0.2)
Exports of crude oil beyond Customs Union	244,240	233,913	4.4	996,096	1,040,747	(4.3)
Total crude oil exports.....	260,206	250,577	3.8	1,059,975	1,104,762	(4.1)
	(thousands of tonnes)					
Exports of crude oil to Customs Union.....	692	747	(7.4)	2,716	2,745	(1.1)
Exports of crude oil beyond Customs Union	8,771	8,457	3.7	34,378	33,956	1.2
Total crude oil exports.....	9,463	9,204	2.8	37,094	36,701	1.1
Exports of crude oil through Transneft and other third party infrastructure including:	7,279	7,011	3.8	28,274	27,946	1.2
ESPO pipeline.....	480	299	60.5	1,738	1,240	40.2
CPC pipeline.....	1,413	1,239	14.0	5,281	4,783	10.4
Exports of crude oil through the Group's transportation infrastructure.....	2,184	2,193	(0.4)	8,820	8,755	0.7
Total crude oil exports.....	9,463	9,204	2.8	37,094	36,701	1.1
	(millions of rubles)					
Refined and petrochemical products exports	150,229	151,543	(0.9)	623,632	594,868	4.8
	(thousands of tonnes)					
Refined products exports						
diesel fuel	2,524	2,669	(5.4)	10,205	9,773	4.4
gasoline	214	97	120.6	491	232	111.6
fuel oil	574	437	31.4	1,962	1,517	29.3
jet fuel	2	2	-	10	49	(79.6)
lubricants and components	163	161	1.2	629	600	4.8
gas refinery products	207	182	13.7	769	650	18.3
other products.....	1,096	1,127	(2.8)	4,663	3,423	36.2
Total refined products exports.....	4,780	4,675	2.2	18,729	16,244	15.3
Total petrochemicals exports	62	54	14.8	302	338	(10.7)

The volume of our crude oil exports from Russia increased by 2.8% compared to the third quarter of 2019, and increased by 1.1% compared to 2018. In the fourth quarter and the twelve months of 2019, we exported 46.3% and 45.5% of our domestic crude oil production (44.8% in the third quarter of 2019 and 45.1% in 2018), respectively. Our export volumes included 54 thousand tonnes in the fourth quarter of 2019 and 171 thousand tonnes in 2019 of crude oil purchased from our affiliates and third parties (43 thousand tonnes in the third quarter of 2019 and 185 thousand tonnes in 2018).

The volume of our refined products exports increased by 2.2% compared to the third quarter of 2019 following seasonal decrease in domestic demand, and increased by 15.3% compared to 2018 against the background of relatively low volumes of export in 2018 due to high domestic demand for our products.

Substantially, we use the Transneft infrastructure to export our crude oil. Nevertheless, a sizeable amount of crude oil is exported through our own infrastructure that allows us to preserve the premium quality of crude oil and thus enables to achieve higher netbacks. All the volume of crude oil exported that bypassed Transneft was routed beyond the Customs Union.

Besides our own infrastructure, we also export the light crude oil through the Caspian Pipeline Consortium and Eastern Siberia – Pacific Ocean pipelines that also allows us to preserve the premium quality of crude oil and to achieve higher netbacks compared to traditional export routes.

Priority sales channels. We develop our priority sales channels aiming at increasing our margin on sale of refined products produced by the Group.

In the fourth quarter and the twelve months of 2019, we sold 2.5 million tonnes and 9.9 million tonnes of motor fuels via our domestic retail network, which was 7.2% less compared to the third quarter of 2019 due to seasonality factor, and 9.1% less compared to 2018 due to high demand for our products in the previous year. Outside Russia, retail sales decreased by 5.4% compared to the third quarter of 2019 due to seasonality factor, and did not change significantly compared to 2018.

We also supply jet fuel to airports and bunker fuel to sea and river ports in and outside Russia. In 2019, our jet fuel deliveries without trading amounted to 3.4 million tonnes, and bunkering volume was 4.3 million tonnes.

Power generation. We established a vertically integrated chain from generation to transportation and sale of power and heat for third party customers (commercial generation) and own consumption. We own commercial generation facilities in the Southern regions of European Russia, Romania and Italy. We also own renewable energy capacity in Russia and abroad. In the fourth quarter and the twelve months of 2019, our total output of commercial electrical energy was 4.9 billion kWh and 18.3 billion kWh (4.2 billion kWh in the third quarter of 2019 and 19.9 billion kWh in 2018), and our total output of commercial heat energy was approximately 3.4 million Gcal and 10.1 million Gcal (0.8 million Gcal in the third quarter of 2019 and 11.0 million Gcal in 2018), respectively.

Financial results

The table below sets forth data from our consolidated statements of profit or loss and other comprehensive income for the periods indicated.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
	(millions of rubles)					
Revenues						
Sales (including excise and export tariffs)	1,912,439	1,952,322	(2.0)	7,841,246	8,035,889	(2.4)
Costs and other deductions						
Operating expenses	(115,565)	(119,286)	(3.1)	(457,710)	(464,467)	(1.5)
Cost of purchased crude oil, gas and products	(1,060,155)	(1,050,010)	1.0	(4,308,073)	(4,534,244)	(5.0)
Transportation expenses	(74,195)	(67,349)	10.2	(278,798)	(270,153)	3.2
Selling, general and administrative expenses	(52,974)	(45,638)	16.1	(197,172)	(192,433)	2.5
Depreciation, depletion and amortization	(101,030)	(104,504)	(3.3)	(415,094)	(343,085)	21.0
Taxes other than income taxes	(219,676)	(233,001)	(5.7)	(928,190)	(899,383)	3.2
Excise and export tariffs	(104,534)	(108,573)	(3.7)	(425,763)	(556,827)	(23.5)
Exploration expenses	(7,180)	(660)	>100	(9,348)	(3,582)	>100
Profit from operating activities	177,130	223,301	(20.7)	821,098	771,715	6.4
Finance income	6,131	6,944	(11.7)	25,134	19,530	28.7
Finance costs	(10,774)	(10,872)	(0.9)	(44,356)	(38,298)	15.8
Equity share in income of affiliates	1,628	5,496	(70.4)	18,246	25,243	(27.7)
Foreign exchange gain (loss)	45	(4,630)	-	923	33,763	(97.3)
Other (expenses) income	(23,888)	6,529	-	(27,691)	(38,934)	(28.9)
Profit before income taxes	150,272	226,768	(33.7)	793,354	773,019	2.6
Current income taxes	(25,605)	(36,954)	(30.7)	(144,615)	(137,062)	5.5
Deferred income taxes	(4,924)	1,073	-	(6,518)	(14,855)	(56.1)
Total income tax expense	(30,529)	(35,881)	(14.9)	(151,133)	(151,917)	(0.5)
Profit for the year	119,743	190,887	(37.3)	642,221	621,102	3.4
Profit for the year attributable to non-controlling interests	(433)	(500)	(13.4)	(2,043)	(1,928)	6.0
Profit for the year attributable to PJSC LUKOIL shareholders	119,310	190,387	(37.3)	640,178	619,174	3.4
Earnings per share of common stock attributable to PJSC LUKOIL shareholders (in Russian rubles):						
Basic	184.71	294.10	(37.2)	963.28	874.47	10.2
Diluted	178.22	285.01	(37.5)	934.73	865.19	8.0

The analysis of the main financial indicators of the financial statements is provided below.

Sales revenues

Sales breakdown	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Crude oil						
Export and sales on international markets other than Customs Union	644,015	627,510	2.6	2,575,571	2,559,578	0.6
Export and sales to Customs Union	16,221	16,897	(4.0)	64,890	64,228	1.0
Domestic sales	7,815	1,115	>100	22,528	47,508	(52.6)
	668,051	645,522	3.5	2,662,989	2,671,314	(0.3)
Cost compensation and remuneration at the West Qurna-2 project	11,112	10,619	4.6	43,859	42,350	3.6
	679,163	656,141	3.5	2,706,848	2,713,664	(0.3)
Refined products¹						
Export and sales on international markets						
Wholesale	810,817	840,030	(3.5)	3,403,202	3,612,291	(5.8)
Retail	84,349	90,417	(6.7)	345,162	349,493	(1.2)
Domestic sales						
Wholesale	108,596	122,877	(11.6)	443,667	439,327	1.0
Retail	120,340	129,894	(7.4)	480,048	498,765	(3.8)
	1,124,102	1,183,218	(5.0)	4,672,079	4,899,876	(4.6)
Petrochemicals						
Export and sales on international markets	14,915	20,863	(28.5)	91,687	67,682	35.5
Domestic sales	8,139	10,379	(21.6)	40,971	46,085	(11.1)
	23,054	31,242	(26.2)	132,658	113,767	16.6
Gas						
Sales on international markets	36,993	32,790	12.8	138,997	112,990	23.0
Domestic sales	8,681	7,685	13.0	32,490	33,352	(2.6)
	45,674	40,475	12.8	171,487	146,342	17.2
Sales of energy and related services						
Sales on international markets	2,952	4,451	(33.7)	14,604	15,600	(6.4)
Domestic sales	14,443	10,483	37.8	53,276	54,353	(2.0)
	17,395	14,934	16.5	67,880	69,953	(3.0)
Other						
Export and sales on international markets	12,899	14,908	(13.5)	48,024	46,160	4.0
Domestic sales	10,152	11,404	(11.0)	42,270	46,127	(8.4)
	23,051	26,312	(12.4)	90,294	92,287	(2.2)
Total sales	1,912,439	1,952,322	(2.0)	7,841,246	8,035,889	(2.4)

¹ Including revenue from gas refined products sales.

Sales volumes	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(thousands of tonnes)					
Crude oil						
Export and sales on international markets other than Customs Union.....	21,788	21,125	3.1	84,281	78,914	6.8
Export and sales to Customs Union.....	702	758	(7.4)	2,753	2,754	-
Domestic sales.....	348	52	>100	947	2,061	(54.1)
	22,838	21,935	4.1	87,981	83,729	5.1
Crude oil volumes related to cost compensation and remuneration at the West Qurna-2 project.....	424	417	1.7	1,616	1,514	6.7
	23,262	22,352	4.1	89,597	85,243	5.1
Refined products¹						
Export and sales on international markets						
Wholesale.....	22,422	23,172	(3.2)	92,392	93,676	(1.4)
Retail.....	1,046	1,106	(5.4)	4,194	4,217	(0.5)
Domestic sales						
Wholesale.....	3,535	4,003	(11.7)	14,506	14,721	(1.5)
Retail.....	2,474	2,666	(7.2)	9,935	10,927	(9.1)
	29,477	30,947	(4.8)	121,027	123,541	(2.0)
Petrochemicals						
Export and sales on international markets.....	276	384	(28.1)	1,547	1,004	54.1
Domestic sales.....	146	184	(20.7)	699	754	(7.3)
	422	568	(25.7)	2,246	1,758	27.8
	(millions of cubic meters)					
Gas						
Sales on international markets.....	4,388	3,717	18.1	15,785	14,173	11.4
Domestic sales.....	3,389	3,079	10.1	12,942	13,723	(5.7)
	7,777	6,796	14.4	28,727	27,896	3.0

¹ Including volumes of gas refined products sales.

Realized average sales prices		Q4 2019	Q3 2019	Change, %	12 months of		Change, %
					2019	2018	
Average realized price on international markets							
Crude oil (beyond Customs Union) ¹ (RUB/barrel)		4,033	4,052	(0.5)	4,169	4,425	(5.8)
Crude oil (Customs Union) (RUB/barrel)		3,152	3,041	3.7	3,216	3,182	1.1
Refined products							
Wholesale..... (RUB/tonne)		36,162	36,252	(0.2)	36,834	38,562	(4.5)
Retail..... (RUB/tonne)		80,640	81,751	(1.4)	82,299	82,877	(0.7)
Petrochemicals..... (RUB/tonne)		54,040	54,331	(0.5)	59,268	67,412	(12.1)
Gas (excluding royalty) (RUB/1,000 m ³)		8,430	8,822	(4.4)	8,806	7,972	10.5
Average realized price within Russia							
Crude oil (beyond Customs Union) ¹ (\$/barrel)		63.29	62.75	0.8	64.40	70.56	(8.7)
Crude oil (Customs Union) (\$/barrel)		49.47	47.09	5.1	49.67	50.74	(2.1)
Refined products							
Wholesale..... (\$/tonne)		568	561	1.1	569	615	(7.5)
Retail..... (\$/tonne)		1,266	1,266	-	1,271	1,322	(3.8)
Petrochemicals..... (\$/tonne)		848	841	0.8	916	1,075	(14.8)
Gas (excluding royalty) (\$/1,000 m ³)		132	137	(3.2)	136	127	7.0
Average realized price within Russia							
Crude oil..... (RUB/barrel)		3,064	2,925	4.7	3,245	3,145	3.2
Refined products							
Wholesale..... (RUB/tonne)		30,720	30,696	0.1	30,585	29,844	2.5
Retail..... (RUB/tonne)		48,642	48,722	(0.2)	48,319	45,645	5.9
Petrochemicals..... (RUB/tonne)		55,747	56,408	(1.2)	58,614	61,121	(4.1)
Gas ² (RUB/1,000 m ³)		2,562	2,496	2.6	2,510	2,430	3.3

¹ Excluding cost compensation and remuneration at the West Qurna-2 project.

² The price does not include cost of transportation by Unified Gas Supply System of Gazprom, as most of our gas production in Russia is sold ex-field.

Compared to the third quarter of 2019, our revenues decreased by 2.0% driven mainly by a decrease in refined products output and trading volumes.

Compared to 2018, our revenues decreased by 2.4%, largely as a result of a decrease in hydrocarbon prices and refined products trading volumes, that was partially offset by the effect of the ruble devaluation on our revenues denominated in the US dollars, as well as higher gas sales and petrochemical products trading volumes.

Sales of crude oil

Compared to the third quarter of 2019, our international crude oil sales revenue increased by 2.6% due to trading volume increase. Our domestic sales revenue increased owing to higher sales volume as a result of a decrease in throughput at our refineries in Russia due to maintenance works.

In 2019, our international crude oil sales revenue did not change significantly compared to 2018. A decrease in crude oil prices was offset by an increase in trading volumes. At the same time, our domestic sales volumes decreased by 54.1% due to an increase in refinery throughput and our sales revenue decreased consequently.

Sales of refined products

Sales breakdown	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Wholesale outside Russia	810,817	840,030	(3.5)	3,403,202	3,612,291	(5.8)
diesel fuel	398,753	401,518	(0.7)	1,637,550	1,608,595	1.8
motor gasoline	149,404	175,469	(14.9)	637,327	746,274	(14.6)
fuel oil	134,541	118,781	13.3	521,882	534,155	(2.3)
jet fuel	8,812	31,040	(71.6)	97,202	126,840	(23.4)
lubricants and components	15,230	16,330	(6.7)	65,726	73,300	(10.3)
gas products.....	15,024	11,915	26.1	53,515	57,274	(6.6)
others.....	89,053	84,977	4.8	390,000	465,853	(16.3)
Retail outside Russia.....	84,349	90,417	(6.7)	345,162	349,493	(1.2)
Wholesale in Russia	108,596	122,877	(11.6)	443,667	439,327	1.0
diesel fuel	32,730	28,864	13.4	116,906	99,090	18.0
motor gasoline	12,114	15,886	(23.7)	48,539	50,254	(3.4)
fuel oil	4,610	8,820	(47.7)	33,124	44,070	(24.8)
jet fuel	31,333	37,708	(16.9)	128,672	120,042	7.2
lubricants and components	5,429	7,200	(24.6)	25,265	26,236	(3.7)
gas products.....	2,665	2,675	(0.4)	10,903	14,839	(26.5)
others.....	19,715	21,724	(9.2)	80,258	84,796	(5.4)
Retail in Russia.....	120,340	129,894	(7.4)	480,048	498,765	(3.8)
Total refined products sales	1,124,102	1,183,218	(5.0)	4,672,079	4,899,876	(4.6)

Sales volumes	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(thousands of tonnes)					
Wholesale outside Russia	22,422	23,172	(3.2)	92,392	93,676	(1.4)
diesel fuel.....	9,637	9,759	(1.3)	39,002	36,455	7.0
motor gasoline.....	3,538	4,160	(15.0)	15,015	16,806	(10.7)
fuel oil.....	5,203	4,840	7.5	20,121	20,733	(3.0)
jet fuel.....	207	748	(72.3)	2,323	2,846	(18.4)
lubricants and components.....	228	258	(11.6)	997	1,147	(13.1)
gas products	521	475	9.7	1,902	1,720	10.6
others	3,088	2,932	5.3	13,032	13,969	(6.7)
Retail outside Russia	1,046	1,106	(5.4)	4,194	4,217	(0.5)
diesel fuel.....	707	738	(4.2)	2,814	2,831	(0.6)
motor gasoline.....	294	317	(7.3)	1,195	1,202	(0.6)
gas products	45	51	(11.8)	185	184	0.5
Wholesale in Russia.....	3,535	4,003	(11.7)	14,506	14,721	(1.5)
diesel fuel.....	758	691	9.7	2,733	2,396	14.1
motor gasoline.....	310	392	(20.9)	1,257	1,242	1.2
fuel oil.....	423	602	(29.7)	2,184	2,746	(20.5)
jet fuel.....	753	919	(18.1)	3,138	2,936	6.9
lubricants and components.....	86	100	(14.0)	361	359	0.6
gas products	137	170	(19.4)	648	756	(14.3)
others	1,068	1,129	(5.4)	4,185	4,286	(2.4)
Retail in Russia	2,474	2,666	(7.2)	9,935	10,927	(9.1)
diesel fuel.....	938	981	(4.4)	3,715	4,128	(10.0)
motor gasoline.....	1,516	1,674	(9.4)	6,161	6,734	(8.5)
gas products	20	11	81.8	59	65	(9.2)
Total refined products volumes.....	29,477	30,947	(4.8)	121,027	123,541	(2.0)

The fourth quarter vs. the third quarter of 2019

- Our revenue from the wholesale of refined products outside Russia decreased by 3.5% due to a decrease in trading volumes.
- International retail revenue decreased by 6.7% due to a seasonal decrease in sales volumes.
- Revenue from the wholesale and retail sales of refined products on the domestic market decreased by 11.6% and 7.4%, respectively, as a result of a decrease in sales volumes due to a seasonal decline in domestic demand.

2019 vs. 2018

- Our revenue from the wholesale of refined products outside Russia decreased by 5.8% that was mainly due to a decrease in sales volumes and prices in dollar terms that was partially offset by the effect of the ruble devaluation.
- Our international retail revenue decreased by 1.2% mainly as a result of a decrease in sales volumes and our realized prices.
- Despite a decrease in sales volumes, our revenue from the wholesale of refined products on the domestic market increased by 1.0% as a result of growth of our realized prices.
- Our revenue from refined products retail sales in Russia decreased by 3.8%, as a result of a decrease in sales volumes against a background of high demand for our products in 2018, that was partially offset by an increase in our realized prices.

Sales of petrochemical products

Compared to the third quarter of 2019, our revenue from sales of petrochemical products decreased by 26.2%, as a result of a decrease in trading volumes and average realized sales prices both in and outside Russia.

Compared to 2018, our revenue from sales of petrochemical products increased by 16.6%, as a result of growth of trading volumes outside Russia. At the same time, our average realized sales prices decreased.

Sales of gas

Compared to the third quarter of 2019, our revenue from gas sales increased by 12.8%, as a result of an increase in gas production outside Russia.

Our sales of gas increased by 17.2%, compared to 2018. This increase related mostly to our operations outside Russia and was a result of natural gas production growth in Uzbekistan. Higher gas prices also contributed to an increase in our gas sales revenue.

Sales of energy and related services

Compared to the third quarter of 2019, our revenue from sales of energy and related services increased by 16.5% mainly due to seasonal factor in Russia.

Compared to 2018, our revenue from sales of energy and related services decreased by 3.0%.

Other sales

Other sales include non-petroleum sales through our retail network, transportation services, rental revenue, crude oil extraction services, and other revenue of our production and marketing companies from sales of goods and services not related to our primary activities.

In the fourth quarter of 2019, revenue from other sales decreased by 12.4%, compared to the third quarter of 2019, largely as a result of seasonal decrease in non-petrol revenue of our retail network.

Compared to 2018, revenue from other sales decreased by 2.2%. This was largely a result of a discontinuing of a non-core car sales business in Russia.

Moreover, other sales revenue for the third quarter and the twelve months of 2019 included 2.2 billion RUB (approximately €30 million) of loss compensation in relation to energy supplies in Sicily, Italy in 2016.

Operating expenses

Operating expenses include the following:

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
				(millions of rubles)		
Hydrocarbon extraction expenses ¹	49,877	49,577	0.6	193,857	196,227	(1.2)
Extraction expenses at the West Qurna-2 field	4,133	3,851	7.3	17,010	17,588	(3.3)
Own refining expenses	24,636	24,942	(1.2)	96,543	104,987	(8.0)
Refining expenses at third-party refineries	(1,516)	4,523	-	7,175	8,020	(10.5)
Expenses for crude oil transportation to refineries	13,268	13,570	(2.2)	52,884	50,264	5.2
Power generation and distribution expenses	8,517	7,310	16.5	30,432	30,045	1.3
Petrochemical expenses	3,379	2,904	16.4	12,463	12,075	3.2
Other operating expenses	13,271	12,609	5.3	47,346	45,261	4.6
Total operating expenses	115,565	119,286	(3.1)	457,710	464,467	(1.5)

¹ Excluding extraction expenses at the West Qurna-2 field.

The method of allocation of operating expenses above differs from the approach used in preparing data for Note 33 “Segment information” to our consolidated financial statements. Expenditures in the segment reporting are grouped depending on the segment to which a particular company belongs and do not include adjustments related to elimination of intra-group service margin. Operating expenses for the purposes of this analysis are grouped based on the nature of the costs incurred.

Hydrocarbon extraction expenses

Our extraction expenses include expenditures related to repairs of extraction equipment, labor costs, expenses on artificial stimulation of reservoirs, fuel and electricity costs, cost of extraction of natural gas liquids, property insurance of extraction equipment and other similar costs.

	Q4 2019	Q3 2019	Change, %	12 months of 2019	2018	Change, %
				(millions of rubles)		
Hydrocarbon extraction expenses ¹	49,877	49,577	0.6	193,857	196,227	(1.2)
in Russia.....	43,285	42,970	0.7	170,590	175,131	(2.6)
outside Russia ¹	6,592	6,607	(0.2)	23,267	21,096	10.3
				(rubles per BOE)		
Hydrocarbon extraction expenses ¹	233	239	(2.6)	232	238	(2.5)
in Russia.....	239	239	0.2	237	244	(2.7)
outside Russia ¹	200	245	(18.1)	200	199	0.3

¹ Excluding extraction expenses at the West Qurna-2 field.

Compared to the previous quarter, per BOE hydrocarbon extraction expenses and our total extraction expenses in Russia did not change significantly. Our extraction expenses outside Russia were also flat compared to the third quarter of 2019, while our per BOE hydrocarbon extraction expenses decreased by 18.1%, mainly as a result of an increase in gas production outside Russia.

In Russia, hydrocarbon extraction expenses decreased by 2.6% compared to 2018. A decrease in workover operations and overhauls was partially offset by higher electricity costs. A decrease in our extraction expenses was also driven by the adoption of IFRS 16. In 2019, our domestic per BOE hydrocarbon extraction expenses decreased by 2.7%.

In 2019, outside Russia, our hydrocarbon extraction expenses increased by 10.3% as a result of substantial gas production growth in Uzbekistan and Azerbaijan, maintenance works in Kazakhstan, as well as the ruble devaluation. Despite the ruble devaluation, our per BOE hydrocarbon extraction expenses outside Russia did not change due to an increase in gas share in our production structure.

Own refining expenses

	Q4 2019	Q3 2019	Change, %	12 months of 2019	2018	Change, %
				(millions of rubles)		
Refining expenses at the Group refineries	24,636	24,942	(1.2)	96,543	104,987	(8.0)
in Russia.....	11,328	11,036	2.6	42,555	45,659	(6.8)
outside Russia	13,308	13,906	(4.3)	53,988	59,328	(9.0)
				(rubles per tonne)		
Refining expenses at the Group refineries	1,448	1,367	6.0	1,404	1,560	(10.0)
in Russia.....	1,046	951	10.1	964	1,057	(8.8)
outside Russia	2,153	2,096	2.7	2,195	2,459	(10.7)

Compared to the third quarter of 2019, refining expenses at our domestic refineries increased by 2.6%, mainly due to an increase in electricity and fuel costs, maintenance works, as well as an increase in consumption of purchased additives. Outside Russia, our expenses decreased by 4.3% largely due to lower refinery throughput as a result of scheduled maintenance works at the refinery in Italy.

Compared to 2018, expenses at our domestic refineries decreased by 6.8%, mainly due to a decrease in consumption of purchased additives in gasoline production, despite higher throughput volumes. Outside Russia, our expenses decreased by 9.0% due to a decline in fuel, electricity and maintenance costs, despite higher throughput volumes.

Refining expenses at third-party refineries

Along with our own production of refined products, we process crude oil at third-party refineries.

At the end of 2016, as part of our trading business development, a Group company entered into a 3-year tolling agreement with a Canadian refinery. Related refining expenses represented variable toll that was mostly the difference between the price of feedstock supplied, including various related costs, and the selling price of the refined products taken. When the refined products were sold, this toll was naturally offset by the respective refined products sales revenue. The agreed compensation was received by the Group company for execution of this agreement.

In August 2019, the agreement was extended till 2022 with modification of certain provisions. As a result, the agreement is now treated as a financing arrangement with recognizing only interest on financing provided and administrative fee in the profit or loss statement. Thus, we do not recognize the tolling fee starting from September 2019.

In the fourth quarter of 2019, this tolling fee was a negative amount of 1.7 billion RUB as a result of a change of arrangement from September 2019, compared to 4.4 billion RUB in the previous quarter.

In 2019, tolling fee amounted to 6.6 billion RUB compared to 7.4 billion RUB in 2018.

Expenses for crude oil transportation to refineries

Expenses for crude oil and refined products transportation to refineries include pipeline, railway, freight and other costs related to delivery of crude oil and refined products to refineries for further processing.

Compared to the third quarter of 2019, our expenses for crude oil transportation to refineries decreased by 2.2% due to changes in structure of crude oil supplies to the Group refineries.

Compared to 2018, our expenses for crude oil transportation to refineries increased by 5.2% mainly due to an increase in volumes of supplies of own crude oil and tariffs.

Power generation and distribution expenses

Compared to the third quarter of 2019 and the twelve months of 2018, power generation and distribution expenses increased by 16.5% and by 1.3%, respectively. The increase compared to the third quarter of 2019 was due to seasonality.

Petrochemical expenses

Our petrochemical expenses increased by 16.4% quarter-on-quarter as a result of an increase in maintenance costs at our petrochemical plants in Russia.

Our petrochemical expenses increased by 3.2% year-on-year as a result of an increase in production volumes against the background of suspension of production at petrochemical facilities at our Bulgarian refinery in 2018.

Cost of purchased crude oil, gas and products

Cost of purchased crude oil, gas and products includes cost of crude oil and refined products purchased for trading or refining, gas and fuel oil to supply our power generation entities and the result of hedging of crude oil and refined products sales.

	Q4	Q3	Change,	12 months of		Change,
	2019	2019	%	2019	2018	%
	(millions of rubles)					
Cost of purchased crude oil in Russia.....	5,292	3,846	37.6	18,123	21,458	(15.5)
Cost of purchased crude oil outside Russia	507,554	586,976	(13.5)	2,229,352	2,213,464	0.7
Compensation crude oil related to West Qurna-2 project.....	10,341	10,399	(0.6)	36,225	52,817	(31.4)
Cost of purchased crude oil.....	523,187	601,221	(13.0)	2,283,700	2,287,739	(0.2)
Cost of purchased refined products in Russia.....	9,100	10,101	(9.9)	37,146	50,176	(26.0)
Cost of purchased refined products outside Russia.....	470,717	466,206	1.0	1,930,711	2,067,726	(6.6)
Cost of purchased refined products	479,817	476,307	0.7	1,967,857	2,117,902	(7.1)
Other purchases	15,606	15,871	(1.7)	82,157	60,898	34.9
Net loss/(gain) from hedging of trading operations	28,418	(11,370)	-	61,333	(21,908)	-
Change in crude oil and petroleum products inventory.....	13,127	(32,019)	-	(86,974)	89,613	-
Total cost of purchased crude oil, gas and products.....	1,060,155	1,050,010	1.0	4,308,073	4,534,244	(5.0)

Compared to the third quarter of 2019, cost of purchased crude oil, gas and products increased by 1.0%.

Compared to 2018, cost of purchased crude oil, gas and products decreased by 5.0% largely as a result of a decrease in hydrocarbon prices.

Transportation expenses

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Crude oil transportation expenses	25,133	23,633	6.3	98,406	95,913	2.6
in Russia.....	11,922	10,261	16.2	46,946	46,881	0.1
outside Russia	13,211	13,372	(1.2)	51,460	49,032	5.0
Refined products transportation expenses.....	43,873	38,942	12.7	162,648	160,972	1.0
in Russia.....	23,018	22,429	2.6	89,842	90,293	(0.5)
outside Russia	20,855	16,513	26.3	72,806	70,679	3.0
Other transportation expenses.....	5,189	4,774	8.7	17,744	13,268	33.7
in Russia.....	456	736	(38.0)	2,200	2,696	(18.4)
outside Russia	4,733	4,038	17.2	15,544	10,572	47.0
Total transportation expenses.....	74,195	67,349	10.2	278,798	270,153	3.2

Compared to the third quarter of 2019, our expenses for transportation of crude oil and refined products increased by 6.3% and 12.7%, respectively. Outside Russia, our expenses for transportation of crude oil did not change significantly, while our expenses for transportation of refined products increased by 26.3% due to higher freight rates. In Russia, our expenses for transportation of crude oil increased due to higher sales volumes and changes in delivery directions. Our expenses for transportation of refined products also increased due to changes in delivery directions and an increase in export sales volumes that was partially offset by a decrease in domestic sales volumes.

Compared to 2018, our expenses for transportation of crude oil and refined products increased by 2.6% and 1.0%, respectively. Outside Russia, our expenses increased mainly as a result of the ruble devaluation and higher freight rates that was partially offset by the effect of IFRS 16 adoption. In Russia, our transportation expenses did not change significantly. Indexation of tariffs and an increase in export sales volumes were offset by a decrease in domestic sales volumes and the effect of IFRS 16 adoption.

Compared to 2018, the dynamics of other transportation expenses outside Russia was due to one-off adjustments of the fourth quarter of 2018, related to the Group's PSA projects in Uzbekistan.

Selling, general and administrative expenses

Selling, general and administrative expenses include payroll costs (excluding production staff costs of extraction entities, refineries and power generation entities), insurance costs (except for property insurance related to extraction, refinery and power generation equipment), costs of maintenance of social infrastructure, movement in allowance for expected credit losses and other expenses. Our selling, general and administrative expenses are roughly equally split between domestic and international operations.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Labor costs included in selling, general and administrative expenses	15,909	17,957	(11.4)	68,380	62,959	8.6
Other selling, general and administrative expenses	25,454	20,686	23.0	88,086	99,123	(11.1)
Share-based compensation.....	7,841	7,841	-	31,366	31,300	0.2
Expenses (income) on allowance for expected credit losses	3,770	(846)	-	9,340	(949)	-
Total selling, general and administrative expenses	52,974	45,638	16.1	197,172	192,433	2.5

Compared to the third quarter of 2019, an increase in selling, general and administrative expenses was largely a result of changes in allowances for expected credit losses. A decrease in labor costs was mainly a result of lower expenses for bonuses outside Russia. Other selling, general and administrative expenses increased mainly due to an increase in advertising, consulting and other expenses.

In 2019, our selling, general and administrative expenses increased by 2.5% compared to 2018 mainly as a result of changes in allowance for expected credit losses. Our labor costs increased due to salary indexation and bonus payments. At the same time, the dynamics of our selling, general and administrative expenses was positively impacted by the effect of IFRS 16 adoption.

In late December 2017, the Company announced a new compensation plan based on approximately 40 million shares available to certain members of management and key employees for the period from 2018 to 2022, which was implemented in July 2018 and recognized as equity-settled share-based compensation plan.

Depreciation, depletion and amortization

Compared to the third quarter of 2019, our depreciation, depletion and amortization expenses decreased by 3.3%. Positive effect of an increase in proved developed hydrocarbon reserves at Group's certain fields as of the end of 2019 and consequent recalculation of depletion of respective fixed assets for the full year was partially offset by an increase in depletion expenses in Uzbekistan following the growth in gas production volumes.

Compared to 2018, depreciation, depletion and amortization expenses increased by 72 billion RUB, or by 21.0%, mostly as a result of amortization of the right-of-use assets in the amount of 33.0 billion RUB under the newly adopted IFRS 16 and an increase in depletion expenses as a result of higher gas production volumes after launching new production facilities as part of the Kandym project in Uzbekistan.

Equity share in income of affiliates

The Group has investments in equity method affiliates and corporate joint ventures. These companies are primarily engaged in crude oil exploration, production, marketing and distribution operations in the Russian Federation, crude oil production and marketing in Kazakhstan. Currently, our largest affiliates are Tengizchevroil, an exploration and production company, operating in Kazakhstan, Bashneft-Polus, an exploration and production company that develops the Trebs and Titov oilfields in Timan-Pechora, Russia, South Caucasus Pipeline Company and Caspian Pipeline Consortium, midstream companies in Azerbaijan and Kazakhstan.

Our share in income of affiliates decreased by 3.9 billion RUB, or by 70.4%, compared to the third quarter of 2019, and decreased by 7 billion RUB, or by 27.7% compared to 2018 mainly due to a partial impairment of fixed assets of our upstream affiliates.

Taxes other than income taxes

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
In Russia						
Mineral extraction taxes	200,682	214,115	(6.3)	849,445	836,820	1.5
Tax on additional income	3,401	3,367	1.0	16,229	-	-
Social security taxes and contributions	6,163	6,798	(9.3)	27,308	26,506	3.0
Property tax	5,943	5,652	5.1	22,663	24,273	(6.6)
Other taxes	668	729	(8.4)	2,515	2,063	21.9
Total in Russia	216,857	230,661	(6.0)	918,160	889,662	3.2
International						
Mineral extraction taxes	22	-	-	22	-	-
Social security taxes and contributions	1,797	1,317	36.4	6,109	6,025	1.4
Property tax	237	222	6.8	906	904	0.2
Other taxes	763	801	(4.7)	2,993	2,792	7.2
Total internationally	2,819	2,340	20.5	10,030	9,721	3.2
Total taxes other than income taxes	219,676	233,001	(5.7)	928,190	899,383	3.2

In the fourth quarter of 2019, our taxes other than income taxes decreased by 5.7% compared to the previous quarter. This was a result of a decrease in mineral extraction tax expense due to inventory effect, as well as due to adjustments of mineral extraction tax expense for prior periods.

An increase in our taxes other than income taxes compared to 2018 by 3.2% was largely driven by a growth in mineral extraction tax expense on the back of an increase in the tax rate by 4.6%, as well as an application of new tax on additional income from the hydrocarbon production.

The following table summarizes data on application of reduced and zero mineral extraction tax rates for crude oil produced in Russia (excluding special tax regimes).

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(millions of rubles)					
Decrease in extraction taxes from application of reduced and zero rates for crude oil production.....	30,970	31,688	(2.3)	127,018	133,300	(4.7)
	(thousands of tonnes)					
Volume of crude oil production subject to:						
zero rates (ultra-high viscosity).....	557	577	(3.5)	2,157	1,630	32.3
reduced rates (tax holidays for specific regions and high viscosity oil).....	1,076	1,037	3.8	4,221	5,672	(25.6)
reduced rates (low permeability deposits).....	395	548	(27.9)	1,422	517	175.0
reduced rates (Tyumen deposits).....	181	225	(19.6)	725	835	(13.2)
reduced rates (depleted fields).....	4,703	4,786	(1.7)	19,050	15,631	21.9
reduced rates (other).....	632	664	(4.8)	2,503	2,310	8.4
Total volume of production subject to reduced or zero rates	7,544	7,837	(3.7)	30,078	26,595	13.1

From 1 January 2019, the Group also applies special tax regime at certain license areas with reduced mineral extraction tax for crude oil and gas condensate along with newly-implemented TAI. In the fourth quarter and the twelve months of 2019, the total volume of crude oil and gas condensate production subject to TAI amounted to 1,273 thousand tonnes and 4,948 thousand tonnes, respectively. The mineral extraction tax on crude oil and gas condensate produced at the license areas subject to TAI totaled 6,418 million RUB and 25,429 million RUB in the fourth quarter and the twelve months of 2019, respectively.

The Group also applies special tax regime for offshore crude oil production at certain fields and deposits. In the fourth quarter and the twelve months of 2019, volumes of production subject to such regimes amounted to 1,657 thousand tonnes and 6,436 thousand tonnes, respectively (compared to 1,554 thousand tonnes in the third quarter of 2019 and 6,074 thousand tonnes in 2018).

Excise and export tariffs

	Q4 2019	Q3 2019	Change, %	12 months of 2019	12 months of 2018	Change, %
	(millions of rubles)					
In Russia						
Excise tax on refined products	35,499	39,133	(9.3)	140,659	113,479	24.0
Excise tax on oil feedstock (excluding damper).....	(7,381)	(7,932)	(6.9)	(31,212)	-	-
Damper	(12,359)	(17,927)	(31.1)	(57,237)	-	-
Crude oil export tariffs	32,612	33,498	(2.6)	141,622	203,310	(30.3)
Refined products export tariffs.....	10,813	11,686	(7.5)	46,058	55,453	(16.9)
Total in Russia	59,184	58,458	1.2	239,890	372,242	(35.6)
International						
Excise tax and sales taxes on refined products.....	45,347	50,158	(9.6)	186,078	184,249	1.0
Crude oil export tariffs	7	15	(53.3)	51	35	45.7
Refined products export and import tariffs, net.....	(4)	(58)	(93.1)	(256)	301	(185.0)
Total internationally	45,350	50,115	(9.5)	185,873	184,585	0.7
Total excise and export tariffs	104,534	108,573	(3.7)	425,763	556,827	(23.5)

Compared to the third quarter of 2019, crude oil and refined products export tariffs decreased due to export duty lag effect.

In the fourth quarter of 2019, excise tax on refined products decreased both in Russia and internationally compared to the previous quarter mainly due to a seasonal decrease in sales volumes subject to excise taxes.

In the fourth quarter of 2019, our proceeds from negative excise tax on refinery feedstock decreased to 20 billion RUB from 26 billion RUB in the third quarter of 2019 primarily due to lower damper as a result of a decrease in export netbacks for gasoline.

Compared to 2018, crude oil export tariffs declined mainly as a result of a decrease in export duty rate by 24.7% and increased share of crude oil from fields with special export duty rates in export volumes structure. Refined products export tariffs also decreased, as a result of lower export duty rate, despite higher refined products export volumes.

Compared to 2018, excise tax in Russia increased due to higher excise tax rates and internationally due to an increase in sales volumes subject to excise taxes.

Negative values of international refined products export and import tariffs in 2019 are a result of the compensation of import tariffs in the USA.

Exploration expenses

In the fourth quarter of 2019, we charged to expense approximately 5.8 billion RUB related to dry exploratory well in Romania.

Foreign exchange gain (loss)

Foreign exchange gains or losses are mostly related to revaluation of US dollar and euro net monetary position of the Group entities that largely consists of accounts receivables and loans, mostly intra-group, given or received in currencies other than the entities' functional currencies. In the end of 2018, the Company's net monetary position in foreign currencies significantly changed as a result of a change in the structure of intra-group financing. Moreover, starting from 1 January 2019, the Group recognized certain lease liabilities in foreign currencies in accordance with IFRS 16.

In 2019, foreign exchange gain amounted to 0.9 billion RUB, of which 45 million RUB related to the fourth quarter of 2019, compared to a foreign exchange loss of 4.6 billion RUB in the third quarter of 2019 and a gain of 33.8 billion RUB in 2018. Implementation of IFRS 16 resulted in a foreign exchange gain of 7.9 billion RUB in 2019, of which 2.0 billion RUB related to the fourth quarter results.

Other (expenses) income

Other (expenses) income include the financial effects of disposals of assets, impairment losses, extraordinary gains and losses, revisions of estimates and other non-operating gains and losses.

In the fourth quarter of 2019, the Group recognized an impairment loss for its exploration and production assets in Russia and abroad in the amount of 21.4 billion RUB, as well as for its refining, marketing and distribution assets in Russia and abroad in the amount of 1.3 billion RUB. At the same time, the Group recognized an impairment reversal of 9.7 billion RUB in 2019, which was mainly a result of improvement of economic parameters of our production projects in West Siberia and European part of Russia.

In the fourth quarter of 2018, the Group recognized an impairment loss for its exploration and production assets in Russia and abroad in the amount of 6.1 billion RUB, and impairment loss for its refining, marketing and distribution assets in Russia and abroad in the amount of 0.6 billion RUB. Moreover, in the second quarter of 2018, the Group recognized an impairment loss for its exploration and production assets in Russia in the amount of 5.0 billion RUB following the decision to stop exploration works at the East Taimyr block.

Income taxes

The maximum statutory income tax rate in Russia is 20%. Nevertheless, the actual effective income tax rate may be higher due to non-deductible expenses or lower due to certain non-taxable gains and application of reduced regional income tax rates in Russia.

Compared to the third quarter of 2019, our total income tax expense decreased by 5 billion RUB, or by 14.9%. At the same time, our profit before income tax decreased by 76 billion RUB, or by 33.7%. In the fourth quarter of 2019, our effective income tax rate was 20.3%, compared to 15.8% in the third quarter of 2019. An increase in our effective income tax rate was a result of tax adjustments related to prior periods in the third quarter of 2019.

Compared to 2018, our total income tax expense did not change significantly. Our profit before income tax increased by 20 billion RUB, or by 2.6%. In 2019, our effective income tax rate was 19.0%, compared to 19.7% in 2018. The decrease in the effective income tax rate in 2019 was also a result of tax adjustments related to prior periods and changes in income tax incentives for certain Russian subsidiaries.

Non-GAAP items reconciliation

Reconciliation of profit for the year attributable to PJSC LUKOIL shareholders to EBITDA

EBITDA is not defined under IFRS. We define EBITDA as profit from operating activities before depreciation, depletion and amortization. We believe that EBITDA provides useful information to investors because it is an indicator of the strength and performance of our business operations, including our ability to finance capital expenditures, acquisitions and other investments and to raise and service debt. EBITDA should not be considered in isolation as an alternative to profit or any other measure of performance under IFRS.

	Q4 2019	Q3 2019	12 months of 2019 2018	
	(millions of rubles)			
Profit for the year attributable to PJSC LUKOIL shareholders	119,310	190,387	640,178	619,174
Add back				
Profit for the year attributable to non-controlling interests.....	433	500	2,043	1,928
Income tax expense	30,529	35,881	151,133	151,917
Financial income	(6,131)	(6,944)	(25,134)	(19,530)
Financial costs	10,774	10,872	44,356	38,298
Foreign exchange (gain) loss	(45)	4,630	(923)	(33,763)
Equity share in income of affiliates	(1,628)	(5,496)	(18,246)	(25,243)
Other expenses (income)	23,888	(6,529)	27,691	38,934
Depreciation, depletion and amortization	101,030	104,504	415,094	343,085
EBITDA	278,160	327,805	1,236,192	1,114,800
EBITDA by operating segments				
Exploration and production segment				
Sales (including excise and export tariffs).....	579,500	570,432	2,364,184	2,391,467
Operating expenses	(70,069)	(70,479)	(274,934)	(273,012)
Cost of purchased crude oil, gas and products.....	(10,326)	(14,282)	(40,350)	(58,053)
Transportation expenses	(18,846)	(16,925)	(69,589)	(63,713)
Selling, general and administrative expenses	(13,303)	(8,585)	(47,964)	(38,559)
Taxes other than income taxes	(214,657)	(213,331)	(891,051)	(875,172)
Excise and export tariffs	(33,333)	(34,211)	(136,998)	(209,089)
Exploration expenses.....	(7,180)	(661)	(9,348)	(3,582)
EBITDA of Exploration and production segment.....	211,786	211,958	893,950	870,287
Refining, marketing and distribution segment				
Sales (including excise and export tariffs).....	1,851,598	1,902,350	7,624,198	7,834,339
Operating expenses	(56,644)	(60,148)	(228,576)	(243,214)
Cost of purchased crude oil, gas and products.....	(1,541,297)	(1,557,851)	(6,362,401)	(6,584,719)
Transportation expenses	(61,385)	(55,798)	(229,007)	(218,851)
Selling, general and administrative expenses	(31,439)	(30,016)	(121,383)	(127,089)
Taxes other than income taxes	(6,242)	(6,607)	(25,323)	(24,480)
Excise and export tariffs	(72,434)	(75,550)	(285,866)	(353,842)
EBITDA of Refining, marketing and distribution segment.....	82,157	116,380	371,642	282,144
EBITDA of Corporate and other segment	(13,679)	(10,544)	(39,962)	(36,154)
Elimination	(2,104)	10,011	10,562	(1,477)
EBITDA	278,160	327,805	1,236,192	1,114,800

Reconciliation of Cash provided by operating activities to Free cash flow

	Q4 2019	Q3 2019	12 months of 2019 2018	
	(millions of rubles)			
Net cash provided by operating activities	320,681	317,921	1,151,844	1,006,651
Capital expenditures	(135,937)	(109,062)	(449,975)	(451,526)
Free cash flow	184,744	208,859	701,869	555,125

Liquidity and capital resources

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Net cash provided by operating activities	320,681	317,921	0.9	1,151,844	1,006,651	14.4
including decrease (increase) in working capital	44,960	12,796	>100	(6,781)	(33,592)	(79.8)
Net cash used in investing activities	(157,725)	(143,238)	10.1	(510,126)	(420,392)	21.3
Net cash used in financing activities.....	(79,980)	(240,489)	(66.7)	(582,344)	(468,549)	24.3

Changes in operating assets and liabilities:

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
(Increase) decrease in accounts receivable	(29,162)	84,710	-	(48,023)	23,877	-
Decrease (increase) in inventory.....	10,798	(17,428)	-	(69,171)	71,565	-
Increase (decrease) in accounts payable	54,345	(37,056)	-	88,977	(92,508)	-
Increase (decrease) in net taxes other than on income payable	1,525	(4,287)	-	24,053	(8,460)	-
Change in other current assets and liabilities.....	7,454	(13,143)	-	(2,617)	(28,066)	(90.7)
Total decrease (increase) in working capital	44,960	12,796	-	(6,781)	(33,592)	(79.8)

Operating activities

Our primary source of cash flow is funds generated from our operations. Our cash generated from operations did not change significantly compared to the third quarter of 2019, and increased by 14.4% compared to 2018 as a result of higher profitability of our core operations and changes in working capital.

The positive impact of IFRS 16 adoption on our cash provided by operating activities in 2019 amounted to 37.2 billion RUB.

Investing activities

Our cash used in investing activities increased by 10.1% compared to the previous quarter, and by 21.3% compared to 2018.

Our capital expenditures increased by 27 billion RUB, or by 24.6%, compared to the third quarter of 2019, and did not change significantly compared to 2018.

The adoption of IFRS 16 resulted in a decrease in capital expenditures by 9.5 billion RUB that had a positive impact on our cash used in investing activities in 2019.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
Capital expenditures						
Exploration and production						
West Siberia.....	35,922	37,868	(5.1)	141,266	129,050	9.5
Timan-Pechora.....	16,203	14,964	8.3	66,808	69,770	(4.2)
Ural region.....	10,567	9,773	8.1	37,243	35,374	5.3
Volga region.....	14,542	12,767	13.9	43,798	53,481	(18.1)
Other in Russia.....	3,700	2,367	56.3	10,778	11,429	(5.7)
Total in Russia.....	80,934	77,739	4.1	299,893	299,104	0.3
Iraq.....	7,101	5,153	37.8	22,833	18,849	21.1
Other outside Russia.....	14,527	7,894	84.0	42,214	45,903	(8.0)
Total outside Russia.....	21,628	13,047	65.8	65,047	64,752	0.5
Total exploration and production.....	102,562	90,786	13.0	364,940	363,856	0.3
Refining, marketing and distribution						
Russia.....	26,540	13,972	90.0	62,740	65,326	(4.0)
refining.....	16,228	9,264	75.2	39,912	44,621	(10.6)
retail.....	1,634	601	171.9	4,189	7,433	(43.6)
other.....	8,678	4,107	111.3	18,639	13,272	40.4
International.....	5,356	3,551	50.8	18,400	18,616	(1.2)
refining.....	2,849	2,308	23.4	12,327	12,381	(0.4)
retail.....	2,159	880	145.3	4,318	4,222	2.3
other.....	348	363	(4.1)	1,755	2,013	(12.8)
Total refining, marketing and distribution.....	31,896	17,523	82.0	81,140	83,942	(3.3)
Corporate and other.....	1,479	753	96.4	3,895	3,728	4.5
Total capital expenditures.....	135,937	109,062	24.6	449,975	451,526	(0.3)

In Russia, an increase in our upstream capital expenditures in the fourth quarter of 2019 was mainly due to an increase in capital expenditures in Volga region where we continue to develop the Yu. Korchagin and V. Filanovsky fields and prepare to develop the V.Grayfer (Rakushechnoye) field.

An increase in our international capital expenditures quarter-on-quarter was as a result of uneven payments schedule in Uzbekistan.

Compared to the previous quarter, an increase in capital expenditures in refining segment in Russia was primarily due to construction of new facilities at our refineries.

Compared to 2018, the dynamics in our domestic capital expenditures in the exploration and production segment was due to the completion of the next stages of development works at the Yu. Korchagin and V. Filanovsky fields in the Caspian Sea. Higher capital expenditures in West Siberia were a result of an increase in production drilling footage.

A decrease in our domestic capital expenditures in the refining, marketing and distribution segment year-on-year was due to prepayments in 2018 related to the commencement of construction of a delayed coker complex at Nizhny Novgorod refinery.

The table below presents exploration and production capital expenditures at our growth projects.

	Q4 2019	Q3 2019	Change, %	12 months of		Change, %
				2019	2018	
	(millions of rubles)					
West Siberia (Yamal)	5,110	4,537	12.6	21,383	22,007	(2.8)
Caspian region (Projects in Russia)	11,726	10,731	9.3	36,362	47,913	(24.1)
Timan-Pechora (Yaregskoye field).....	1,169	2,440	(52.1)	7,756	10,304	(24.7)
Iraq (West Qurna-2 project).....	6,210	4,580	35.6	19,967	16,366	22.0
Iraq (Block-10).....	891	573	55.5	2,866	2,483	15.4
Uzbekistan	3,547	744	>100	11,605	20,932	(44.6)
Total.....	28,653	23,605	21.4	99,939	120,005	(16.7)

Financing activities

In the fourth quarter of 2019, net movements of short-term and long-term debt generated an outflow of 65 billion RUB, compared to an outflow of 13 billion RUB in the third quarter of 2019. In 2019, net movements of short-term and long-term debt generated an outflow of 113 billion RUB, including 38.6 billion RUB related to the newly adopted IFRS 16, compared to an outflow of 208 billion RUB in 2018.

In 2019, we also recognized additional 8.1 billion RUB of interest payments under IFRS 16.

In August 2018, we announced the start of an open market buyback programme to reduce the share capital of the Company. In relation to this programme, as well as a tender offer that took place in July-August 2019, a Group company spent 243,691 million RUB in the nine months of 2019.

On 20 August 2019, the Company announced the completion of the buyback programme. From its start and also taking into account a tender offer, 56.7 million ordinary shares and depositary receipts of the Company were purchased in aggregate.

Credit rating

Standard & Poor's Ratings Services set the Company's issuer credit rating to BBB.

Moody's set the Company's long-term issuer rating to Baa2.

Fitch Ratings set the Company's long-term issuer default rating to BBB+.

Debt maturity

The following table displays the breakdown of our total debt obligation by maturity dates.

	Total	2020	2021	2022	2023	2024	After
	(millions of rubles)						
Short term debt	16,162	16,162	-	-	-	-	-
Long-term bank loans and borrowings....	117,864	24,294	22,177	17,092	12,943	12,881	28,477
6.125% Non-convertible US dollar bonds, maturing 2020.....	61,866	61,866	-	-	-	-	-
6.656% Non-convertible US dollar bonds, maturing 2022.....	30,905	-	-	30,905	-	-	-
4.563% Non-convertible US dollar bonds, maturing 2023.....	92,769	-	-	-	92,769	-	-
4.750% Non-convertible US dollar bonds, maturing 2026.....	61,786	-	-	-	-	-	61,786
Lease obligation ¹	171,880	27,978	21,977	13,417	13,335	13,543	81,630
Total	553,232	130,300	44,154	61,414	119,047	26,424	171,893

¹ Discounted amounts. Undiscounted cash flows are presented in Note 36 «Capital and risk management» to our consolidated financial statements.

Litigation and claims

The Group is involved in various claims and legal proceedings arising in the normal course of business. While these claims may seek substantial damages against the Group and are subject to uncertainty inherent in any litigation, management does not believe that the ultimate resolution of such matters will have a material adverse impact on the Group's operating results or financial condition. See Note 30 «Commitments and contingencies» to our consolidated financial statements for detailed information on claims and legal proceedings involving the Group.

Critical accounting policies

The preparation of financial statements in conformity with IFRS requires management to select appropriate accounting policies and to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. See Note 3 “Summary of significant accounting policies” to our consolidated financial statements for descriptions of the Company’s major accounting policies. Certain of these accounting policies involve judgments and uncertainties to such an extent that there is a reasonable likelihood that materially different amounts would have been reported under different conditions, or if different assumptions had been used.

Other information

Sectoral sanctions against the Russian companies

In July–September 2014, the United States (“US”), the European Union (“EU”) and several other countries imposed a set of sanctions on Russia, including sectoral sanctions which affect several Russian oil and gas companies. The US Department of the Treasury has placed the Company onto the Sectoral Sanctions Identifications List subject to Directive 4 of the Office of foreign assets control (OFAC). Directive 4 prohibits US companies and individuals from providing, exporting, or re-exporting directly or indirectly, goods, services (except for financial services), or technology in support of exploration or production for deepwater, Arctic offshore or shale projects that have the potential to produce oil in the Russian Federation, or in maritime area spreading from the Russian territory and claimed by the Russian Federation.

From January 2018 (based on acts adopted in August–October 2017), the US expanded abovementioned sanctions to include certain categories of international oil projects initiated on or after 29 January 2018 in any part of the world, in which companies placed on the Sectoral Sanctions Identifications List subject to Directive 4 (including the Company) have an ownership interest of 33% or more, or ownership of a majority of the voting interests.

Management believes that current sanctions do not have a material adverse effect on the current or planned Group’s oil projects. At the same time, the Company continues to monitor and evaluate potential risks for its operations in connection with sanctions.

Operations in Iraq

The Group is exposed to political, economic and legal risks due to its operations in Iraq. Management monitors these risks and believes that there is no adverse effect on the Group’s financial position that can be reasonably estimated at present.

Forward-looking statements

Certain statements in this document are not historical facts and are “forward-looking.” We may from time to time make written or oral forward-looking statements in reports to shareholders and in other communications. Examples of such forward-looking statements include, but are not limited to:

- statements of our plans, objectives or goals, including those related to products or services
- statements of future economic performance
- statements of assumptions underlying such statements.

Forward looking statements that may be made by us from time to time (but that are not included in this document) may also include projections or expectations of revenues, income (or loss), earnings (or loss) per share, dividends, capital structure or other financial items or ratios. Words such as “believes,” “anticipates,” “expects,” “estimates,” “intends” and “plans” and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. You should be aware that a number of important factors could cause actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward-looking statements.

These factors include:

- inflation, interest rate and exchange rate fluctuations
- the price of oil
- the effects of, and changes in, Russian government policy
- the effects of competition in the geographic and business areas in which we conduct operations
- the effects of changes in laws, regulations, taxation or accounting standards or practices
- our ability to increase market share for our products and control expenses
- acquisitions or divestitures
- technological changes
- our success at managing the risks of the aforementioned factors.

This list of important factors is not exhaustive. When relying on forward-looking statements, you should carefully consider the foregoing factors and other uncertainties and events, especially in light of the political, economic, social and legal environment in which we operate. Such forward-looking statements speak only as of the date on which they are made, and, subject to any continuing obligations under the Listing Rules of the U.K. Listing Authority, we do not undertake any obligation to update or revise any of them, whether as a result of new information, future events or otherwise. We do not make any representation, warranty or prediction that the results anticipated by such forward-looking statements will be achieved, and such forward-looking statements represent, in each case, only one of many possible scenarios and should not be viewed as the most likely or standard scenario.