

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

for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

The following report contains a discussion and analysis of the financial position of PJSC LUKOIL at 30 June 2021 and results of its operations for the three-month periods ended 30 June and 31 March 2021, and six-month periods ended 30 June 2021 and 2020, as well as significant factors that may affect its future performance. It should be read in conjunction with our International Financial Reporting Standards ("IFRS") condensed interim consolidated financial statements for the respective periods, including notes.

References to "LUKOIL," "the Company," "the Group," "we" or "us" are references to PJSC LUKOIL and its subsidiaries and associates. 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.

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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 15.4 billion BOE at 1 January 2021 and comprised of 11.7 billion barrels of crude oil and 22.2 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 PSAs 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 the first half of 2021 amounted to 2.1 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, retail sales of 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 the first half of 2021 amounted to 1.2 million barrels per day, and we produced 0.6 million tonnes of petrochemicals, including olefins, polyolefins and products of organic synthesis.

We market our own and purchased 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 19 countries. Most of our retail networks are located close to our refineries. Our retail sales in the first half of 2021 amounted to 6.4 million tonnes of refined products. We also supply jet fuel to airports and bunker fuel to sea and river ports in and outside Russia.

We are involved in production, distribution and marketing of electrical energy and heat both in Russia and internationally. In the first half of 2021, our total output of commercial electrical energy was 7.8 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".

Impact of COVID-19 on the Group's operations

In December 2019, the emergence of a new strain of coronavirus (COVID-2019) was reported in China and has subsequently spread globally. On 11 March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. Mobility restrictions, quarantines and similar lockdown measures implemented in different countries to cope with the pandemic had a significant negative impact on the global economy. Deceleration of economic activity resulted in a substantial decrease in demand for hydrocarbons leading to oversupply on the international oil market and a sharp decline in oil prices. Failure of OPEC+ countries to reach a new agreement on crude oil production quotas in the beginning of March 2020 put an incremental pressure on oil prices. As a result, the price for Brent collapsed to a 20-years minimum of \$13 per barrel in April 2020. On 12 April 2020, OPEC+ countries entered into a new agreement to reduce their collective output by 9.7 million barrels per day starting from 1 May 2020. This coordinated production cut together with the negative impact of low oil prices on crude oil production in different countries resulted in lower supply of crude oil and reduction of surplus on the crude oil market and led to a gradual recovery of oil prices. This upward oil price trend was further supported by the gradual lifting of lockdowns in different countries, recovery in economic activity and respective growth in demand for hydrocarbons. Acceleration of COVID-19 spread in October 2020 resulted in a renewal of lockdown measures in different countries, which put some pressure on oil prices at the end of 2020. Meanwhile, continued recovery in demand for crude oil along with further coordination of production volumes by OPEC+ countries in 2021 resulted in crude oil price growth, with the price of Brent reaching its peak of \$76 per barrel at the end of June 2021.

From the beginning of COVID-19 pandemic the Group has taken necessary measures to avoid direct impact of the pandemic on its operations with a special focus on protection of the health of employees and clients and uninterrupted production processes.

The major impact of COVID-19 on the macroeconomic environment in the oil and gas industry resulted in a number of consequences on operational and financial performance of the Group.

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From February through August 2020, we reduced production of gas at our projects in Uzbekistan to approximately 20% of the projects capacity due to lower demand for Uzbek gas from China. At the same time, since September 2020, we have recovered our gas production in Uzbekistan on the back of growing demand for gas from China. As of December 2020, production was back to the project levels.

Due to the new OPEC+ agreement, we cut our crude oil production in Russia in May 2020 by approximately 310 thousand barrels per day, or by 19%, as compared to our daily crude oil production in Russia in the first quarter of 2020. To minimize the negative impact of this production cut on our financial performance the cut was implemented at the least profitable fields. Since May 2020, our crude oil production in Russia stepped up sequentially and in the second quarter of 2021 was on average approximately 170 thousand barrels per day higher as compared to the May 2020 level. Due to the agreement, crude oil production was also cut at some of our international projects. For example, average daily production at the West Qurna-2 project in Iraq was approximately 50 thousand barrels per day below its capacity in the second quarter of 2021.

Our refining and marketing segment was also affected as demand for jet fuel and motor fuels declined substantially, which had a negative impact on the benchmark refining margins and sales volumes. We adjusted the product slate and optimized utilization rates at our refineries starting from the second quarter of 2020 in order to efficiently react to the adverse macro changes. As a result, in the second quarter of 2020, our average daily refinery throughput volumes were 21% lower than in 2019. Gradual improvement of macro conditions resulted in the recovery of utilization rates at our refineries with the average daily refinery throughput volumes increasing by 16% in the second quarter of 2021 as compared to the second quarter of 2020.

We also faced a steep decline in the retail sales volumes of motor fuels at our filling stations in Russia and other countries in April 2020, when volumes were 40% lower compared to April 2019 level. However, from May 2020, retail sales volumes started recovering and in the second quarter of 2021 were approximately 25% higher compared to the second quarter of 2020.

The impact of the pandemic on the Group's financial performance in the first half of 2021 is discussed in detail in the below discussion and analysis. Management expects that as a result of the effects of the pandemic the macroeconomic environment in the oil and gas industry will remain volatile. Management will continue monitoring the situation closely to ensure prompt reaction to the rapidly changing environment.

Management believes that the Group is in a solid financial condition and has adequate liquidity with the net financial debt position (excluding lease obligations) of minus 114 billion RUB at the end of the first half of 2021. This represents an incremental support for continuous operations and meeting all of the Group's obligations, as well as adequate financing of the investment programme.

Key financial and operational results

	Q2	Q1	Change,	1st half of		Change,
	2021	2021	%	2021	2020	%
			(millions o	of rubles)		
Sales revenue	2,201,884	1,876,483	17.3	4,078,367	2,652,412	53.8
EBITDA ¹ , including	339,842	314,380	8.1	654,222	295,259	>100
Exploration and production segment	220,904	223,793	(1.3)	444,697	181,535	>100
Refining, marketing and distribution segment	126,947	120,210	5.6	247,157	119,035	>100
EBITDA ¹ net of West Qurna-2 project	333,896	302,306	10.4	636,202	276,594	>100
Profit (loss) for the period attributable to LUKOIL						
shareholders	189,750	157,427	20.5	347,177	(64,680)	-
Capital expenditures	104,213	107,220	(2.8)	211,433	247,456	(14.6)
Free cash flow ²	112,203	163,625	(31.4)	275,828	81,026	>100
Free cash flow before changes in working capital	212,004	187,706	12.9	399,710	45,441	>100
		(1	thousand BO	DE per day)		
Production of hydrocarbons, including our share in						
associates and joint ventures	2,100	2,198	(4.5)	2,149	2,223	(3.3)
crude oil and natural gas liquids	1,643	1,624	1.2	1,633	1,744	(6.4)
gas	457	574	(20.4)	516	479	7.7
Refinery throughput at the Group refineries	1,268	1,176	7.8	1,222	1,233	(0.9)

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

In the second quarter of 2021, compared to the previous quarter, our financial results were positively impacted by an increase in international hydrocarbon prices and refining margins, higher crude oil production and refinery throughput volumes, as well as better results of our international trading business. At the same time, these positive factors were partially offset by the accounting specifics of our international trading operations, lower international gas production volumes, lower positive inventory effect at our refineries and lower positive export duty lag effect.

Compared to the first half of 2020, our financial results were driven up by higher hydrocarbon prices, ruble depreciation, change in inventory effect at our refineries, higher refining margins in Russia, positive export duty lag effect, higher international gas production volumes, as well as better results of our international trading operations. Lower crude oil production volumes, realized gas prices and refining margins outside Russia, as well as elimination of tax incentives for high-viscous crude oil were the main restraining factors.

As a result, our EBITDA increased by 8.1% and by 121.6% compared to the first quarter of 2021 and the first half of 2020, respectively.

Foreign exchange losses in the first and the second quarters of 2021 were relatively insignificant and amounted to approximately 1 billion RUB, while the ruble depreciation during the first half of 2020 resulted in a foreign exchange loss of 11 billion RUB.

Compared to the first quarter of 2021 and the first half of 2020, our depreciation, depletion and amortization expenses decreased by 6.3% and increased by 4.2%, respectively.

Due to a significant deterioration in the macroeconomic environment in 2020, the Group recognized impairment loss of property, plant and equipment and other non-current assets in the total amount of 83 billion RUB in the first half of 2020. No impairment losses were recognized in the first half of 2021.

In the second quarter and the first half of 2021, profit attributable to LUKOIL shareholders amounted to 190 billion RUB and 347 billion RUB, compared to profit in the amount of 157 billion RUB in the first quarter of 2021 and loss in the amount of 65 billion RUB in the first half of 2020.

Our capital expenditures decreased by 3 billion RUB, or by 2.8%, compared to the first quarter of 2021, and by 36 billion RUB, or by 14.6%, compared to the first half of 2020.

In the second quarter of 2021, our free cash flow amounted to 112 billion RUB, a decrease of 31.4% compared to the first quarter of 2021, and amounted to 276 billion RUB, an increase of 240.4% compared to the first half of 2020. The quarter-on-quarter dynamics of our free cash flow was restrained by an increase in working capital, while the year-on-year increase was mainly a result of improved profitability of our core operations and lower capital expenditures.

The Group's average daily hydrocarbon production decreased by 4.5% compared to the first quarter of 2021 mainly as a result of a decrease in gas production in Uzbekistan, and decreased by 3.3% compared to the first half of 2020 mainly due to the external limitations on oil production due to the OPEC+ agreement.

² Cash flow from operating activities less capital expenditures.

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Average daily throughput volumes at our refineries increased by 7.8% compared to the previous quarter and didn't change significantly compared to the first half of 2020. In the second quarter of 2021, growth of refinery throughput volumes both in and outside Russia was attributable to the recovery of refineries utilization after scheduled maintenance works and throughput optimization driven by the changes in macro environment.

Changes in the Group structure

In July 2021, a Group company entered into a contract to purchase the 50% operator interest in the Area 4 project in Mexico by acquiring the operator's holding company for approximately \$435 million plus expenditures incurred in 2021 as of the transaction completion date. The transaction will be closed after all the customary conditions, including approval by the Mexican authorities, are fulfilled.

Main macroeconomic factors affecting our results of operations

International crude oil and refined products prices

The price at which we sell crude oil and refined products is the primary driver of the Group's revenues.

The dynamics of our realized prices on international markets generally matches the dynamics of commonly used spot benchmarks such as Brent crude oil price, however our average prices are usually different from such benchmarks due to different delivery terms, quality mix, as well as specifics of regional markets in case of petroleum product sales.

During the first half of 2021, the price for Brent crude oil increased from \$50.0 per barrel in January to \$76.0 per barrel in the end of June owing to gradual recovery of global demand together with the effect of the OPEC+ agreement. As a result, average price increased by 12.8% compared to the first quarter of 2021, and by 62.0% compared to the first half of 2020.

The following tables show the average crude oil and refined product prices.

	Q2	Q2	Q1	Change,	1st h	alf of	Change,
	2021	2021	%	2021	2020	%	
			(US dollars p	er barrel)			
Brent FOB dated	68.65	60.85	12.8	64.77	39.98	62.0	
Urals (average MED and Rotterdam)	67.01	59.81	12.0	63.43	38.98	62.7	
			(US dollars p	er tonne)			
Diesel fuel 10 ppm (FOB Rotterdam)	552.55	490.66	12.6	521.78	374.94	39.2	
Premium gasoline (FOB Rotterdam)	657.25	557.43	17.9	607.61	369.34	64.5	
Naphtha (FOB Rotterdam)	589.73	538.53	9.5	564.27	321.75	75.4	
Jet fuel (FOB Rotterdam)	574.14	508.96	12.8	541.73	364.42	48.7	
Vacuum gas oil (FOB Rotterdam)	473.32	423.58	11.7	448.59	291.44	53.9	
Marine fuel 0.5% (FOB Rotterdam)	478.10	441.16	8.4	459.73	311.61	47.5	
Fuel oil 3.5% (FOB Rotterdam)	370.56	340.71	8.8	355.72	194.55	82.8	
Source: Platts, Argus.							

Source: F	latts,	Argus.
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	Q2 Q1	Q2 Q1 C	Q2 Q1 Change,	Change,	1st half of		Change,
	2021	2021	%	2021	2020	%	
			(rubles per	barrel)			
Brent FOB dated	5,095	4,524	12.6	4,811	2,773	73.5	
Urals (average MED and Rotterdam)	4,973	4,446	11.9	4,711	2,704	74.2	
			(rubles per	tonne)			
Diesel fuel 10 ppm (FOB Rotterdam)	41,008	36,476	12.4	38,757	26,010	49.0	
Premium gasoline (FOB Rotterdam)	48,778	41,440	17.7	45,132	25,622	76.1	
Naphtha (FOB Rotterdam)	43,767	40,035	9.3	41,913	22,320	87.8	
Jet fuel (FOB Rotterdam)	42,610	37,837	12.6	40,239	25,281	59.2	
Vacuum gas oil (FOB Rotterdam)	35,128	31,489	11.6	33,320	20,218	64.8	
Marine fuel 0.5% (FOB Rotterdam)	35,482	32,796	8.2	34,148	21,617	58.0	
Fuel oil 3.5% (FOB Rotterdam)	27,501	25,329	8.6	26,422	13,496	95.8	

Translated to rubles using average exchange rate for the period.

Domestic crude oil and refined products prices

Most of the crude oil in Russia is produced and then refined or exported by vertically integrated oil companies. As a result, there is no liquid spot market for crude oil in Russia and no publicly available spot price benchmark. Domestic prices may deviate significantly from export netbacks and they also vary between different regions of Russia driven by supply-demand balance on regional markets.

Domestic prices for refined products correlate to some extent with export netbacks, but are also materially affected by supply-demand balance on regional markets.

The table below represents average domestic wholesale prices for refined products for the respective periods.

	Q2	Q2	Q2	Q2 Q1	Change,	1st half of		Change,	
	2021	2021	%	2021	2020	%			
	(rubles per tonne)								
Diesel fuel	39,368	41,125	(4.3)	40,247	35,526	13.3			
Regular gasoline	45,889	45,069	1.8	45,479	38,861	17.0			
Premium gasoline	47,847	47,375	1.0	47,611	41,115	15.8			
Fuel oil	21,097	20,194	4.5	20,646	9,722	>100			

Source: InfoTEK (excluding VAT).

Changes in ruble exchange rate and inflation

A substantial part of our revenue is either denominated in US dollars and euro or correlated to some extent with US dollar crude oil prices, while most of our costs are settled in Russian rubles. Therefore, a depreciation 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.

	Q2	Q1	1st ha	f of	
	2021	2021	2021	2020	
Ruble inflation (CPI), %	2.0	2.1	4.2	2.7	
Ruble to US dollar exchange rate					
Average for the period	74.22	74.34	74.28	69.37	
At the beginning of the period	75.70	73.88	73.88	61.91	
At the end of the period	72.37	75.70	72.37	69.95	
Ruble to euro exchange rate					
Average for the period	89.39	89.70	89.55	76.44	
At the beginning of the period	88.88	90.68	90.68	69.34	
At the end of the period	86.20	88.88	86.20	78.68	

Source: Bank of Russia, Federal State Statistics Service.

Taxation

Key upstream tax rates. The following tables represent average statutory enacted rates applicable to our upstream operations in Russia with no taxation incentives:

	Q2	Q2 Q1	Change,	1st half of		Change,	
	2021	2021	%	2021	2020	%	
	(US dollars per tonne)						
Mineral extraction tax ¹	251.52	211.15	19.1	231.43	111.31	>100	
Export duty on crude oil	57.08	44.04	29.6	50.59	48.15	5.1	

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

	Q2 Q	Q1	Change,	1st half of		Change,		
	2021	2021	%	2021	2020	%		
	(rubles per tonne)							
Mineral extraction tax	18,667	15,697	18.9	17,190	7,722	>100		
Export duty on crude oil ¹	4,236	3,274	29.4	3,758	3,340	12.5		

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

These rates are linked to international crude oil prices and change 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. From 2019, crude oil export duty rate is being gradually reduced and will be nulled in 2024. Simultaneously, the mineral extraction tax rate for crude oil is being equivalently increased. 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, which also led to increase in mineral extraction tax rate.

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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:

Rate =
$$919 \times (Price - 15) \times \frac{Exchange\ Rate}{261}$$
 - Incentive + $428 + Tax\ Manoeuvre\ Factor + Damper\ Factors$

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 *Tax Manoeuvre Factor* is derived as Export duty reduction factor multiplied by the base export duty rate. The two fixed *Damper Factors* are applicable when the corresponding components of a negative excise formula are positive. From 2020, in addition to the fixed factors a new variable Damper Factor, which is linked to the export netbacks for gasoline and diesel fuel, was added to the formula. In 2021, the formula was amended by increasing the variable Damper Factor, which was synchronized with the increase in the damper coefficient in the negative excise tax formula.

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

					2024 and
	2020	2021	2022	2023	further
Export duty reduction factor	0.333	0.500	0.667	0.833	1
			(rubles)		
Damper Factor for gasoline	105	105	105	105	105
Damper Factor for diesel fuel	92	92	92	92	92

Mineral extraction tax on crude oil has the following types of tax incentives applied to our fields and deposits:

- A special reducing coefficient is applied to the standard tax rate depending on location, size and complexity of a particular field. This type of incentive with different coefficients is applied to our Yu. Korchagin field located in the Caspian offshore, 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. Vinogradov, Sredne-Nazymskoye and Imilorskoye fields and Tyumen deposits. Before the end of 2020, the incentive was applied to our highly depleted fields (more than 80% depletion), the Permian layers of our Usinskoye field in Timano-Pechora producing high-viscous crude oil, as well as our Yaregskoye field producing extra-viscous crude oil. After the adoption of amendments to the Russian Tax Code in October 2020 these tax incentives have been cancelled as of 1 January 2021. The cancellation of mineral extraction tax incentives for our highly depleted fields was followed by allowance of inclusion of the respective license areas into Group 3 of tax on additional income regime (see below) as of beginning of 2021;
- 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 Sea;
- A fixed tax rate of 30% of the Urals price is applied to our offshore greenfields, located in the Baltic Sea;
- A special tax rate is applied to crude oil produced at license areas with TAI regime. For Groups 1 and 4 of TAI a discount to the special tax rate is applied depending on the duration of commercial production at the particular license area. For highly depleted license areas in Group 3 of TAI a 20% discount will be applied to the special tax rate starting from 1 January 2024.

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

Tax on additional income. Starting from 2019, a tax on additional income (hereinafter TAI) from the crude oil and gas condensate production 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 five groups of license areas. In Group 1, LUKOIL has nineteen license areas with greenfields in the Yamal-Nenets Autonomous District, including Pyakyakhinskoye field, and a number of fields in Timan-Pechora. In Group 3, LUKOIL has eight license areas with brownfields in West Siberia that adopted TAI regime as of 1 January 2019, as well as 105 license areas with depleted reserves in different regions transferred to TAI regime in 2021. In Group 4, LUKOIL has two license areas with greenfields in West Siberia and five license areas in Timan-Pechora added in 2021. LUKOIL has license areas neither in Group 2 nor in Group 5 of the TAI regime.

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)						
	2024 and 2020 2021 2022 2023 further						
Adjusting factor							

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 lead to sizeable impact on our financial results in the periods of high oil price volatility. As a result of the tax manoeuvre, the lag effect is migrating from the export duty to the mineral extraction tax.

	Q2	Q1	Q1 Change,	1st half of		Change,
	2021	2021	%	2021	2020	%
			(US dollars pe	r barrel)		
Urals price (Argus)	67.01	59.81	12.0	63.43	38.98	62.7
Export duty on crude oil	7.82	6.03	29.7	6.93	6.60	5.0
Mineral extraction tax on crude oil	34.46	28.92	19.2	31.70	15.25	>100
Net Urals price ¹	24.73	24.86	(0.5)	24.80	17.13	44.8
Export duty lag effect	0.47	1.18	(60.2)	0.82	(1.24)	-
Mineral extraction tax lag effect	0.47	1.18	(60.2)	0.82	(0.62)	-
Net Urals price ¹ assuming no lag	23.79	22.50	5.7	23.16	18.99	21.9
			(rubles per b	arrel)2		
Urals price (Argus)	4,973	4,446	11.9	4,711	2,704	74.2
Export duty on crude oil	580	448	29.5	515	458	12.4
Mineral extraction tax on crude oil	2,557	2,150	18.9	2,355	1,058	>100
Net Urals price ¹	1,836	1,848	(0.6)	1,841	1,188	55.0
Export duty lag effect	35	88	(60.2)	61	(86)	-
Mineral extraction tax lag effect	35	88	(60.2)	61	(43)	-
Net Urals price ¹ assuming no lag	1,766	1,672	5.6	1,719	1,317	30.5

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

Crude oil produced at some of our fields and license areas under special tax regimes is subject to zero export duty. In particular, a zero rate applies to crude oil of our V. Filanovsky field and other greenfields located in the Caspian Sea, the offshore greenfields in the Baltic Sea as well as license areas included into the Group 1 of the TAI regime.

A reduced rate was applied to crude oil produced at our Yaregskoye field producing extra-viscous crude oil and our Yu. Korchagin field in the Caspian offshore. In October 2020, amendments to the Russian customs legislation were adopted, providing for the cancellation of reduced export duty rates applied to crude oil produced at these fields starting from 1 January 2021.

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.

² Translated to rubles for Urals and export duty on crude oil using average exchange rate for the period.

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

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-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.

Tax incentives

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

	Mineral extraction			As %	
	tax	Export duty	Total	of oil price	
		(in US dollars	per barrel)		
Under 2021 tax formulas					
Standard	23.5	5.7	29.2	58.3	
Yu. Korchagin field	13.2	5.7	18.9	37.8	
V. Filanovsky field	7.5	0.0	7.5	15.0	
D41 field	15.0	0.0	15.0	30.0	
V. Vinogradov and Imilorskoye fields	15.2	5.7	20.9	41.9	
New fields with reserves below 5 million tonnes	17.0-23.5	5.7	22.7-29.2	45.5-58.3	
Tyumen deposits	21.4	5.7	27.1	54.5	

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.

	Q2	Q1	Change,	1st ha	lf of	Change,		
	2021	2021	%	2021	2020	%		
	(US dollars per thousand cubic meters) ¹							
Nakhodkinskoye field	6.17	6.16	0.2	6.17	5.78	6.7		
Pyakyakhinskoye field	7.90	7.71	2.4	7.81	6.89	13.3		

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

	Q2	Q1	Change,	1st ha	lf of	Change,		
	2021	2021	%	2021	2020	%		
	(rubles per thousand cubic meters)							
Nakhodkinskoye field	458	458	-	458	401	14.2		
Pyakyakhinskoye field	586	573	2.3	580	478	21.3		

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.

	2020 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.

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

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 used as refinery feedstock, bunker fuel or fuel at power plants is reimbursed in double amount. Since 1 April 2020, the fixed excise tax rate for middle distillates was replaced with formula-based rate linked to the level of damper for diesel fuel.

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

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

	Q2	Q2	Q2	Q2	Q1	Change,	1st h	alf of	Change,
	2021	2021	%	2021	2020	%			
	(rubles per tonne)								
Gasoline (below Euro-5)	13,624	13,624	-	13,624	13,100	4.0			
Gasoline (Euro-5)	13,262	13,262	-	13,262	12,752	4.0			
Diesel fuel	9,188	9,188	-	9,188	8,835	4.0			
Motor oils	5,841	5,841	-	5,841	5,616	4.0			
Middle distillates*	9,938	12,601	(21.1)	11,262	14,628	(23.0)			

^{*}Excise tax rates for middle distillates after 1 April 2020 are calculated by formula.

Established excise tax rates are listed below.

	2021	2022	2023	2024
		(rubles per toni	ne)	
Gasoline (below Euro-5)	13,624	14,169	14,736	15,325
Gasoline (Euro-5)	13,262	13,793	14,345	14,919
Diesel fuel	9,188	9,556	9,938	10,336
Motor oils	5,841	6,075	6,318	6,571

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 product 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 and starting from 2021 it also includes an investment factor. The damper coefficient is calculated by multiplying the respective Compensation Coefficients and a difference between gasoline and diesel fuel export netbacks at North-Western Russia delivery basis and Fixed benchmarks. When the damper coefficient is positive, it is payable by the Government to the refinery, and vice versa. In 2021, the damper coefficient formula was amended which resulted in an increase in damper coefficient for gasoline from 1 May 2021 and for diesel fuel from 1 January 2022.

The investment factor is a multiplier to the negative excise tax excluding the damper, which is applicable when a special agreement is signed with the Government providing for at least 60 billion RUB of investments into development of a refinery. The multiplier depends on the refinery's geography. In March 2021, the Company signed an agreement with the Government according to which it is eligible for the investment factor in relation to the project for construction of a delayed coker unit at Nizhny Novgorod refinery. In August 2021, the Company signed similar agreement in relation to the project for construction of a catalytic cracker unit at Perm refinery. For both projects the investment factor will be applied until 1 January 2031.

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

	2020	January - April 2021	May - December 2021	2022	2023	2024
			(rubles per	tonne)		
Fixed benchmark for gasoline	53,600	56,300	52,300	55,200	56,900	58,650
Fixed benchmark for diesel fuel	48,300	50,700	50,700	52,250	53,850	55,500
					2020 aı	nd further
Compensation coefficient for gasoline						0.68
Compensation coefficient for diesel fuel						0.65

The following tables present the average enacted damper coefficients for the respective periods:

	Q2	Q2 Q	Q2 Q1	Q2 Q1	Q2 Q1	Q2 Q1 (Q2 Q1	Q2 Q1	Q1 Change,	1st half of		Change,
	2021	2021	%	2021	2020	%						
	(US dollars per tonne) ¹											
Gasoline	159.21	48.99	>100	104.36	(129.22)	-						
Diesel fuel	63.87	15.87	>100	39.98	(92.78)	-						

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

	Q2	Q1	Change,	1st h	alf of	Change,		
	2021	2021	%	2021	2020	%		
	(rubles per tonne)							
Gasoline	11,816	3,642	>100	7,752	(8,964)	-		
Diesel fuel	4,740	1,180	>100	2,970	(6,436)	-		

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 set as 17.0%. 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 Transnefteproduct, 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.

	Q2 2021 to	1 st half of 2021 to
	Q1 2021	1st half of 2020
Transneft (crude oil)	0.0%	3.6%
Russian Railways (crude oil and refined products)	0.0%	3.7%

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. 8, 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 27 "Segment information" to our condensed interim consolidated financial statements.

Exploration and production

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

	Q2	Q2 Q1 Change,		Q2 Q1 Change, 1st half of		half of	Change,
	2021	2021	%	2021	2020	%	
			(millions o	f rubles)			
EBITDA	220,904	223,793	(1.3)	444,697	181,535	>100	
in Russia	193,379	186,970	3.4	380,349	137,501	>100	
outside Russia and Iraq	21,579	24,749	(12.8)	46,328	25,369	82.6	
in Iraq	5,946	12,074	(50.8)	18,020	18,665	(3.5)	
Hydrocarbon extraction expenses	50,710	48,539	4.5	99,249	101,204	(1.9)	
in Russia	40,236	37,943	6.0	78,179	81,244	(3.8)	
outside Russia and Iraq	6,555	6,392	2.6	12,947	11,507	12.5	
in Iraq	3,919	4,204	(6.8)	8,123	8,453	(3.9)	
•			(rubles pe	r BOE)			
Hydrocarbon unit extraction expenses (excluding							
Iraq)	256	235	8.8	245	243	0.8	
in Russia	249	240	3.8	245	239	2.1	
outside Russia and Iraq	305	208	46.7	248	271	(8.5)	
-			(US dollars	per BOE)			
Hydrocarbon unit extraction expenses (excluding							
Iraq)	3.44	3.16	9.0	3.30	3.50	(5.8)	
in Russia	3.36	3.23	3.9	3.29	3.45	(4.6)	
outside Russia and Iraq	4.11	2.80	46.8	3.34	3.91	(14.6)	

Our upstream EBITDA decreased by 1.3% compared to the first quarter of 2021. At the same time, our EBITDA in Russia increased by 3.4% quarter-on-quarter mainly as a result of higher crude oil prices and production volumes, while lower positive export duty lag effect and increased damper factor in mineral extraction tax rate were the restraining factors. Outside Russia and Iraq, our EBITDA decreased by 12.8% quarter-on-quarter mainly as a result of lower gas production volumes in Uzbekistan and lower crude oil production and sales volumes, that was partially offset by higher crude oil and gas realized prices.

Compared to the first half of 2020, our upstream EBITDA increased more than two-fold. In Russia, the increase was mainly attributed to higher crude oil prices, the ruble depreciation and export duty lag effect that was partially offset by crude oil production cut due to the OPEC+ agreement and elimination of tax incentives for high-viscous crude oil. Outside Russia and Iraq, our upstream EBITDA increased mainly due to higher crude oil prices, higher gas production volumes in Uzbekistan and the ruble depreciation. This was partially offset by lower realized gas prices.

The dynamics of EBITDA of the West Qurna-2 project was mainly a result of changes in incurred costs and their compensation.

The following table summarizes our hydrocarbon production by major regions.

	Q2	Q1	Change,	1st h	alf of	Change,
	2021		%	2021	2020	%
			(thousand BOE	per day)		
Crude oil and natural gas liquids						
Consolidated subsidiaries	<0.7		4.0	451	5 00	(5.0)
West Siberia	687	655	4.9	671	708	(5.2)
Timan-Pechora	275	265	3.8	270	296	(8.8)
Ural region	309	312	(1.0)	310	318	(2.5)
Volga region	221	221	-	221	223	(0.9)
Other in Russia	28	28	-	28	30	(6.7)
Total in Russia	1,520	1,481	2.6	1,500	1,575	(4.8)
Iraq ¹	35	46	(23.9)	40	68	(41.2)
Other outside Russia	46	55	(16.4)	51	55	(7.3)
Total outside Russia	81	101	(19.8)	91	123	(26.0)
Total consolidated subsidiaries	1,601	1,582	1.2	1,591	1,698	(6.3)
Our share in associates and joint ventures						
in Russia	12	12	-	12	11	9.1
outside Russia	30	30	-	30	35	(14.3)
Total share in production of associates and joint						<u> </u>
ventures	42	42	-	42	46	(8.7)
Total crude oil and natural gas liquids	1,643	1,624	1.2	1,633	1,744	(6.4)
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Natural and petroleum gas ²						
Consolidated subsidiaries						
West Siberia	180	193	(6.7)	187	209	(10.5)
Timan-Pechora	29	29	-	29	31	(6.5)
Ural region	23	27	(14.8)	25	23	8.7
Volga region	24	27	(11.1)	25	26	(3.8)
Other in Russia	0	0	(11.1)	0	0	
Total in Russia	256	276	(7.2)	266	289	(9.0)
						(8.0)
Uzbekistan	143	236	(39.4)	189	131	44.3
Other outside Russia	46	51	(9.8)	49	47	4.3
Total outside Russia	189	287	(34.1)	238	178	33.7
Total consolidated subsidiaries	445	563	(21.0)	504	467	7.9
Share in associates and joint ventures						
in Russia	2	2	(13.4)	2	1	82.5
outside Russia	10	9	3.9	10	11	(7.5)
Total share in production of associates and joint						
ventures	12	11	9.1	12	12	3.0
Total natural and petroleum gas	457	574	(20.4)	516	479	7.7
Total daily hydrocarbon production (excluding						
the West Qurna-2 project)	2,065	2,152	(4.0)	2,109	2,155	(2.1)
Total daily hydrocarbon production	2,100	2,198	(4.5)	2,149	2,223	(3.3)
Including natural gas liquids produced at the gas						
processing plants	28	34	(17.0)	31	41	(23.9)

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.

	Q2 Q1 (Change,	1st half of		Change,		
	2021	2021	%	2021	2020	%	
	(thousands of tonnes)						
West Siberia	8,333	7,866	5.9	16,199	17,088	(5.2)	
Timan-Pechora	3,530	3,352	5.3	6,882	7,492	(8.1)	
Ural region	3,653	3,578	2.1	7,231	7,347	(1.6)	
Volga region	2,610	2,593	0.7	5,203	5,299	(1.8)	
Other in Russia	358	357	0.3	715	759	(5.8)	
Crude oil produced in Russia	18,484	17,746	4.2	36,230	37,985	(4.6)	
Iraq ¹	460	609	(24.5)	1,069	1,815	(41.1)	
Other outside Russia	501	561	(10.7)	1,062	1,155	(8.1)	
Crude oil produced outside Russia	961	1,170	(17.9)	2,131	2,970	(28.2)	
Total crude oil produced by consolidated							
subsidiaries	19,445	18,916	2.8	38,361	40,955	(6.3)	
Our share in crude oil produced by associates and joint ventures:							
in Russia	138	141	(2.1)	279	257	8.6	
outside Russia	345	332	3.9	677	804	(15.8)	
Total crude oil produced	19,928	19,389	2.8	39,317	42,016	(6.4)	

¹ Compensation crude oil related to the Group.

Our main oil producing region is West Siberia where we produced 42.9% and 42.2% of our crude oil in the second quarter and the first half of 2021 (41.6% in the first quarter of 2021 and 41.7% in the first half of 2020). Our crude oil production increased by 2.8% compared to the first quarter of 2021, and decreased by 6.4% compared to the first half of 2020.

The dynamics of our crude oil production volumes in Russia since the beginning of 2017 has been driven by external limitations due to agreements of OPEC and some of the non-OPEC countries, including Russia, (the OPEC+ countries) to cap production levels in order to stabilize the global crude oil market. Following these agreements, the Group limited production in its traditional regions (West Siberia, Timan-Pechora, and Ural) at the least-productive fields and fields with high water-cuts.

In April 2020, OPEC+ countries entered into a new agreement to reduce their collective output by 9.7 million barrels per day starting from 1 May 2020 as a response to a dramatic contraction in demand for crude oil due to the COVID-19 pandemic. The agreement expires at the end of 2022 and its parameters are adjusted depending on the market situation. Due to the agreement, from May 2020, the Group reduced its crude oil production in Russia by approximately 310 thousand barrels per day, or by 19%, as compared to the average daily crude oil production level in the first quarter of 2020. Subsequently, our crude oil production in Russia has been gradually recovering. As a result, in the second quarter of 2021, crude oil production by the Group in Russia was approximately 170 thousand barrels per day higher than the May 2020 level.

The new OPEC+ agreement also led to limitations on oil production by the Group at certain international projects.

Despite external limitations on production volumes, development of the priority projects continued. In particular, in West Siberia total crude oil and gas condensate production at the V. Vinogradov, Imilorskoye, Sredne-Nazymskoye and Pyakyakhinskoye fields increased in the first half of 2021 by 7.3% year-on-year, to 2.2 million tonnes.

In the first half of 2021, high viscosity oil production at the Yaregskoye field and Permian reservoir of the Usinskoye field increased by 5.1% year-on-year, to 2.6 million tonnes.

Implementation of drilling programmes at the V. Filanovsky and Yu. Korchagin fields in the Caspian Sea allowed to increase total crude oil and gas condensate production in the first half of 2021 by 1.7% year-on-year, to 3.7 million tonnes. The V. Grayfer field development continues: subsea pipelines and cable lines are being laid, shipyards are constructing topsides of the platforms.

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

	Q2	Q2 Q1 (Change,	1st half of		Change,		
	2021	2021	%	2021	2020	%		
	(millions of cubic meters)							
West Siberia, including:	2,774	2,958	(6.2)	5,732	6,436	(10.9)		
Nakhodkinskoye field	1,107	1,176	(5.9)	2,283	2,725	(16.2)		
Pyakyakhinskoye field	776	847	(8.4)	1,623	1,556	4.3		
Other fields	891	935	(4.7)	1,826	2,155	(15.3)		
Timan-Pechora	446	440	1.4	886	961	(7.8)		
Ural region	356	415	(14.2)	771	708	8.9		
Volga region	366	406	(9.9)	772	811	(4.8)		
Other in Russia	2	3	(33.3)	5	11	(54.5)		
Gas produced in Russia	3,944	4,222	(6.6)	8,166	8,927	(8.5)		
Uzbekistan	2,209	3,612	(38.8)	5,821	4,043	44.0		
Other outside Russia	720	769	(6.4)	1,489	1,474	1.0		
Gas produced outside Russia	2,929	4,381	(33.1)	7,310	5,517	32.5		
Total gas produced by consolidated subsidiaries	6,873	8,603	(20.1)	15,476	14,444	7.1		
Our share in gas produced by associates and joint ventures:								
in Russia	36	41	(12.2)	77	43	79.1		
outside Russia	153	145	5.5	298	324	(8.0)		
Total gas produced	7,062	8,789	(19.6)	15,851	14,811	7.0		

In the second quarter and the first half of 2021, LUKOIL Group's gas production was 7.1 billion cubic meters and 15.9 billion cubic meters, which was 19.6% lower quarter-on-quarter, and 7.0% higher year-on-year.

In Russia, our major gas production region is West Siberia (Bolshekhetskaya depression), where gas is produced mainly from the Nakhodkinskoye and Pyakyakhinskoye fields. Our gas production in Russia decreased by 6.6% compared to the first quarter of 2021, and by 8.5% compared to the first half of 2020 mainly as a result of natural production decline at our Nakhodkinskoye field. Outside Russia, the main gas production region is Uzbekistan where we have shares in two PSAs. Quarter-on-quarter, our international gas production (including our share in associates' production) decreased by 31.9% due to planned maintenance works at the projects in Uzbekistan. At the same time, our international gas production increased by 30.3% year-on-year mainly as a result of gas production recovery in Uzbekistan after temporary decline in 2020 due to lower demand from China for gas produced in Uzbekistan amid the COVID-19 pandemic.

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. Starting from 1 May 2020, crude oil production at the field is limited due to the OPEC+ agreement. In the second quarter of 2021, average daily production at the field was approximately 50 thousand barrels per day below its capacity.

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.

	Costs	Remunera-	Crude oil	Crude oil to
(millions of US dollars)	incurred ¹	tion fee	received	be received
Cumulative at 31 December 2020	9,778	675	9,868	585
Change in the first half of 2021	330	62	505	(113)
Cumulative at 30 June 2021	10,108	737	10,373	472

¹ Including prepayments.

The West Qurna-2 project summary is presented below:

	Q2 2021		Q1 2021			
					Change, %	
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	32,221	4,711	27,675	4,046	16.4	16.4
Production related to cost compensation and						
remuneration	3,144	460	4,166	609	(24.5)	(24.5)
Shipment of compensation crude oil ¹	4,500	658	3,242	474	38.8	38.8
	(millions	(millions of	(millions	(millions of		
	of rubles)	US dollars)	of rubles)	US dollars)		
Cost compensation	7,617	103	14,805	199	(48.6)	(48.2)
Remuneration fee	2,065	28	1,765	24	17.0	16.7
	9,682	131	16,570	223	(41.6)	(41.3)
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil,						
gas and products)1	23,506	317	13,995	188	68.0	68.6
Extraction expenses	3,919	52	4,204	57	(6.8)	(8.8)
Depreciation, depletion and amortization	3,712	50	10,601	143	(65.0)	(65.0)
EBITDA	5,946	81	12,074	162	(50.8)	(50.0)

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.

		1st				
	2021		20	20	Change,	, %
	(thousand barrels)	(thousand tonnes)	(thousand barrels)	(thousand tonnes)		
Total production	59,896	8,757	68,510	10,016	(12.6)	(12.6)
Production related to cost compensation and remuneration	7,310 7,742	1,069 1,132	12,415 9,698	1,815 1,418	(41.1) (20.2)	(41.1) (20.2)
on photos of companion court on	(millions of rubles)	(millions of US dollars)	(millions of rubles)	(millions of US dollars)	(=0.2)	(20:2)
Cost compensation	22,422	302	23,375	341	(4.1)	(11.4)
Remuneration fee	3,830	52	4,391	63	(12.8)	(17.5)
	26,252	354	27,766	404	(5.5)	(12.4)
Cost of compensation crude oil, received as liability settlement (included in Cost of purchased crude oil,						
gas and products)1	37,501	505	16,241	235	130.9	>100
Extraction expenses	8,123	109	8,453	122	(3.9)	(10.7)
Depreciation, depletion and amortization	14,313	193	15,012	220	(4.7)	(12.3)
EBITDA	18,020	243	18,665	272	(3.5)	(10.7)

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, marketing and distribution

The following table summarizes key figures on our Refining, marketing and distribution segment:

	Q2	Q1	Change,	1st half of		Change,
	2021	2021	%	2021	2020	%
			(millions of	rubles)		
EBITDA	126,947	120,210	5.6	247,157	119,035	>100
in Russia	85,013	66,614	27.6	151,627	94,823	59.9
outside Russia	41,934	53,596	(21.8)	95,530	24,212	>100
Refining expenses at the Group refineries	29,722	27,375	8.6	57,097	42,885	33.1
in Russia	12,195	12,337	(1.2)	24,532	19,114	28.3
outside Russia	17,527	15,038	16.6	32,565	23,771	37.0
			(rubles per	tonne)		
Unit refining expenses at the Group refineries	1,889	1,895	(0.3)	1,892	1,401	35.0
in Russia	1,173	1,231	(4.7)	1,201	945	27.0
outside Russia	3,284	3,403	(3.5)	3,338	2,287	46.0
			(US dollars p	er tonne)		
Unit refining expenses at the Group refineries	25.45	25.49	(0.2)	25.47	20.19	26.1
in Russia	15.80	16.55	(4.5)	16.17	13.63	18.7
outside Russia	44.25	45.78	(3.3)	44.94	32.96	36.3

Our refining, marketing and distribution EBITDA was 5.6% higher than in the first quarter of 2021. In Russia, refining, marketing and distribution EBITDA increased by 27.6% quarter-on-quarter largely due to an increase in refining margins and throughput volumes, as well as stronger results of our petrochemical, lubricants and aircraft refueling businesses. This growth was restrained by lower positive inventory effect at our refineries, weaker retail margins and seasonal decrease in profitability of our power generation business. Outside Russia, our refining, marketing and distribution EBITDA decreased by 21.8% compared to the first quarter of 2021 mainly due to the accounting specifics of our trading operations and lower positive inventory effect at our refineries. These factors were partially offset by better results of our international trading business, higher refinery throughput volumes and refining margins, as well as increased retail margins and sales volumes.

Compared to the first half of 2020, our refining, marketing and distribution EBITDA increased more than two-fold. In Russia, our downstream EBITDA increased largely due to higher refining margins, positive inventory effect at our refineries and stronger results of petrochemical business. This was partially offset by weaker retail margins. Outside Russia, our downstream EBITDA increased significantly owing to a change in inventory effect at our refineries, stronger results of our trading operations, and better results of the retail business, that was partially offset by lower refinery throughput volumes and lower refining margins.

Refining and petrochemicals

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

	Q2 Q1 Chan 2021 2021	Change,	1 st h 2021	alf of 2020	Change,	
	2021	2021	(thousands o		2020	70
Refinery throughput at the Group refineries	15,738	14,444	9.0	30,182	30,615	(1.4)
in Russia	10,400	10,026	3.7	20,426	20,220	1.0
outside Russia, including	5,338	4,418	20.8	9,756	10,395	(6.1)
crude oil	4,924	3,788	30.0	8,712	9,588	(9.1)
refined products	414	630	(34.3)	1,044	807	29.4
Refinery throughput at third party refineries	1	-	-	1	77	(98.7)
Total refinery throughput	15,739	14,444	9.0	30,183	30,692	(1.7)
Production of the Group refineries in Russia ¹	9,892	9,468	4.5	19,360	19,134	1.2
diesel fuel	3,987	3,863	3.2	7,850	8,314	(5.6)
motor gasoline	1,988	1,685	18.0	3,673	3,493	5.2
fuel oil	1,114	890	25.2	2,004	1,338	49.8
jet fuel	669	550	21.6	1,219	1,003	21.5
lubricants and components	200	229	(12.7)	429	466	(7.9)
straight-run gasoline	623	635	(1.9)	1,258	1,392	(9.6)
vacuum gas oil	81	552	(85.3)	633	20	>100
bitumen	263	118	>100	381	484	(21.3)
coke	235	306	(23.2)	541	586	(7.7)
bunker fuel	378	333	13.5	711	1,061	(33.0)
gas products	88	71	23.9	159	149	6.7
petrochemicals	90	77	16.9	167	163	2.5
other products	176	159	10.7	335	665	(49.6)
Production of the Group refineries outside						
Russia	5,242	4,145	26.5	9,387	9,465	(0.8)
diesel fuel	2,526	1,917	31.8	4,443	4,589	(3.2)
motor gasoline	1,141	646	76.6	1,787	2,106	(15.1)
fuel oil	28	105	(73.3)	133	484	(72.5)
jet fuel	109	117	(6.8)	226	326	(30.7)
straight-run gasoline	464	648	(28.4)	1,112	883	25.9
coke	32	23	39.1	55	36	52.8
bunker fuel	619	442	40.0	1,061	219	>100
gas products	133	105	26.7	238	252	(5.6)
petrochemicals	10	11	(9.1)	21	23	(8.7)
other products	180	131	37.4	311	547	(43.1)
Refined products produced by the Group	15,134	13,613	11.2	28,747	28,599	0.5
Refined products produced at third party refineries	4	-	-	4	76	(94.7)
Total refined products produced	15,138	13,613	11.2	28,751	28,675	0.3
Reference: Net of cross-supplies of refined products						
between the Group refineries	408	337	21.1	745	784	(5.0)
Products produced at petrochemical plants and	205	210	(4.0)	20 -	242	/4 A
facilities	295	310	(4.8)	605	613	(1.3)
in Russia	210	233	(9.9)	443	447	(0.9)
outside Russia	85	77	10.4	162	166	(2.4)

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

In the second quarter and the first half of 2021, refinery throughput at the Group refineries was 15.7 million tonnes and 30.2 million tonnes, respectively, which is 9.0% higher compared to the first quarter of 2021 and 1.4% lower compared to the first half of 2020.

Compared to the previous quarter, refinery throughput volumes increased by 3.7% in Russia and by 20.8% outside Russia. The dynamics of refinery throughput volumes both in and outside Russia was attributable to the recovery of refineries utilization after scheduled maintenance works and throughput optimization driven by the changes in macro environment.

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Compared to the first half of 2020, refinery throughput volumes increased by 1.0% in Russia and decreased by 6.1% outside Russia. The dynamics of refinery throughput volumes was also attributable to scheduled maintenance works and throughput optimization driven by the changes in macro environment.

In the first half of 2020, we processed our crude oil at third party refineries in Belarus and Kazakhstan.

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 associated 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 and our retail chains.

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.

	Q2 2021	Q2 Q1 C		Change,	1st half of		Change,
		2021	%	2021	2020	%	
			(thousands o	f tonnes)			
Crude oil purchases							
In Russia	310	274	13.1	584	374	56.1	
For trading internationally	13,114	11,136	17.8	24,250	27,143	(10.7)	
For refining internationally	4,646	3,602	29.0	8,248	6,600	25.0	
Shipment of the West Qurna-2 compensation							
crude oil	658	474	38.8	1,132	1,418	(20.2)	
Total crude oil purchased	18,728	15,486	20.9	34,214	35,535	(3.7)	

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

	Q2 2021	Q1	Change,	1st half of		Change,
		2021	%	2021	2020	%
			(thousands of	f tonnes)		
Refined products purchases						
In Russia	223	277	(19.5)	500	389	28.5
For trading internationally	10,814	11,698	(7.6)	22,512	22,795	(1.2)
For refining internationally	336	532	(36.9)	868	900	(3.5)
Total refined products purchased	11,373	12,507	(9.1)	23,880	24,084	(0.8)
Petrochemical products purchases						
In Russia	29	41	(29.3)	70	65	7.7
For trading internationally	153	179	(14.5)	332	342	(2.9)
For refining internationally	45	40	12.5	85	83	2.4
Total petrochemical products purchased	227	260	(12.7)	487	490	(0.6)

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:

	Q2 Q1 (Change,	1st half of		Change,	
	2021	2021	%	2021	2020	%	
			(millions of	rubles)			
Exports of crude oil to Customs Union	14,815	15,869	(6.6)	30,684	5,605	>100	
Exports of crude oil beyond Customs Union	258,156	219,885	17.4	478,041	275,569	73.5	
Total crude oil exports	272,971	235,754	15.8	508,725	281,174	80.9	
_			(thousands o	f tonnes)			
Exports of crude oil to Customs Union	486	568	(14.4)	1,054	451	>100	
Exports of crude oil beyond Customs Union	7,220	6,785	6.4	14,005	16,838	(16.8)	
Total crude oil exports	7,706	7,353	4.8	15,059	17,289	(12.9)	
Exports of crude oil through Transneft,							
excluding ESPO pipeline	4,016	3,794	5.9	7,810	10,497	(25.6)	
ESPO pipeline	878	680	29.1	1,558	540	>100	
CPC pipeline	1,497	1,394	7.4	2,891	2,574	12.3	
Exports of crude oil through the Group's							
transportation infrastructure	1,315	1,485	(11.4)	2,800	3,678	(23.9)	
Total crude oil exports	7,706	7,353	4.8	15,059	17,289	(12.9)	
Supply of exported crude oil to refineries	439	352	24.7	791	2,497	(68.3)	

	Q2	Q2 Q1 Q		1st half of		Change,	
	2021	2021 2021	%	2021	2020	%	
			(millions o	f rubles)			
Refined and petrochemical products exports	188,427	166,805	13.0	355,232	210,039	69.1	
			(thousands o	of tonnes)			
Refined products exports							
diesel fuel	2,356	2,397	(1.7)	4,753	5,439	(12.6)	
gasoline	26	72	(63.9)	98	652	(85.0)	
fuel oil	819	662	23.7	1,481	541	>100	
jet fuel	4	6	(33.3)	10	7	42.9	
lubricants and components	127	149	(14.8)	276	312	(11.5)	
gas refinery products	128	142	(9.9)	270	404	(33.2)	
other products	1,126	1,229	(8.4)	2,355	2,308	2.0	
Total refined products exports	4,586	4,657	(1.5)	9,243	9,663	(4.3)	
Total petrochemicals exports	125	110	13.6	235	176	33.5	

The volume of our crude oil exports from Russia increased by 4.8% compared to the first quarter of 2021 as a result of higher crude oil production volumes, and decreased by 12.9% compared to the first half of 2020 due to crude oil production cut resulting from the OPEC+ agreement. In the second quarter and the first half of 2021, we exported 41.7% and 41.6% of our domestic crude oil production, respectively (41.4% in the first quarter of 2021 and 45.5% in the first half of 2020).

The volume of our refined products exports decreased by 1.5% compared to the first quarter of 2021 due to a seasonal increase in domestic demand, and by 4.3% compared to the first half of 2020 due to lower production volumes.

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 reduce transportation costs and 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. Our retail sales of motor fuels and jet fuel supplies both in and outside Russia were negatively affected by a decrease in demand due to the consequences of the COVID-19 pandemic.

Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

In the second quarter and the first half of 2021, we sold 2.4 million tonnes and 4.5 million tonnes of motor fuels, respectively, via our domestic retail network, which was 14.0% higher compared to the first quarter of 2021, and 10.2% higher compared to the first half of 2020. Outside Russia, retail sales increased by 9.9% compared to the first quarter of 2021 and by 9.1% compared to the first half of 2020. The increase in sales volumes compared to the first quarter of 2021 was due to seasonality factor, while the increase compared to the first half of 2020 was due to lower demand in the second quarter of 2020 because of the consequences of the COVID-19 pandemic.

In the second quarter and the first half of 2021, our jet fuel deliveries volume net of trading operations amounted to 0.7 million tonnes and 1.2 million tonnes, respectively, compared to 0.5 million tonnes in the first quarter of 2021 and 1.2 million tonnes in the first half of 2020.

In the second quarter and the first half of 2021, our bunkering volume net of trading operations amounted to 0.5 million tonnes and 1.0 million tonnes, respectively, compared to 0.5 million tonnes in the first quarter of 2021 and 1.5 million tonnes in the first half of 2020.

Power generation. We own commercial electricity and heat generation facilities in the Southern regions of European Russia, Romania and Italy. We also own renewable energy capacity in Russia and abroad. In the second quarter and the first half of 2021, our total output of commercial electrical energy was 2.6 billion kWh and 7.8 billion kWh, respectively (5.2 billion kWh in the first quarter of 2021 and 9.0 billion kWh in the first half of 2020), and our total output of commercial heat energy was approximately 1.3 million Gcal and 5.9 million Gcal (4.6 million Gcal in the first quarter of 2021 and 5.6 million Gcal in the first half of 2020).

Financial results

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

	Q2 2021	Q1 2021	Change,	1st 2021	half of 2020	Change,
			(millions	of rubles)		
Revenues						
Sales (including excise and export tariffs)	2,201,884	1,876,483	17.3	4,078,367	2,652,412	53.8
Costs and other deductions						
Operating expenses	(124,925)	(116,038)	7.7	(240,963)	(217,033)	11.0
Cost of purchased crude oil, gas and products	(1,214,383)	(1,029,125)	18.0	(2,243,508)	(1,366,645)	64.2
Transportation expenses	(75,112)	(68,018)	10.4	(143,130)	(159,618)	(10.3)
Selling, general and administrative expenses	(54,369)	(46,032)	18.1	(100,401)	(97,521)	3.0
Depreciation, depletion and amortization	(106,514)	(113,714)	(6.3)	(220,228)	(211,443)	4.2
Taxes other than income taxes	(328,549)	(236,612)	38.9	(565,161)	(287,049)	96.9
Excise and export tariffs	(63,231)	(65,865)	(4.0)	(129,096)	(226,190)	(42.9)
Exploration expenses	(1,473)	(413)	>100	(1,886)	(3,097)	(39.1)
Profit from operating activities	233,328	200,666	16.3	433,994	83,816	>100
Finance income	2,701	2,164	24.8	4,865	7,496	(35.1)
Finance costs	(9,289)	(9,351)	(0.7)	(18,640)	(21,572)	(13.6)
Equity share in income of associates and joint						
ventures	6,624	6,488	2.1	13,112	4,428	>100
Foreign exchange loss	(1,275)	(1,145)	11.4	(2,420)	(11,290)	(78.6)
Other (expenses) income	(2,099)	157	-	(1,942)	(91,077)	(97.9)
Profit (loss) before income taxes	229,990	198,979	15.6	428,969	(28,199)	-
Current income taxes	(36,530)	(36,369)	0.4	(72,899)	(24,716)	>100
Deferred income taxes	(3,064)	(4,643)	(34.0)	(7,707)	(11,326)	(32.0)
Total income tax expense	(39,594)	(41,012)	(3.5)	(80,606)	(36,042)	>100
Profit (loss) for the period	190,396	157,967	20.5	348,363	(64,241)	-
Profit (loss) for the period attributable to:						
PJSC LUKOIL shareholders	189,750	157,427	20.5	347,177	(64,680)	_
Non-controlling interests	646	540	19.6	1,186	439	>100
Earnings per share Profit (loss) for the period attributable to PJSC LUKOIL shareholders per share of common stock (in Russian rubles):						
Basic	290.81	241.27	20.5	532.07	(99.60)	-
Diluted	277.31	230.69	20.2	508.04	(99.60)	_

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

PJSC LUKOIL Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

Sales revenues

Sales breakdown	Q2	Q1	Change,	e, 1st half of		Change,	
	2021	2021	%	2021	2020	%	
			(millions o	of rubles)			
Crude oil							
Export and sales on international markets other							
than Customs Union	786,818	633,361	24.2	1,420,179	906,146	56.7	
Export and sales to Customs Union	15,003	15,864	(5.4)	30,867	5,879	>100	
Domestic sales	21,620	13,894	55.6	35,514	11,034	>100	
	823,441	663,119	24.2	1,486,560	923,059	61.0	
Cost compensation and remuneration at the West							
Qurna-2 project	9,682	16,570	(41.6)	26,252	27,766	(5.5)	
	833,123	679,689	22.6	1,512,812	950,825	59.1	
Refined products							
Export and sales on international markets							
Wholesales	902,291	795,370	13.4	1,697,661	1,029,578	64.9	
Retail	100,028	87,111	14.8	187,139	135,055	38.6	
Domestic sales							
Wholesales	123,064	87,312	40.9	210,376	165,222	27.3	
Retail	122,092	106,347	14.8	228,439	200,160	14.1	
	1,247,475	1,076,140	15.9	2,323,615	1,530,015	51.9	
Petrochemicals							
Export and sales on international markets	29,938	24,429	22.6	54,367	28,871	88.3	
Domestic sales	16,303	12,689	28.5	28,992	18,556	56.2	
	46,241	37,118	24.6	83,359	47,427	75.8	
Gas							
Sales on international markets	27,738	28,158	(1.5)	55,896	29,947	86.6	
Domestic sales	7,096	7,626	(6.9)	14,722	16,340	(9.9)	
	34,834	35,784	(2.7)	70,618	46,287	52.6	
Sales of energy and related services							
Sales on international markets	1,702	2,061	(17.4)	3,763	4,732	(20.5)	
Domestic sales	10,440	19,840	(47.4)	30,280	27,694	9.3	
	12,142	21,901	(44.6)	34,043	32,426	5.0	
Other							
Export and sales on international markets	16,226	15,541	4.4	31,767	27,149	17.0	
Domestic sales	11,843	10,310	14.9	22,153	18,283	21.2	
	28,069	25,851	8.6	53,920	45,432	18.7	
Total sales	2,201,884	1,876,483	17.3	4,078,367	2,652,412	53.8	

PJSC LUKOIL
Management's discussion and analysis of financial condition and results of operations for the three-month periods ended 30 June and 31 March 2021 and six-month periods ended 30 June 2021 and 2020

Sales volumes	Q2	Q1	Change,	1st h	alf of	Change,
	2021	2021	%	2021	2020	%
			(thousands of	f tonnes)		
Crude oil						
Export and sales on international markets other						
than Customs Union	21,496	19,637	9.5	41,133	42,034	(2.1)
Export and sales to Customs Union	490	568	(13.7)	1,058	461	>100
Domestic sales	707	489	44.6	1,196	776	54.1
	22,693	20,694	9.7	43,387	43,271	0.3
Crude oil volumes related to cost compensation						
and remuneration at the West Qurna-2 project	207	609	(66.0)	816	1,815	(55.0)
_	22,900	21,303	7.5	44,203	45,086	(2.0)
Refined products						
Export and sales on international markets						
Wholesales	20,481	20,292	0.9	40,773	38,823	5.0
Retail	987	898	9.9	1,885	1,728	9.1
Domestic sales						
Wholesales	3,253	2,656	22.5	5,909	6,055	(2.4)
Retail	2,412	2,116	14.0	4,528	4,110	10.2
	27,133	25,962	4.5	53,095	50,716	4.7
Petrochemicals						
Export and sales on international markets	341	335	1.8	676	690	(2.0)
Domestic sales	180	188	(4.3)	368	418	(12.0)
	521	523	(0.4)	1,044	1,108	(5.8)
		(1	millions of cul	oic meters)		
Gas						
Sales on international markets	3,320	4,661	(28.8)	7,981	5,449	46.5
Domestic sales	2,726	2,904	(6.1)	5,630	6,499	(13.4)
	6,046	7,565	(20.1)	13,611	11,948	13.9

Realized average sales prices		Q2	Q1	Change,	1st half of		Change,
		2021	2021	%	2021	2020	%
Average realized price on international							
markets							
Crude oil (beyond Customs Union)1	(RUB/barrel)	4,994	4,400	13.5	4,710	2,941	60.2
Crude oil (Customs Union)	(RUB/barrel)	4,177	3,810	9.6	3,980	1,740	>100
Refined products							
Wholesales	(RUB/tonne)	44,055	39,196	12.4	41,637	26,520	57.0
Retail	(RUB/tonne)	101,345	97,006	4.5	99,278	78,157	27.0
Petrochemicals	(RUB/tonne)	87,795	72,922	20.4	80,425	41,842	92.2
Gas (excluding royalty)	$(RUB/1,000 \text{ m}^3)$	8,355	6,041	38.3	7,004	5,496	27.4
Crude oil (beyond Customs Union) ¹	(\$/barrel)	67.28	59.19	13.7	63.41	42.39	49.6
Crude oil (Customs Union)	(\$/barrel)	56.28	51.25	9.8	53.59	25.08	>100
Refined products							
Wholesales	(\$/tonne)	594	527	12.6	561	382	46.6
Retail	(\$/tonne)	1,366	1,305	4.7	1,337	1,127	18.6
Petrochemicals	(\$/tonne)	1,183	981	20.6	1,083	603	79.5
Gas (excluding royalty)	(\$/1,000 m ³)	113	81	38.5	94	79	19.0
Average realized price within Russia							
Crude oil	(RUB/barrel)	4,172	3,876	7.6	4,051	1,940	>100
Refined products							
Wholesales	(RUB/tonne)	37,831	32,873	15.1	35,603	27,287	30.5
Retail	(RUB/tonne)	50,619	50,259	0.7	50,450	48,701	3.6
Petrochemicals	(RUB/tonne)	90,572	67,495	34.2	78,783	44,392	77.5
Gas ²	$(RUB/1,000 \text{ m}^3)$	2,603	2,626	(0.9)	2,615	2,514	4.0

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.

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Compared to the first quarter of 2021, our revenues were positively impacted by higher international hydrocarbon prices, an increase in crude oil production volumes as a result of further partial lifting of the external limitations under the OPEC+ agreement, as well as an increase in crude oil trading volumes and refined products production and retail sales volumes. Among main adverse factors were lower refined products trading and international gas sales volumes and a seasonal decrease in power generation segment's revenues.

Compared to the first half of 2020, our revenues were positively impacted by an increase in international hydrocarbon prices and the ruble depreciation. This was partially offset by lower crude oil production, refinery throughput and crude oil trading volumes.

Sales of crude oil

Compared to the first quarter of 2021, our crude oil sales revenue in and outside Russia increased by 55.6% and by 24.2%, respectively, largely as a result of an increase in crude oil prices, production volumes in Russia, and international trading volumes.

Compared to the first half of 2020, our international crude oil sales revenue increased by 56.7%, despite lower sales volumes, mainly as a result of an increase in realized crude oil prices by 60.2%. Our domestic crude oil sales revenue increased more than three-fold owing to an increase in realized crude oil prices by 108.8% and sales volumes by 54.1%.

Sales of refined products

Sales breakdown	Q2	Q1	Change,	1st	half of	Change,	
	2021	2021	%	2021	2020	%	
	(millions of rubles)						
Wholesales outside Russia	902,291	795,370	13.4	1,697,661	1,029,578	64.9	
diesel fuel	361,230	286,228	26.2	647,458	446,588	45.0	
motor gasoline	190,750	145,463	31.1	336,213	182,716	84.0	
fuel oil	104,236	120,564	(13.5)	224,800	179,183	25.5	
jet fuel	14,364	14,762	(2.7)	29,126	9,924	>100	
lubricants and components	22,641	19,357	17.0	41,998	33,477	25.5	
gas products	22,687	21,279	6.6	43,966	37,822	16.2	
others	186,383	187,717	(0.7)	374,100	139,868	>100	
Retail outside Russia	100,028	87,111	14.8	187,139	135,055	38.6	
Wholesales in Russia	123,064	87,312	40.9	210,376	165,222	27.3	
diesel fuel	33,270	27,117	22.7	60,387	55,646	8.5	
motor gasoline	21,981	11,689	88.0	33,670	18,221	84.8	
fuel oil	4,067	4,267	(4.7)	8,334	3,783	>100	
jet fuel	26,843	17,412	54.2	44,255	40,142	10.2	
lubricants and components	10,604	7,211	47.1	17,815	11,956	49.0	
gas products	3,540	3,390	4.4	6,930	4,084	69.7	
others	22,759	16,226	40.3	38,985	31,390	24.2	
Retail in Russia	122,092	106,347	14.8	228,439	200,160	14.1	
Total refined products sales	1,247,475	1,076,140	15.9	2,323,615	1,530,015	51.9	

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Sales volumes	Q2	Q1	Change,	1st h	alf of	Change,		
	2021	2021	%	2021	2020	%		
	(thousands of tonnes)							
Wholesales outside Russia	20,481	20,292	0.9	40,773	38,823	5.0		
diesel fuel	7,743	6,786	14.1	14,529	14,639	(0.8)		
motor gasoline	3,643	3,268	11.5	6,911	5,994	15.3		
fuel oil	3,428	4,135	(17.1)	7,563	9,605	(21.3)		
jet fuel	310	373	(16.9)	683	298	>100		
lubricants and components	180	214	(15.9)	394	569	(30.8)		
gas products	583	537	8.6	1,120	1,569	(28.6)		
others	4,594	4,979	(7.7)	9,573	6,149	55.7		
Retail outside Russia	987	898	9.9	1,885	1,728	9.1		
diesel fuel	671	628	6.8	1,299	1,187	9.4		
motor gasoline	280	238	17.6	518	474	9.3		
gas products	36	32	12.5	68	67	1.5		
Wholesales in Russia	3,253	2,656	22.5	5,909	6,055	(2.4)		
diesel fuel	767	659	16.4	1,426	1,358	5.0		
motor gasoline	476	266	78.9	742	482	53.9		
fuel oil	192	226	(15.0)	418	485	(13.8)		
jet fuel	692	535	29.3	1,227	1,154	6.3		
lubricants and components	85	83	2.4	168	182	(7.7)		
gas products	129	122	5.7	251	277	(9.4)		
others	912	765	19.2	1,677	2,117	(20.8)		
Retail in Russia	2,412	2,116	14.0	4,528	4,110	10.2		
diesel fuel	853	817	4.4	1,670	1,605	4.0		
motor gasoline	1,544	1,286	20.1	2,830	2,479	14.2		
gas products	15	13	15.4	28	26	7.7		
Total refined products volumes	27,133	25,962	4.5	53,095	50,716	4.7		

Compared to the first quarter of 2021 and the first half of 2020, our refined products sales revenue was positively impacted by higher sales prices. Moreover, the dynamics of our revenues compared to the first half of 2020 was positively impacted by the ruble depreciation.

The second quarter of 2021 vs. the first quarter of 2021

- Our revenue from the wholesales of refined products outside Russia increased by 13.4% largely due to an increase in average realized prices by 12.4%.
- International retail revenue increased by 14.8% primarily due to an increase in average realized prices by 4.5% and a seasonal increase in sales volumes by 9.9%.
- Revenue from the wholesale sales of refined products on the domestic market increased by 40.9% that was both price- and volume-driven.
- Revenue from the retail sales of refined products on the domestic market increased by 14.8%, mainly as a result of a seasonal increase in sales volumes.

The first half of 2021 vs. the first half of 2020

- Our revenue from the wholesale sales of refined products outside Russia increased by 64.9% mostly as a result of an increase in average realized prices by 57.0%.
- Our international retail revenue increased by 38.6% as a result of an increase in realized prices, as well as sales volumes.
- Our revenue from the wholesales of refined products on the domestic market increased by 27.3% primarily as a result of higher average realized prices.
- Our revenue from refined products retail sales in Russia increased by 14.1% as an increase in sales volumes was amplified by an increase in average realized prices.

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Sales of petrochemical products

Compared to the first quarter of 2021 and the first half of 2020, our revenue from sales of petrochemical products increased by 24.6% and 75.8%, respectively, as a result of higher realized prices.

Sales of gas

Compared to the first quarter of 2021, our revenue from gas sales decreased by 2.7%, as a result of lower sales volumes that was partially offset by higher international realized prices.

A ramp up of our gas trading activities in Europe along with an increase in international gas production volumes resulted in an increase in revenue by 52.6% compared to the first half of 2020.

Sales of energy and related services

Our revenue from sales of energy and related services decreased by 44.6% compared to the first quarter of 2021, mainly due to a seasonality factor, and increased by 5.0% compared to the first half of 2020 due to an increase in volumes of electricity trading, that was partly offset by a decrease in electricity output and sales volumes in Italy.

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.

Compared to the first quarter of 2021, revenue from other sales increased by 8.6% largely as a result of higher non-petrol revenue of our retail network due to a seasonality factor in Russia and Europe.

Compared to the first half of 2020, revenue from other sales increased by 18.7% largely as a result of an increase in non-petrol revenue of our retail network and increase in volume of transportation services provided.

Operating expenses

Operating expenses include the following:

	Q2 2021	Q1	Change, %	1st half of		Change,
		2021		2021	2020	%
			(millions of	f rubles)		
Hydrocarbon extraction expenses ¹	46,791	44,335	5.5	91,126	92,751	(1.8)
Extraction expenses at the West Qurna-2 field	3,919	4,204	(6.8)	8,123	8,453	(3.9)
Own refining expenses	29,722	27,375	8.6	57,097	42,885	33.1
Refining expenses at third-party refineries	4	-	-	4	273	(98.5)
Expenses for feedstock transportation to refineries	12,931	11,147	16.0	24,078	29,059	(17.1)
Power generation and distribution expenses	7,259	8,252	(12.0)	15,511	14,335	8.2
Petrochemical expenses	3,607	3,349	7.7	6,956	5,974	16.4
Other operating expenses	20,692	17,376	19.1	38,068	23,303	63.4
Total operating expenses	124,925	116,038	7.7	240,963	217,033	11.0

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 27 "Segment information" to our condensed interim consolidated financial statements. Expenditures in the segment reporting are grouped depending on the segment to which a particular company belongs, are not divided by the type of expenses within one company 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, labour 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.

	Q2 2021	-	Change,	1st half of		Change,		
			%	2021	2020	%		
	(millions of rubles)							
Hydrocarbon extraction expenses	46,791	44,335	5.5	91,126	92,751	(1.8)		
in Russia	40,236	37,943	6.0	78,179	81,244	(3.8)		
outside Russia ¹	6,555	6,392	2.6	12,947	11,507	12.5		
	(rubles per BOE)							
Hydrocarbon unit extraction expenses	256	235	8.8	245	243	0.8		
in Russia	249	240	3.8	245	239	2.1		
outside Russia ¹	305	208	46.7	248	271	(8.5)		

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

Compared to the first quarter of 2021, our extraction expenses in Russia increased by 6.0% due to higher production volumes and an increase in maintenance costs, artificial stimulation of reservoirs, energy and other production costs. At the same time, unit extraction expenses increased by 3.8%, as a decrease in share of fixed costs in our extraction costs structure owing to production volumes growth was offset by the above mentioned cost items and by a decrease in share of gas in hydrocarbon production mix. Outside Russia, our extraction expenses increased by 2.6% mainly as a result of higher maintenance costs at our projects in Uzbekistan. At the same time, hydrocarbon unit extraction expenses outside Russia increased by 46.7% mainly due to lower production volumes and a decrease in share of gas, which has lower unit extraction expenses compared to crude oil, in our hydrocarbon production mix.

Compared to the first half of 2020, our extraction expenses in Russia decreased by 3.8% mainly due to lower production volumes. However, due to certain share of fixed costs, our hydrocarbon unit extraction expenses increased by 2.1%. Outside Russia, our hydrocarbon extraction expenses increased by 12.5% largely as a result of higher gas production in Uzbekistan and Azerbaijan, as well as the ruble depreciation. At the same time, our hydrocarbon unit extraction expenses outside Russia decreased by 8.5% as gas has lower unit extraction expenses compared to crude oil.

Own refining expenses

	Q2 2021	Q2 Q1 Cha	Change,	nge, 1st half of				
		2021	%	2021	2020	%		
	(millions of rubles)							
Refining expenses at the Group refineries	29,722	27,375	8.6	57,097	42,885	33.1		
in Russia	12,195	12,337	(1.2)	24,532	19,114	28.3		
outside Russia	17,527	15,038	16.6	32,565	23,771	37.0		
			(rubles per	tonne)				
Unit refining expenses at the Group refineries	1,889	1,895	(0.3)	1,892	1,401	35.0		
in Russia	1,173	1,231	(4.7)	1,201	945	27.0		
outside Russia	3,284	3,403	(3.5)	3,338	2,287	46.0		

Compared to the first quarter of 2021, refining expenses at the Group refineries increased by 8.6%. At the same time, refining expenses in Russia decreased by 1.2%, as higher throughput volumes and an increase in maintenance costs were offset by a lower consumption of purchased additives and energy costs. Outside Russia, refining expenses increased by 16.6% as a result of higher throughput volumes and a respective increase in fuel and energy costs, as well as an increase in costs of emission certificates.

Compared to the first half of 2020, expenses at our refineries increased by 33.1%. In Russia, refining expenses increased by 28.3%, mainly as a result of an increase in consumption of purchased additives to substitute lower own production, as well as an increase in fuel, energy and maintenance costs and higher throughput volumes. Outside Russia, expenses at our refineries increased by 37.0% mainly due to the ruble depreciation to euro, and an increase in fuel costs, despite a decrease in throughput.

Expenses for feedstock transportation to refineries

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

Our expenses for feedstock transportation to refineries increased by 16.0% compared to the first quarter of 2021 and decreased by 17.1% compared to the first half of 2020 largely following the dynamics of refinery throughput volumes.

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	Q2	Q1	Change,	1st half of		Change,			
	2021	2021	%	2021	2020	%			
	(millions of rubles)								
Own feedstock transportation to our domestic refineries	10,707	9,670	10.7	20,377	20,651	(1.3)			
Own feedstock transportation from Russia to our international refineries	945	253	>100	1,198	4,560	(73.7)			
Other feedstock transportation costs outside Russia	1,279	1,224	4.5	2,503	3,848	(35.0)			
Feedstock transportation to refineries	12,931	11,147	16.0	24,078	29,059	(17.1)			

Power generation and distribution expenses

Power generation and distribution expenses decreased by 12.0% compared to the first quarter of 2021 due to seasonality, and increased by 8.2% compared to the first half of 2020 due to an increase in volumes of energy trading in Russia that was partly offset by a decrease in electricity output in Italy.

Petrochemical expenses

In the second quarter and the first half of 2021, our petrochemical expenses increased by 7.7%, compared to the previous quarter, and by 16.4% compared to the first half of 2020 as a result of higher costs of purchased raw materials.

Other operating expenses

Other operating expenses include expenses of the Group's upstream and downstream entities that do not relate to their core activities, namely transportation and extraction services, costs of other services provided and goods sold by our production and marketing companies, and of non-core businesses of the Group.

Compared to the first quarter of 2021 and the first half of 2020, our other operating expenses increased by 19.1% and by 63.4%, respectively. Quarter-on-quarter increase was largely a result of higher cost of non-petrol goods sold via our retail network, while the increase to the first half of 2020 was also affected by higher volumes of transportation services rendered outside Russia.

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 our trading activities.

	Q2	Q2 Q1 Ch		1st half of		Change,
	2021	2021	%	2021	2020	%
			(millions o	of rubles)		
Cost of purchased crude oil in Russia	10,673	8,356	27.7	19,029	6,797	180.0
Cost of purchased crude oil outside Russia	649,571	454,838	42.8	1,104,409	735,397	50.2
Compensation crude oil related to West Qurna-2						
project	23,506	13,995	68.0	37,501	16,241	>100
Cost of purchased crude oil	683,750	477,189	43.3	1,160,939	758,435	53.1
Cost of purchased refined products in Russia	10,748	10,469	2.7	21,217	15,624	35.8
Cost of purchased refined products outside Russia	507,787	491,279	3.4	999,066	611,963	63.3
Cost of purchased refined products	518,535	501,748	3.3	1,020,283	627,587	62.6
Other purchases	28,542	30,148	(5.3)	58,690	27,992	>100
Net loss/(gain) from hedging of trading operations	9,437	47,303	(80.0)	56,740	(114,148)	-
Change in crude oil and petroleum products						
inventory	(25,881)	(27,263)	(5.1)	(53,144)	66,779	-
Total cost of purchased crude oil, gas and						
products	1,214,383	1,029,125	18.0	2,243,508	1,366,645	64.2

In the second quarter and the first half of 2021, cost of purchased crude oil, gas and products increased by 18.0% and by 64.2%, respectively.

The increase in crude oil and refined products purchases compared to the previous quarter was mostly due to higher hydrocarbon prices and crude oil trading volumes.

Compared to the first half of 2020, cost of purchased crude oil and refined products increased mostly due to higher prices. An increase in other purchases compared to the first half of 2020 was mostly related to growth in gas trading activities in Europe. Moreover, dynamics of cost of purchased crude oil, gas and products were impacted by the ruble depreciation.

Transportation expenses

	Q2	Q1	Change,	1st half of		Change,			
	2021	2021 2021	%	2021	2020	%			
	(millions of rubles)								
Crude oil transportation expenses	22,947	21,939	4.6	44,886	62,325	(28.0)			
in Russia	13,309	10,739	23.9	24,048	23,785	1.1			
outside Russia	9,638	11,200	(13.9)	20,838	38,540	(45.9)			
Refined products transportation expenses	44,249	39,533	11.9	83,782	91,489	(8.4)			
in Russia	21,985	18,543	18.6	40,528	45,936	(11.8)			
outside Russia	22,264	20,990	6.1	43,254	45,553	(5.0)			
Other transportation expenses	7,916	6,546	20.9	14,462	5,804	>100			
in Russia	1,279	707	80.9	1,986	1,123	76.8			
outside Russia	6,637	5,839	13.7	12,476	4,681	>100			
Total transportation expenses	75,112	68,018	10.4	143,130	159,618	(10.3)			

Compared to the first quarter of 2021, our expenses for transportation of crude oil and refined products increased by 4.6% and 11.9%, respectively. In Russia, our expenses for transportation of crude oil increased mainly as a result of higher domestic and export sales volumes. An increase in refined products transportation expenses mainly resulted from increased sales in Russia and an inventory effect. Outside Russia, a decrease in crude oil transportation expenses was due to a decrease in freight rates, and an increase in refined products transportation expenses was generally in line with dynamics of freight rates, sales volumes, as well as an inventory effect.

Compared to the first half of 2020, our expenses for transportation of crude oil and refined products decreased by 28.0% and 8.4%, respectively. In Russia, our expenses for transportation of crude oil increased as a result of tariffs indexation that was partly offset by lower sales volumes and changes in transport routes. Our expenses for transportation of refined products in Russia decreased as a result of lower export supplies, change in structure and inventory effect, despite tariffs indexation. Outside Russia, our expenses for transportation of crude oil and refined products decreased mainly as a result of a decrease in freight rates and lower crude oil sales volumes that was partially offset by the ruble depreciation.

An increase in other transportation expenses compared to the first half of 2020 was due to commencement of gas supplies from our project in Azerbaijan to Europe.

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.

	Q2 2021	Q2 Q1 Ch	Change,	1st h	1st half of	
		2021	%	2021	2020	%
			(millions of	f rubles)		
Payroll costs included in selling, general and						
administrative expenses	24,724	15,954	55.0	40,678	38,490	5.7
Other selling, general and administrative expenses	21,128	21,512	(1.8)	42,640	42,041	1.4
Share-based compensation	7,842	7,842	-	15,684	15,684	-
Expenses on allowance for expected credit losses	675	724	(6.8)	1,399	1,306	7.1
Total selling, general and administrative						
expenses	54,369	46,032	18.1	100,401	97,521	3.0

Our selling, general and administrative expenses increased by 18.1% compared to the first quarter of 2021 mainly as a result of bonus accruals outside Russia.

Compared to the first half of 2020, our selling, general and administrative expenses increased by 3.0%.

Depreciation, depletion and amortization

Compared to the first quarter of 2021, our depreciation, depletion and amortization expenses decreased by 6.3% mainly due to lower expenses at our West Qurna-2 project in Iraq, as well as lower gas production volumes in Uzbekistan.

Compared to the first half of 2020, our depreciation, depletion and amortization expenses increased by 4.2%.

Equity share in income of associates and joint ventures

The Group has investments in equity method associates 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 associates 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, respectively.

In the second quarter and the first half of 2021, our share in income of associates and joint ventures increased by 2.1% and by 196.1%, compared to the first quarter of 2021 and the first half of 2020, respectively, mainly due to an increase in profits of our upstream associates in Kazakhstan and Russia.

Taxes other than income taxes

	Q2 2021	Q1	Change,	1st half of		Change,
		2021	%	2021	2020	%
			(millions of	f rubles)		
In Russia						
Mineral extraction taxes	273,958	191,441	43.1	465,399	250,821	85.6
Tax on additional income	36,174	27,715	30.5	63,889	2,634	>100
Statutory insurance contributions and social taxes	7,815	7,481	4.5	15,296	14,894	2.7
Property tax	6,472	6,512	(0.6)	12,984	12,501	3.9
Other taxes	564	590	(4.4)	1,154	950	21.5
Total in Russia	324,983	233,739	39.0	558,722	281,800	98.3
International						
Mineral extraction taxes	7	6	16.7	13	12	8.3
Statutory insurance contributions and social taxes	2,340	1,742	34.3	4,082	3,103	31.6
Property tax	206	295	(30.2)	501	439	14.1
Other taxes	1,013	830	22.0	1,843	1,695	8.7
Total internationally	3,566	2,873	24.1	6,439	5,249	22.7
Total taxes other than income taxes	328,549	236,612	38.9	565,161	287,049	96.9

Our taxes other than income taxes increased by 38.9% compared to the first quarter of 2021, mainly as a result of an increase in mineral extraction tax expense on the back of an increase in the tax rate by 18.9% due to higher crude oil prices, as well as an increase in crude oil extraction volumes and inventory effect. TAI expenses increased as a result of higher crude oil prices and crude oil extraction volumes at license areas subject to TAI.

Compared to the first half of 2020, our taxes other than income taxes increased by 96.9% mainly as a result of an increase in mineral extraction tax expense on the back of an increase in the tax rate by 122.6% due to higher crude oil prices and ongoing tax manoeuvre and also as a result of elimination of tax incentives for high-viscous crude oil. This was partially compensated by inventory effect, time lag effect and lower crude oil extraction volumes. TAI expenses increased due to transfer of license areas with depleted reserves to TAI regime since 1 January 2021 and higher crude oil prices.

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).

	Q2 2021	Q2 Q1	Change,	1st half of		Change,	
		2021	%	2021	2020	%	
			(millions of	rubles)			
Decrease in extraction taxes from application of							
reduced rates for crude oil production	9,437	7,944	18.8	17,381	34,589	(49.7)	
	(thousands of tonnes)						
Volume of crude oil production subject to:							
reduced rates (ultra-high viscosity)	-	-	-	-	1,204	(100.0)	
reduced rates (tax holidays for specific regions)	279	302	(7.6)	581	2,069	(71.9)	
reduced rates (low permeability deposits)	518	512	1.2	1,030	785	31.2	
reduced rates (Tyumen deposits)	133	132	0.8	265	394	(32.7)	
reduced rates (depleted fields)	-	-	-	-	9,759	(100.0)	
reduced rates (other)	718	695	3.3	1,413	1,139	24.1	
Total volume of production subject to reduced							
rates	1,648	1,641	0.4	3,289	15,350	(78.6)	

A special tax regime is applied for crude oil production at certain Group's offshore fields and deposits. In the second quarter and the first half of 2021, volumes of production subject to such regimes amounted to 1,598 thousand tonnes and 3,196 thousand tonnes, respectively (compared to 1,598 thousand tonnes in the first quarter of 2021 and 3,197 thousand tonnes in the first half of 2020).

The table below summarizes our production from license areas subject to TAI in the respective periods.

	Q2	Q1	Change,	1st h	alf of	Change,
	2021	2021	%	2021	2020	%
			(millions of	rubles)		
Mineral extraction tax for crude oil and gas condensate on license areas under TAI	49,006	44,485	10.2	93,491	7,954	>100
condensate on incense areas under 1741	(thousands of tonnes)					>100
Group 1	495	560	(11.6)	1,055	1,050	0.5
Group 3	4,629	4,368	6.0	8,997	1,535	>100
Group 4	35	24	45.8	59	47	25.5
Total volume of crude oil and gas condensate production at license areas subject to TAI	5,159	4,952	4.2	10,111	2,632	>100

Excise and export tariffs

	Q2	Q2 Q1 C 2021 2021	Change,	1st half of		Change,
	2021		%	2021	2020	%
			(millions of	rubles)		
In Russia						
Excise tax on refined products	40,358	32,344	24.8	72,702	61,697	17.8
Excise tax on oil feedstock (excluding damper)	(28,504)	(23,662)	20.5	(52,166)	(17,585)	>100
Damper	(31,733)	(7,976)	>100	(39,709)	42,945	-
Crude oil export tariffs	22,190	12,398	79.0	34,588	46,828	(26.1)
Refined products export tariffs	10,028	6,447	55.5	16,475	13,959	18.0
Total in Russia	12,339	19,551	(36.9)	31,890	147,844	(78.4)
International						
Excise tax and sales taxes on refined products	50,826	46,302	9.8	97,128	78,302	24.0
Crude oil export tariffs	13	20	(35.0)	33	19	73.7
Refined products export and import tariffs, net	53	(8)	-	45	25	80.0
Total internationally	50,892	46,314	9.9	97,206	78,346	24.1
Total excise and export tariffs	63,231	65,865	(4.0)	129,096	226,190	(42.9)

Compared to the first quarter of 2021, crude oil and refined products export tariffs increased mainly due to inventory effect and export duty lag effect, an increase in crude oil prices and increase in export volumes beyond Customs Union.

In the second quarter of 2021, excise tax on refined products in Russia and internationally increased compared to the previous quarter mainly due to higher sales volumes.

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Compared to the first half of 2020, crude oil export tariffs declined mainly as a result of ongoing tax manoeuvre, export duty lag effect and inventory effect, as well as a decrease in crude oil export volumes beyond Customs Union. These effects were partially offset by higher crude oil prices. Refined products export tariffs increased compared to the first half of 2020 due to an increase in the share of export of heavy refined products with a higher export duty rate, despite a decrease in export duty rates and inventory effect.

Compared to the first half of 2020, excise tax in Russia increased due to higher sales volumes and excise taxes rates. Internationally, excise tax expenses increase was due to the ruble depreciation and an increase in excise taxes rates in some jurisdictions.

Proceeds from excise tax on feedstock, excluding damper, increased by 20.5% compared to the first quarter of 2021 as a result of higher crude oil prices and higher refinery throughput volumes. Compared to the first half of 2020, the excise tax on feedstock increased almost three-fold as a result of excise tax rates increase due to ongoing tax manoeuvre, higher crude oil prices and the ruble depreciation. Starting from April 2021, excise tax on feedstock was increased by the investment factor in relation to Nizhny Novgorod refinery.

In the first half of 2021, damper was positive as export netbacks for gasoline and diesel fuel stayed above respective fixed benchmarks. In the second quarter of 2021, damper increased compared to the first quarter levels due to ongoing increase in export netbacks for gasoline and diesel fuel and higher sales volumes of motor fuels on the domestic market. Moreover, in the second quarter, there was a decrease in fixed benchmark for gasoline that also contributed to the damper increase.

Negative values of international refined products export and import tariffs in the first quarter of 2021 were a result of the compensation of import tariffs in the USA.

Foreign exchange 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 of our international subsidiaries and loans, mostly intra-group, given or received in currencies other than the entities' functional currencies ("other currencies").

In the first quarter of 2021, the Group's net monetary position in other currencies was quite balanced that resulted in relatively insignificant exchange loss on the back of the ruble depreciation during the period. An increase in accounts receivables in the second quarter of 2021 led to a change in net monetary position that resulted in a foreign exchange loss despite the ruble appreciation. A sharp ruble depreciation in 2020 resulted in a foreign exchange loss in the amount of 11 billion RUB in the first half of 2020.

Other (expenses) income

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

In the second quarter of 2020, the Group recognized an impairment loss for its international exploration and production assets in the amount of 39 billion RUB, 36 billion RUB of which related to the projects in Uzbekistan, and a reversal of a provision related to our project in Egypt in the amount of 2 billion RUB.

In the first quarter of 2020, the Group recognized an impairment loss for its exploration and production assets in Russia and abroad in the amount of 8 billion RUB, as well as fixed assets and other non-current assets for its refining, marketing and distribution assets outside Russia in the amount of 36 billion RUB.

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.

Our total income tax expense decreased by 1 billion RUB, or by 3.5%, compared to the first quarter of 2021, and increased by 45 billion RUB, or by 123.6%, compared to the first half of 2020.

High effective income tax rate in 2020 resulted from write-offs of deferred tax assets related to tax loss carry forwards in certain international downstream subsidiaries as it is not probable that taxable profit will be available against which these temporary differences can be utilized, and changes in tax rates of certain regional income tax incentives.

Non-GAAP items reconciliation

EBITDA reconciliation

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.

	Q2	Q1	1st	half of
	2021	2021	2021	2020
		(millions	of rubles)	
Profit (loss) for the period attributable to PJSC LUKOIL shareholders	189,750	157,427	347,177	(64,680)
Add back				
Profit for the period attributable to non-controlling interests	646	540	1,186	439
Income tax expense	39,594	41,012	80,606	36,042
Financial income	(2,701)	(2,164)	(4,865)	(7,496)
Financial costs	9,289	9,351	18,640	21,572
Foreign exchange loss	1,275	1,145	2,420	11,290
Equity share in income of associates and joint ventures	(6,624)	(6,488)	(13,112)	(4,428)
Other expenses (income)	2,099	(157)	1,942	91,077
Depreciation, depletion and amortization	106,514	113,714	220,228	211,443
EBITDA	339,842	314,380	654,222	295,259
EBITDA by operating segments				
Exploration and production segment				
Revenues and other operating income	677,140	598,949	1,276,089	690,009
Operating expenses	(69,510)	(65,341)	(134,851)	(134,243)
Cost of purchased crude oil, gas and products	(15,514)	(35,951)	(51,465)	(20,419)
Transportation expenses	(20,722)	(18,823)	(39,545)	(30,096)
Selling, general and administrative expenses	(9,174)	(11,519)	(20,693)	(23,364)
Taxes other than income taxes	(319,828)	(228,670)	(548,498)	(255,715)
Excise and export tariffs	(20,015)	(14,439)	(34,454)	(41,553)
Exploration expenses	(1,473)	(413)	(1,886)	(3,084)
EBITDA of Exploration and production segment	220,904	223,793	444,697	181,535
Refining, marketing and distribution segment				
Revenues and other operating income	2,166,692	1,824,219	3,990,911	2,599,800
Operating expenses	(67,126)	(58,015)	(125,141)	(89,482)
Cost of purchased crude oil, gas and products	(1,830,805)	(1,497,515)	(3,328,320)	(1,989,488)
Transportation expenses	(60,162)	(58,021)	(118,183)	(152,653)
Selling, general and administrative expenses	(31,776)	(29,842)	(61,618)	(60,424)
Taxes other than income taxes	(7,476)	(6,644)	(14,120)	(12,862)
Excise and export tariffs	(42,400)	(53,972)	(96,372)	(175,856)
EBITDA of Refining, marketing and distribution segment	126,947	120,210	247,157	119,035
EBITDA of Corporate and other segment	(14,323)	(11,009)	(25,332)	(16,130)
Elimination	6,314	(18,614)	(12,300)	10,819
EBITDA	339,842	314,380	654,222	295,259

Free cash flow reconciliation

	Q2	Q1	1st 1	nalf of
	2021	2021	2021	2020
		(millions o	f rubles)	
Net cash provided by operating activities	216,416	270,845	487,261	328,482
Capital expenditures	(104,213)	(107,220)	(211,433)	(247,456)
Free cash flow	112,203	163,625	275,828	81,026

Liquidity and capital resources

	Q2 Q1 Cha		Q2 Q1		Change,	1st]	half of	Change,
	2021	2021	%	2021	2020	%		
		(millions of rubles)						
Net cash provided by operating activities	216,416	270,845	(20.1)	487,261	328,482	48.3		
including (increase) decrease in working capital	(99,801)	(24,081)	>100	(123,882)	35,585	-		
Net cash used in investing activities	(102,882)	(104,692)	(1.7)	(207,574)	(244,042)	(14.9)		
Net cash used in financing activities	(27,129)	(29,890)	(9.2)	(57,019)	(14,009)	>100		

Changes in operating assets and liabilities:

	Q2	Q1	Change,	1st]	half of	Change,
	2021	2021	%	2021	2020	%
			(millions o	f rubles)		
(Increase) decrease in accounts receivable	(161,941)	(66,253)	>100	(228,194)	151,611	-
(Increase) decrease in inventory	(12,166)	(62,014)	(80.4)	(74,180)	81,757	-
Increase (decrease) in accounts payable	34,034	104,591	(67.5)	138,625	(191,868)	-
Increase (decrease) in net taxes other than on						
income payable	17,320	47,601	(63.6)	64,921	(6,950)	-
Change in other current assets and liabilities	22,952	(48,006)	-	(25,054)	1,035	-
Total (increase) decrease in working capital	(99,801)	(24,081)	>100	(123,882)	35,585	-

Operating activities

Our primary source of cash flow are funds generated from our operations. Compared to the first quarter of 2021, our cash generated from operations decreased by 20.1% mainly due to an increase in working capital that was partially offset by growth in profitability of our core operations. Compared to the first half of 2020, our cash generated from operations increased by 48.3% as a result of improved profitability of our core operations that was partially offset by an increase in working capital.

Investing activities

Compared to the first quarter of 2021 and the first half of 2020, our cash used in investing activities didn't change significantly and decreased by 14.9%, respectively, that was largely defined by the dynamics of capital expenditures.

Our capital expenditures decreased by 2.8% and by 14.6% compared to the first quarter of 2021 and the first half of 2020, respectively.

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	Q2	Q1	Change,	1st]	half of	Change,
	2021	2021	%	2021	2020	
			(millions of			
Capital expenditures						
Exploration and production						
West Siberia	35,347	25,840	36.8	61,187	86,632	(29.4)
Timan-Pechora	12,988	15,820	(17.9)	28,808	43,020	(33.0)
Ural region	8,063	7,471	7.9	15,534	21,079	(26.3)
Volga region	8,365	9,152	(8.6)	17,517	19,116	(8.4)
Other in Russia	1,148	2,380	(51.8)	3,528	3,921	(10.0)
Total in Russia	65,911	60,663	8.7	126,574	173,768	(27.2)
Iroa	7,056	12,836	(45.0)	19.892	15,194	30.9
Iraq Other outside Russia	6.671	4,793	39.2	11,464	17,194	(36.3)
Total outside Russia	13.727	17,629	(22.1)	31,356	33,178	, ,
_	- ,		` /			(5.5)
Total exploration and production	79,638	78,292	1.7	157,930	206,946	(23.7)
Refining, marketing and distribution						
Russia	15,921	17,034	(6.5)	32,955	30,119	9.4
refining	12,447	10,287	21.0	22,734	22,851	(0.5)
retail	403	1,968	(79.5)	2,371	2,083	13.8
other	3,071	4,779	(35.7)	7,850	5,185	51.4
International	8,090	11,153	(27.5)	19,243	9,378	>100
refining	7,293	9,876	(26.2)	17,169	7,632	>100
retail	740	1,179	(37.2)	1,919	1,568	22.4
other	57	98	(41.8)	155	178	(12.9)
Total refining, marketing and distribution	24,011	28,187	(14.8)	52,198	39,497	32.2
Corporate and other	564	741	(23.9)	1,305	1,013	28.8
Total capital expenditures	104,213	107,220	(2.8)	211,433	247,456	(14.6)

Compared to the first quarter of 2021, an increase in our upstream capital expenditures in Russia was mainly in West Siberia and related to an increase in production drilling footage. Quarter-on-quarter dynamics of capital expenditures of our refining and marketing segment was mainly defined by construction schedule of delayed coker unit at our refinery in Nizhny Novgorod, as well as uneven payment schedule.

Year-on-year decrease in exploration and production capital expenditures in Russia was mainly driven by crude oil production cut due to the OPEC+ agreement. Year-on-year dynamics of capital expenditures of our refining and marketing segment was mainly defined by payments made in the first half of 2021 in relation to the planned overhauls at our refinery in Italy performed in the end of 2020.

Financing activities

In the second quarter and the first half of 2021, net movements of short-term and long-term debt generated an outflow of 13 billion RUB and 38 billion RUB, compared to an outflow of 25 billion RUB in the first quarter of 2021 and an inflow of 142 billion RUB in the first half of 2020.

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.

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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.